

Title	College stress and psychological well-being: vision in life as a coping resource
Author(s)	Li, Hong; 李虹
Citation	
Issue Date	2002
URL	http://hdl.handle.net/10722/36216
Rights	The author retains all proprietary rights, (such as patent rights) and the right to use in future works.

College Stress and Psychological Well-being: Vision in Life as a Coping Resource

Li Hong

A thesis submitted in partial fulfillment of the requirements for the degree of
Doctor of Philosophy at the University of Hong Kong

June 2002

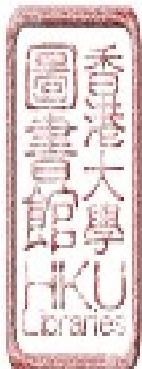


Declaration

I declare that this thesis represents my own work, except where due acknowledgement is made, and that it has not been previously included in a thesis, dissertation or report submitted to this University or to any other institution for a degree, diploma or other qualification.

Signed

Li Hang

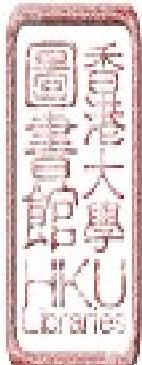


Acknowledgements

I wish to express my deepest gratitude to my supervisor Dr. Kam Weng Boey. Dr. Boey is not only my mentor but also my steerer. Without his insights, generosity with his time, patience, unfailing support and consideration, this thesis could not have been completed at the required academic level. He has opened up and widened my academic horizon, and the research training I received from him is invaluable not only for this thesis but for future ones as well. His supervision is most beneficial to my learning experiences. Although I have encountered many unexpected difficulties in pursuing this doctoral research, it is worth all the while only because of Dr. Boey's unequalled supervision.

Thanks are also due to my English editor Miss Mei Lin Wong. To me, she is really a God-send because she was available when I was in desperate search for editorial help. Without her editing, this thesis would be different. I would also like to extend my appreciation to Dr. Yue Bin Xu, for his editorial help.

Throughout the course of this study, Dr. Kai Fong Chan has given me much support in spirit sparing no time nor patience. She is always there wherever I am in difficulties or have troubles. She is a role model in generosity and kindness for me throughout my whole life. Special thanks are also due to Prof. Cecilia Chan for her support and guidance when my supervisor was on leave. I am also much obliged to Mr. Timothy Sim for suggesting the very crucial term "vision" which is used in this study.



Finally, I wish to thank my family for their understanding, support and sacrifice, to my husband, my little son, my father and my parents-in-law for assuming all the duties lovingly that I as a wife, a mother and a daughter was unable to fulfill during all these study years.

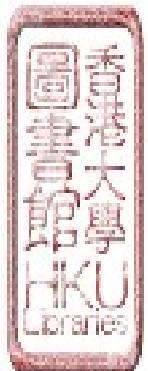


College Stress and Psychological Well-being: Vision in Life as a Coping Resource

Li Hong

A thesis submitted in partial fulfillment of the requirements for the degree of
Doctor of Philosophy at the University of Hong Kong

June 2002



Abstract of thesis entitled
"College Stress and Psychological Well-being:
Vision in Life as a Coping Resource"

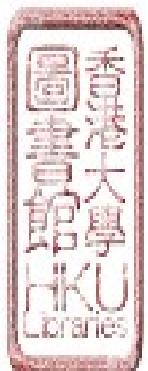
submitted by

Li Hong

for the degree of Doctor of Philosophy
at the University of Hong Kong
in June, 2002

The central aim of this study is to explore a new coping resource in respective of Chinese college students. To represent the new coping resource conceptually, we constructed a new concept named as Vision in Life. Vision in life is developed based on both the observation of healthy and happy college students, and the sublimation of existing coping resources. The theoretical background of vision in life is mainly oriental Buddhism and Taoism philosophy. The conceptual framework of the study, thus focuses on the effects of vision in life in the relationship between college stress and psychological well-being. College stress consists of academic hassle, personal hassle and negative life event. Psychological well-being is conceptualized as mental health status, positive affect, negative affect, and self-esteem. Vision in life consists of three different components which are life control, meaning in life and will to meaning.

The main study was conducted after a preliminary study, in-depth interviews and a validation study. Findings of the preliminary study indicated that the major sources of college stress are academic hassle, personal hassle and negative life event,

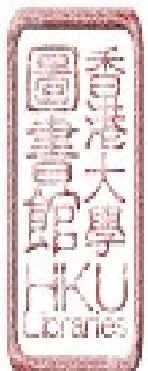


while the in-depth interviews suggested the existence of the phenomenon of vision in life. The validation study developed two scales: College Stress Scale and Vision in Life Scale as well as ensured the psychometric properties of measures for psychological well-being.

The main study, which was designed on cross-sectional and correlational principles, was administered from February to March 2001. In the main study, 788 undergraduate students from three specific universities in Beijing were included. The data of the main study were analyzed through three steps: univariate analysis, bivariate analysis and multivariate analysis.

Findings of the main study fully confirmed the direct effects of vision in life on psychological well-being, and partially confirmed the buffering effects of vision in life on psychological well-being under college stress. Vision in life buffered most significantly depression. Moreover, the most important finding was that life control played a pivotal role in the buffering effect of vision in life on psychological well-being under college stress.

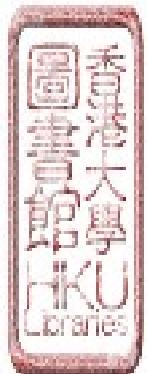
The confirmation of the effects of vision in life on psychological well-being may have implications and contributions to mental health theory, especially to self-esteem theory. It suggests that for Chinese students, self-esteem is not towards self, but towards selflessness. The confirmation of the effects of vision in life on psychological well-being may also have implications for assessment and social work intervention. The direct effects of vision in life and the components on psychological well-being may serve the primary prevention, and the buffering effects of them may serve the secondary prevention.



To:

My Mother

She would be proud of this thesis if she were still around



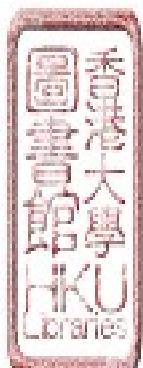
Publications

1. Li, H. & Boey, K.W. (in press). Types and Characteristics of College Stress. *Science of Psychology*, No. 4.
2. Li, H. & Boey, K.W. (in press). Assessing Psychological Well-being of College Student: Psychometric Properties of Positive Affect Scale and Negative Affect Scale. *Chinese Journal of Mental Health*, No. 4.
3. Li, H. & Boey, K.W. (2002). Assessing Psychological Well-being of College Student: Psychometric Properties of GHQ-20. *Psychology Development and Education*, No. 1, 75-78.
4. Li, H. & Boey, K.W. (2002). Development of College Stress Scale. *Chinese Journal of Applied Psychology*, No. 1, 27-32.
5. Li, H. (under review). Gender Difference of College Stress. *Youth Study*.
6. Li, H. & Boey, K.W. (under review). Year of Study Difference of College Stress. *Journal of Psychological Exploration*.
7. Li, H. & Boey, K.W. (2002). Vision in Life Buffers in the Relationship between Stress and Psychological Well-being (paper presentation). The Fourth Dutch Conference on Psychology and Health. Kerkade, The Netherlands.

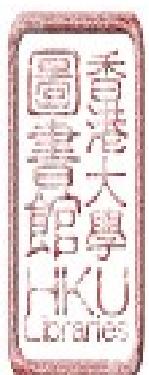


Contents

Declaration	<i>i</i>
Acknowledgements	<i>ii</i>
Publications	<i>iv</i>
Contents	<i>v</i>
List of Figures/Tables/Appendices	<i>vii</i>
Chapter 1 Introduction	1
Phenomenological Observation	4
Theoretical Issues	5
Research Questions	6
Aims and Objectives	8
Significance	9
Organization of the Dissertation	10
Chapter 2 Literature Review	11
Prevalence of Psychological Well-being Problems	11
Major Stressors of College Student	13
Stress and Psychological Well-being	15
Coping Resources	20
Chapter 3 Self-Transcendence and Vision in Life	42
Theoretical Views on Coping Resources	42
Self-focus and Ill-being	55
Self-transcendence and Well-being	61
Vision in Life as Coping Resource	69
Chapter 4 Conceptualization of Research Variables	91
College Stress	91
Coping Resource	101
Psychological Well-being	111
Chapter 5 Conceptual Framework	119
Main Relationships	119
College Stress and Psychological Well-being	121
Effects of Vision in Life on Psychological Well-being	125

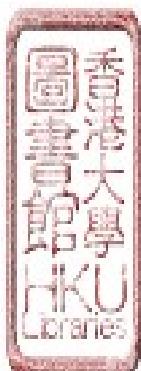


Chapter 6	Construction and Validation of Measures	144
	Overview of Validation Study	144
	Procedure	144
	College Stress Scale	148
	Vision in Life Scale	156
	Measures of Psychological Well-being	166
Chapter 7	Methodology	177
	Research Design	177
	Sampling	182
	Procedures	185
	Analyses	187
Chapter 8	Results of Analyses	188
	Profile of Respondents	189
	Re-evaluation of Reliability of the Measures	190
	College Stress	191
	Psychological Well-being	203
	Vision in Life	211
	College Stress and Psychological Well-being	220
	Effects of Vision in Life on Psychological Well-being	225
Chapter 9	Discussion	258
	Measurement Issues	258
	College Stress	264
	Psychological Well-being	270
	Vision in Life	278
	College Stress and Psychological Well-being	285
	Vision in Life and Psychological Well-being	289
Chapter 10	Implications and Conclusion	310
	Implications and Contributions to Theory	310
	Contributions to Assessment	317
	Implications and Contributions to Intervention	319
	Limitations and Recommendations	320
	Overall Conclusion	325
Reference		329
Appendices		351



List of Figures

Fig. 5.1	Effects of Vision in Life and College Stress on Psychological Well-being	126
Fig. 8.1	Effects of Vision in Life and College Stress on Psychological Well-being	227
Fig. 8.2	Effects of Vision in Life and Academic Stress on Psychological Well-being	230
Fig. 8.3	Effects of Vision in Life and Personal Stress on Psychological Well-being	235
Fig. 8.4	Effects of Vision in Life and Negative Life Event on Psychological Well-being	236
Fig. 8.5	Effects of Life Control and College Stress on Psychological Well-being	242
Fig. 8.6	Effects of Positive Meaning in Life and College Stress on Psychological Well-being	247
Fig. 8.7	Effects of Negative Meaning in Life and College Stress on Psychological Well-being	252
Fig. 8.8	Effects of Will to Meaning and College Stress on Psychological Well-being	257



List of Tables

Table 6.1	Profile of Respondents	147
Table 6.2	Pool of Items of College Stress	150
Table 6.3	Factorial Structure of College Stress	152
Table 6.4	Internal Consistency of College Stress	153
Table 6.5	Correlations of Measures	154
Table 6.6	Relationships of College Stress Scale with Criterion Measures	155
Table 6.7	Pool of Items of Vision in Life	157
Table 6.8	Factorial Structure of Vision in Life Scale	160
Table 6.9	Internal Consistency of Vision in Life Scale	162
Table 6.10	Inter-Correlations of Vision in Life	162
Table 6.11	Relationship between Vision in Life and Criterion Measures	163
Table 6.12	Relationships of Vision in Life Scale with Criterion Measures	165
Table 6.13	Factorial Structure of GHQ-20	169
Table 6.14	Internal Consistency of GHQ-20	170
Table 6.15	Correlations of Measures	171
Table 6.16	Correlations among Measures of Psychological Well-being	176
Table 7.1	Distribution of the Subjects	185
Table 8.1	Profile of Respondents	189
Table 8.2	Reliability of Measures	190
Table 8.3	Descriptive Statistics of Measures of College Stress	192

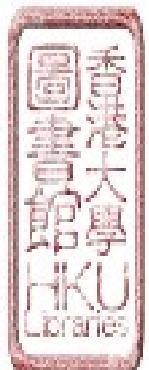


Table 8.4	Frequency Distribution of College Stress	192
Table 8.5	Frequency and Intensity of College Stress	193
Table 8.6	Frequency Distribution of Academic Hassle	195
Table 8.7	Frequency and Intensity of Academic Hassle	196
Table 8.8	Frequency Distribution of Personal Hassle	197
Table 8.9	Frequency and Intensity of Personal Hassle	198
Table 8.10	Frequency Distribution of Negative Life Event	199
Table 8.11	Frequency and Intensity of Negative Life Event	199
Table 8.12	Gender Difference in College Stress	200
Table 8.13	Difference of Field of Study in College Stress	201
Table 8.14	Difference of Year of Study in College Stress	201
Table 8.15	Inter-Correlations among Measures of College Stress	202
Table 8.16	Relationship of College Stress and Criterion Measures	203
Table 8.17	Descriptive Statistics of Measures of Psychological Well-being	204
Table 8.18	Frequency Distribution of Mental Health Status	205
Table 8.19	Frequency Distribution of GHQ-Sense of Adequacy	205
Table 8.20	Frequency Distribution of GHQ-Depression	206
Table 8.21	Cumulative Percentage of GHQ-Anxiety	206
Table 8.22	Frequency Distribution of Positive and Negative Affect	207
Table 8.23	Frequency Distribution of Self-esteem	208
Table 8.24	Gender Difference in Psychological Well-being	209
Table 8.25	Difference of Field of Study in Psychological Well-being	209
Table 8.26	Difference of Year of Study in Psychological Well-being	210
Table 8.27	Correlations among Measures of Psychological Well-being	211
Table 8.28	Descriptive Statistics of Measures of Vision in Life	212

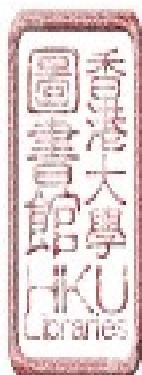


Table 8.29	Frequency Distribution of Vision in Life	212
Table 8.30	Frequency Distribution of Life Control	213
Table 8.31	Frequency Distribution of Positive Meaning in Life	214
Table 8.32	Frequency Distribution of Negative Meaning in Life	214
Table 8.33	Frequency Distribution of Will to Meaning	215
Table 8.34	Gender Difference in Vision in Life	216
Table 8.35	Difference of Field of Study in Vision in Life	217
Table 8.36	Difference of Year of Study in Vision in Life	218
Table 8.37	Inter-Correlations among Different Measures of Vision in Life	218
Table 8.38	Relationship of Vision in Life and Criterion Measures	219
Table 8.39	Correlations of College Stress and Psychological Well-being	221
Table 8.40	Correlations of Academic Hassle and Psychological Well-being	222
Table 8.41	Correlations of Personal Hassle and Psychological Well-being	222
Table 8.42	Correlations of Negative Life Event and Psychological Well-being	223
Table 8.43	Correlations of Academic Hassle, Negative Life Event and Psychological Well-being	224
Table 8.44	Correlations of Personal Hassle, Negative Life Event and Psychological Well-being	224
Table 8.45	Correlations of Vision in Life and Psychological Well-being under Low and High College Stresses	227
Table 8.46	Hierarchical Multiple Regression of Psychological Well-being on Vision in Life and College Stress	228
Table 8.47	Correlations of Vision in Life and Psychological Well-being under Low and High Academic Hassles	229

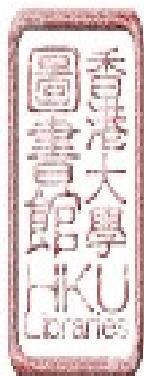
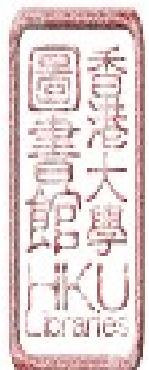


Table 8.48	Hierarchical Multiple Regression of Psychological Well-being on Vision in Life and Academic Hassle	231
Table 8.49	Correlations of Vision in Life and Psychological Well-being under Low and High Personal Hassles	232
Table 8.50	Hierarchical Multiple Regression of Psychological Well-being on Vision in Life and Personal Hassle	234
Table 8.51	Correlations of Vision in Life and Psychological Well-being under High and Low Stresses of Negative Life Event	236
Table 8.52	Hierarchical Multiple Regression of Psychological Well-being on Vision in Life and Negative Life Event	237
Table 8.53	Correlations of Life Control and Psychological Well-being under Low and High College Stresses	239
Table 8.54	Correlations of Life Control and Psychological Well-being under Low and High Academic Hassles	239
Table 8.55	Correlations of Life Control and Psychological Well-being under Low and High Personal Hassles	240
Table 8.56	Correlations of Life Control and Psychological Well-being under Low and High Stresses of Negative Life Event	240
Table 8.57	Hierarchical Multiple Regression of Psychological Well-being on Life Control and College Stress	241
Table 8.58	Correlations of Positive Meaning in Life and Psychological Well-being under Low and High College Stresses	243
Table 8.59	Correlations of Positive Meaning in Life and Psychological Well-being under Low and High Academic Hassles	244
Table 8.60	Correlations of Positive Meaning in Life and Psychological Well-being under Low and High Personal Hassles	
Table 8.61	Correlations of Positive Meaning in Life and Psychological Well-being under Low and High Stresses of Negative Life Event	

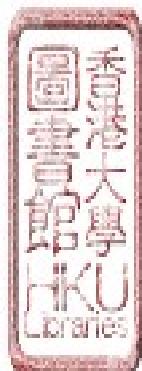


Table 8.62	Hierarchical Multiple Regression of Psychological Well-being on Positive Meaning in Life and College Stress	246
Table 8.63	Correlations of Negative Meaning in Life and Psychological Well-being under Low and High College Stresses	248
Table 8.64	Correlations of Negative Meaning in Life and Psychological Well-being under Low and High Academic Hassles	249
Table 8.65	Correlations of Negative Meaning in Life and Psychological Well-being under Low and High Personal Hassle	249
Table 8.66	Correlations of Negative Meaning in Life and Psychological Well-being under Low and High Stresses of Negative Life Event	250
Table 8.67	Hierarchical Multiple Regression of Psychological Well-being on Negative Meaning in Life and College Stress	251
Table 8.68	Correlations of Will to Meaning and Psychological Well-being under Low and High College Stresses	253
Table 8.69	Correlations of Will to Meaning and Psychological Well-being under Low and High Academic Hassles	253
Table 8.70	Correlations of Will to Meaning and Psychological Well-being under Low and High Personal Hassles	254
Table 8.71	Correlations of Will to Meaning and Psychological Well-being under Low and High Stresses of Negative Life Event	254
Table 8.72	Hierarchical Multiple Regression of Psychological Well-being on Will to Meaning and College Stress	256



List of Appendices

I .	College Stress Scale	351
II .	Vision in Life Scale	352
III .	General Health Questionnaire (GHQ-30)	353
IV .	Self-esteem Scale	354
V .	Positive Affect and Negative Affect Scale	355
VI .	Final Version of GHQ-20	356
VII .	Gender Difference in Stress Items	357
VIII .	Difference of Field of Study in Stress Items	358
IX .	Difference of Year of Study in Stress Items	359
X .	Mental Health Questionnaires for College Students	360

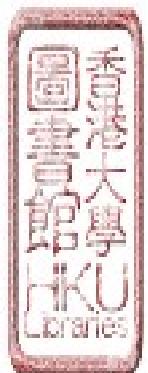


CHAPTER 1

INTRODUCTION

The lives of college students can be characterized as stressful. The beginning of college studies marks a period of psychological transition which brings about a host of challenges and demands in many domains. On the subjective level, concerns arise in regard to self-concept, motivation, achievement, peer network, and living away from home for the first time. In subsequent years, challenges tend to be increasingly academically related. In addition, there are the usual hassles connected with adulthood, e.g. falling in love and sexual problems, etc. Obviously, students' concerns are related not only to external circumstances, but also to psychological development and maturity. Accordingly, many studies explored campus stress from academic, social and emotional dimensions, or from academic and personal dimensions.

The serious and debilitating effects of excessive stress, identified some 20 years ago, are now widely recognized. College counselors, administrators, and student development educators have focused considerable attention on college student stress and on the general increase in severity of all kinds of psychological problems in both Western and Chinese societies. For example, researchers found that university counseling centers were treating students with more severe problems and pathology than in past years. Data comparing student pathology and problem severity over a ten years' period, indicated that there are increasingly serious mental health problems among college students (Koplik & DeVito, 1986). A thorough review of the



literature suggested that there is evidence from many quarters that the level of psychopathology among college students increased during the 1980's, continued through the 1990's and is continuing in the 2000's.

While stresses have been shown to take their toll on physical and psychological health, some researches found that under stresses some students become distressed or perform poorly, whereas others remain resilient. An important area of investigation thus concerns the identification of factors that act as buffers against the adverse effects of life stresses. The existence of such factors has been postulated to be individuals' responses in distinctive manner to stressors, and individuals' possession of resistance resources. Among the kinds of resources that have been empirically identified as potentially important buffers against the adverse effects of life stresses, personal attributes may explain why some people are vulnerable to stresses but others are not. Two lines of evidence support this perspective. The first line of evidence in support of this perspective comes from research on viewing self without spirituality, which represents the mainstream of studies on college stress and mental health. The typical moderators were identified as personal control, hope, and optimism. The second line of evidence comes from research viewing self with spirituality. This line of evidence has been largely overlooked in studies on college students' mental health, but some studies have appeared in recent years. For example, Fehring, Brennan and Keller (1987) studied psychological and spiritual well-being of college students. Maton (1989) examined the buffering effect of spiritual support regarding psychological problems for undergraduate students. These two lines of evidence are generally independent of each other. This distinction is questionable. Could people's spirituality be separated from their personal coping resources? The present study is induced mainly by this issue.



As the result of our thinking and exploration of the issue above, a new concept--Vision in Life is developed. Vision in life represents a coping resource discovered by this study. We initially thought about vision because of a speech of Dr. Martin Luther King. He wrote: " I have a vision...that the writings and speeches changed the world..." With his political vision, Dr. King changed the nation's outlook! The term "vision" enlightened our thinking also because of a true story. A young lady we knew believed in everlasting life in heaven because of her religious conviction and therefore she was able to accept her dying from a terminal illness peacefully. Vision can change the world, can change people's acceptance of death. Can vision change mental health problems that were caused by stress? Given vision appears to be an easily observed phenomenon, one might reasonably assume that vision has been a subject of thorough research in the past. This is not the case, however. A review of the relevant literature reveals that very little attention has been paid to vision, and to the important consequences that vision may have on mental health. This is not to say that phenomenally related constructs do not appear in the literature at all. They do. We have found a large body of researches on positive illusions. However, positive illusions do not refer to spirituality, whereas, vision is the spirituality inside people's mind. Thus, vision is different from positive illusions.

Vision in life is developed also because of the phenomenological observation on some healthy and happy college students and a need to explain the phenomenon theoretically. The primary purpose of this thesis is thus to report on our attempts to begin the exploration of the possibility that vision in life has important implications for students' psychological well-being in college stress.



PHENOMENOLOGICAL OBSERVATION

People differ widely from each other in how they view the world. In general, some people tend to be positive in their outlook, whereas, others tend to be negative. The optimists expect things to go their way, whereas, the pessimists expect things not to go their way. Our observation on college students, however, suggests that most healthy and happy students are not overwhelmingly positive of the world, their attitudes seem both optimistic and realistic. They can also see the negative aspects of the reality. The phenomenon of vision refers to three different aspects.

First, most healthy and happy college students have relative positive views of themselves, but they do not distort reality. Most of them also have relatively accurate knowledge of themselves, for example, negative information and evaluation on some aspects of themselves, but they are not pessimistic. We observed that most of the healthy and happy students do not judge their positive traits overwhelmingly more than their negative attributes as reported by Western researchers. Most of them, however, view themselves as positive and objective. Their attitudes toward themselves are optimistic and realistic. Although this phenomenon is easily observed, it is hard to find a mental health theory to appropriately interpret it.

Second, we also observed that most of the healthy and happy students can view things happening to them objectively. They know that they are not in control of everything. Their realistic perception of personal control do not lead them into depression as those Western researchers argued, but bring them relative optimism. Sometimes the students prefer other control than personal control and they thus feel better. Having regard to this observation, it is important to find out an appropriate

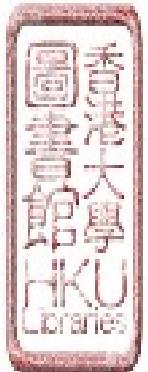


theoretical interpretation. However, previous theories in this field are controversial.

Third, in our observation, it is not true that optimism pervades students' thinking about the future as some previous researchers argued. Students possess a positive yet objective attitude about their future. Most of the students thought that the future would be better because the experiences in the past and present could help them to make things better in the future. Sometimes, they think that it is difficult to predict future because many things are beyond their control. In one word, most healthy and happy students seem to have an open, positive and objective attitude of the future rather than overwhelmingly optimistic. The theoretical interpretation seems lacking in regard to this observation.

THEORETICAL ISSUES

Regarding the first phenomenological observation, we have searched the mental health literature and tried to find an appropriate theory to interpret it. Then, we found two major mental health theories related to this phenomenon: well-adjusted individuals possess accurate knowledge of self; and most normal individuals possess a very positive view of self. However, both theories are not sufficient to interpret our observation since the phenomenon we observed is both optimistic and realistic. We further found that these two theories could not appropriately interpret the phenomenon mainly because they lack spirituality. We then reviewed literature of meaning in life and spirituality. There is very consistent evidence of the positive association between spirituality and psychological well-being, especially under high stress. However, which theory could better interpret the phenomenon we have observed on college students remains unclear.



In respect to the second phenomenological observation, we have reviewed the literature of control and psychological well-being with a view to find out a theory to interpret what we observed. Two major theories were shown related to this phenomenon: personal control is positively associated with psychological well-being under stress; and giving up personal control could benefit psychological well-being when the desired control is impossible. However, both of them may not be sufficient to explain what we have observed because students relinquish personal control sometimes even when a desired control is deemed possible by others. We have further found that students relinquish personal control because they pursue a larger spiritual control. It is worthwhile to further explore spiritual control within the framework of college stress--coping resource--psychological well-being.

Once we find the way to theoretically interpret the optimistic and realistic attitudes of self and control, we could also find the way to interpret the attitude towards future because in nature they are related with each other.

RESEARCH QUESTIONS

Until now we have not found an appropriate theory to interpret what we observed on healthy and happy college students. As we mentioned above, some mental health theories are related to the phenomenon we observed, however, none of them is sufficient to interpret it. On the one hand, the phenomenon is largely overlooked. On the other hand, the phenomenon refers to different facets, whereas, the theories we reviewed can at most explain only one facet of the phenomenon. Even for the individual facet, we have not found an appropriate theory to interpret it. Thus, the present study consists of two major aims. First, to find out or to build up

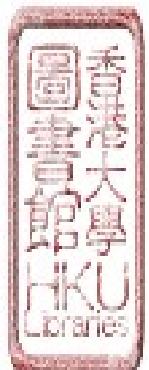


an appropriate spiritual related construct to interpret the phenomenon. Second, to examine whether the construct really interprets and represents the phenomenon. Guiding by the first aim, we reviewed two schools of mental health theories around self and control. We finally found that self-transcendence theory could partially explain our observation, especially for the first facet--optimistic and realistic attitude of self. However, this theory apparently could not directly interpret the second facet--optimistic and realistic attitude of control. Moreover, the three attitudes of self, control and future in fact could not be separated from each other. Thus, we developed a new construct of vision in life based on self-transcendence theory. To examine whether vision in life really represents and interprets the phenomenon, moreover, whether it is an effective coping resource, we establish a conceptual framework for exploring the following questions:

1. What is the effect of vision in life on psychological well-being among college students with various degree of stresses? Could vision in life buffer the negative impact of college stress?
2. What are the effects of different dimensions of vision in life on psychological well-being under college stress?

Before we examine the effects of vision in life, it is necessary to understand first the following questions also:

1. How to describe college stress? For example, how to define college stress? How to measure college stress? What are the basic descriptive statistics of college stress for college students?



2. How to describe vision in life? For example, how to define vision in life? How to measure vision in life? Does vision in life really exist in college students and represent the phenomenon we observed? What are the basic descriptive statistics of vision in life for college students?
3. How to describe psychological well-being? For example, how to define psychological well-being? How to measure psychological well-being? What are the basic descriptive statistics of psychological well-being for college student?
4. How does college stress affect psychological well-being of college students?

AIMS AND OBJECTIVES

The central aim of the present study is to explore a new coping resource which can be represented by a construct conceptually. The idea to explore a new coping resource is initiated by the observation of healthy and happy college student. To address this central aim, the present study sets out specifically to achieve the following objectives:

1. To explore a spiritual control based on the strengths and weaknesses of personal control. To define what the spiritual control is. Finally, to examine the effects of the spiritual control on psychological well-being in college stress.



2. To explore the effects of self-transcendence meaning on psychological well-being under college stress. Moreover, the effects of will to meaning on psychological well-being under college stress.
3. To explore the relation between spiritual control and self-transcendence meaning; to justify that they are inseparable and that this relation is the effective spiritual coping resource we are exploring.

SIGNIFICANCE

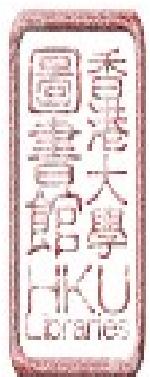
Theoretically, the discovery of vision in life may add to the earlier research efforts in three important respects. First, to the best of our knowledge the present research constitutes the first explicit attempt to investigate the impact of vision in life on psychological well-being under college stress or under other stresses. Second, also to the best of our knowledge the present research first links up control and self-transcendence meaning. Thus, the spiritual control is different from personal control because of the former's spirituality. Moreover, this spiritual control is also different from other spiritual control because of its transcendence over personal control to spiritual control rather than simply giving up personal control. The significant meaning is that when spiritual control is established on self-transcendence, people sense a larger control than personal control naturally, rather than giving up personal control for control by others. Third, regarding the link between non-spiritual and spiritual coping resources, this study may provide the possible comparison between buffering effects of non-spiritual and spiritual coping resources. The comparison is important for theory of non-spiritual and spiritual coping resources.



Practically, findings of this present study may also contribute to intervention with the negative impacts of college stress. We hope the findings would be useful for both primary and secondary prevention of college stress. The assessment developed specially for this study would provide future studies with an instrument to measure vision in life thus providing the possibility to generalize the findings of this study.

ORGANIZATION OF THE DISSERTATION

Following this introduction, the dissertation will be divided into nine chapters. The second chapter contains a review of the literature on college students' stress and psychological well-being, as well as some previous coping resources, which implies a need to establish a new coping resource. The third chapter, then hinges on the development of a new coping resource, which is established on the sublimation of the reviewed coping resources, as well as on the observations. The fourth chapter is devoted to conceptualize research variables while the fifth attempts to build the conceptual framework. The sixth chapter contains construction and validation of measures, while the seventh chapter contains methodology. The eighth chapter describes results of analyses while the ninth is devoted to discussing the results. The tenth is reserved for the contributions, implications, limitations, recommendations and overall conclusion. Finally, the appendix sets out the collation of the instruments used for data collection in this study.



CHAPTER 2

LITERATURE REVIEW

Based on the underlying assumption that psychological well-being is a kind of human reaction set in emotion by stressful experience, we can link stress and psychological well-being together. Stress tends to impose a strong direct negative impact on college students' physical and mental health. However, a related body of research suggests that although stress does exert a negative impact, the intensity of its consequences on health is likely to be different for individual college students, depending on their own different resources of coping (Taylor & Brown, 1988).

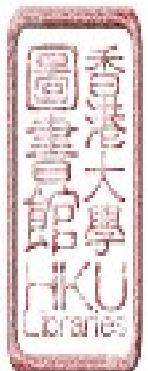
PREVALENCE OF PSYCHOLOGICAL WELL-BEING PROBLEMS

Like non-Chinese college students, college students in Chinese universities are facing psychological well-being problems increasingly in recent years. "Chinese Youth Daily" 《中國青年報》(1988) reported that among the 5 million college students surveyed in Tianjin, about 16% has psychological well-being problems and the majority of which are anxiety, depression and intimacy problems. "People's Daily" 《人民日報》(1989) reported that among the 2916 college students surveyed, 25% has psychological well-being problems. "Health Daily" 《健康報》(1989) reported that among the 12.6 million college students surveyed, the percentage of mental health problems reached 20%. It is reported from Sichuan province (1992) that among the students of eight different universities surveyed, over 30% has different kinds of mental health problems, 12% has moderate severe problems and



less than 1% has severe problems. A survey of 14 universities of Jiangsu province (1999) reported that the rate of mental health problems among the 2080 college students surveyed was much higher than the other adolescent groups, and nearly 20% of the college students has various psychological well-being problems. A very recent study (Fan,Wu & Wong, 2000) showed that of over 5200 college students from 23 universities in Beijing, 17% has moderate severe psychological well-being problems, moreover, the most severe problems appear in the second college year.

Furthermore, it has been estimated that the suicide rate among college students is 50% higher than that of the general population (Craig & Senter, 1972). Moreover, the suicide rate among college students has been found to be significantly higher than that of the same-age non-student population (Mishara, 1982). A research by Mishara (1982) reported that 13% of a student population had attempted suicide, while nearly 50% had considered suicide some time during their college years. According to Rudd (1989), 44% of a sample of university students reported suicidal ideation during 1988, with approximately 2% actually making an attempt to commit suicide. A report by Hilary and Brent (1994) indicated that among young adolescence of 15-24 years of age, the rate of suicide due to severe psychological problems ranked second as the leading cause of death for this age group. Consistent with these disturbing statistics, some epidemiologists suggest that suicide is the second leading cause of death on college campuses (National Center for Health Statistics, 1990). In a survey of freshmen in Chinese universities (Ji, 1999), 7% freshmen had suicide ideation among 1378 college students surveyed and another 25% reported that they occasionally thought about suicide.



MAJOR STRESSORS OF COLLEGE STUDENTS

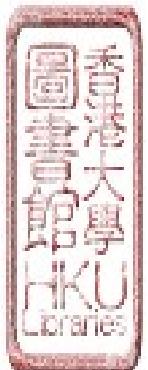
Literature revealed that there are two types of stressors among the college students, which are major hassles and negative life events (Tolan, Miller & Thomas, 1988).

Major Hassles

According to Tolan et al. (1988), major hassles of college students consisted of both campus hassles and family hassles. The present study only focused on campus hassles.

Literature review traced back for 15 years found that the general pattern of hassles on campus was quite similar over time. Murphy and Archer (1996) explained that the consistency of hassle pattern in terms of the structure of the higher education enterprises. During the past 15 years, the structure had not changed significantly, and students encountered similar hassles on campus.

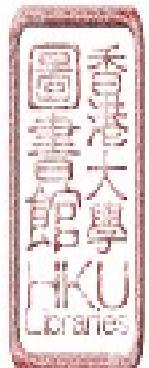
Many studies viewed campus hassles from academic, social and emotional dimensions (e.g. Hilary & Brent, 1994), or from academic and personal dimensions (Archer & Lamnin, 1985; Murphy & Archer, 1996). The major academic hassles identified were frequency of tests, grade competition, time pressure, relation with professors, classroom environment, career and future success (Carson & Runco, 1999; Murphy & Archer, 1993; Roberts & White, 1989). The major personal hassles identified were parental conflicts, financial problems, and interpersonal conflicts with friends (Archer & Lamnin, 1985; Roberts & White, 1989) and the greatest personal hassles were living conditions, appearance, roommate conflicts,



meeting others, parents, and intimacy relationships. Blankenstein, Flett, and Koledin (1991) identified seven frequently experienced “hassles”. They were in descending rank order organization of time, academic deadlines, inadequate finances, family expectations, future job prospects, and college requirements. Gadzella (1994) reported that students’ stressors could be divided into five categories: frustrations, conflicts, external and self-imposed pressures, and changes. A study by Everly, Poff, Lamport, Hamant and Alvey (1994) indicated that at least 86% of the subjects reported their top stressors to be examinations, amount of class work, lack of free time, long hours of study, and poor grades. Kim, Won, Liu, Liu, and Kitanishi (1997) reported that Chinese students had a multitude of stressors: financial difficulty; poor study skills; conflict of academic achievement and inadequate study environment; conflictual interpersonal relations; personality problems such as interpersonal sensitivity and emotional problems, sex and identity problems, and low self-esteem. Among these stressors, Chinese students showed greater severity in personality problems (sociophobic and emotional problems, sexual and identity problems), and self-esteem problems (inferiority complex, dependency, others' criticism, etc.).

Negative Life Events

Literature generally divided negative life events on the basis of two kinds of standards, events which are circumscribed/discrete or events that mark the onset of a life-transition process (Tolan et al., 1988), and controllable or uncontrollable negative life events (e.g. Ge, Lorenz, Conger, Elder, & Simons, 1994). The former standard is mainly based on the type of readjustment process required. Circumscribed/discrete events (e.g. auto accidents) may require obtaining support to



withstand or "get through" the events, whereas events that mark the onset of a life-transition process (e.g. parental divorces) seem to require a reorganization of adaptive functioning. The latter standard is mainly based on whether the events are within or beyond personal control. The present study adopts the latter standard, and treat controllable and uncontrollable negative life events which are perceived to be within or beyond personal control. Based on literature review, most negative life events that students identified are controllable. Some negative life events reported by researches such as the death of a parent, the separation or divorce of parents, argumentative parents, injuries, and serious financial trouble (Ge et al., 1994) are not controllable by the students concerned.

STRESS AND PSYCHOLOGICAL WELL-BEING

As a result of stresses, a significant number of students experience health problems and emotional problems during their college life (Fisher & Hood, 1987; Fisher, Murray & Frazer, 1985). However, this association was not upheld for all types of stressors. This section highlights stresses and specific psychological well-being problems.

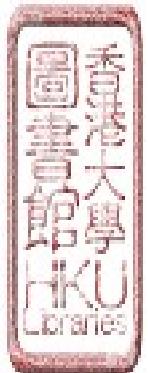
Major Hassles and Psychological Well-being

Hassles can be strongly related to depression and illness (McIntosh, Harlow & Martin, 1995). According to Houston (1972), major hassles mostly related to psychological problems were academic stress. Heinz, Fahey and Leiden (1984) pointed out that intense anxiety in students arises from academic expectation and performance, and social factors such as interpersonal relationships. Monks and



Heath (1954) reported that 18% of the Harvard class they studied, anxiety, depression, character traits, or emotional sensitivity had hampered the students' adjustment some time during the four years in college. Thirty six percent of the Yale students and 35% of the students at the Southern Connecticut College reported to have been bothered by nervousness "very often" or "fairly often". The following two studies illustrate how academic stresses may adversely affect students' psychological adjustment as reflected in the number of students who seek psychological or medical help. In six academic years, the frequency of appearances for services at a university psychological clinic increased significantly immediately following midterm examinations for both fall and spring semesters (Baker, 1963). There was also a significantly higher frequency of appearances for services at the psychological clinic during the second week of the spring semester, which was a possible consequence of students' reaction following the fall semester's final examinations. Wright (1964) reported that at the University of Florida the number of infirmary outpatients and the frequency of counseling for men for both semesters and for women primarily for the spring semester peaks at midterm and final examination times.

Interpersonal mistrust was most strongly and consistently related to students' depression. Monks and Health (1954) reported that for the Harvard class they studied, 20% of the students had interpersonal problems that interfered with their academic performance some time during the class's four years in college, which together with academic performance then negatively affected psychological well-being. According to Wu and Lam (1993), hassles related to difficulties in interpersonal relationships were found to play an important role in both daily health and mood. This was in line with past findings that interpersonal stress might

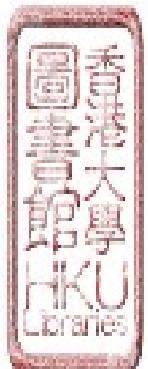


initiate, maintain, or exacerbate depression (Coyne, 1976).

Of the adverse effects that college students' problems may have on their psychological adjustment, student suicide is a traumatic incident. Researchers found that suicide occurred significantly more frequently among students than among their nonstudent peers. Individuals attending college may be at a significantly greater risk for suicidal behaviors than those not attending college (Silver, Goldstein & Silver, 1984). The main conflicts preceding suicide were concern over studies, unusual health complaints, and difficulties with interpersonal relations. Houston (1971) suggested a connection between concern over studies and 40% of the suicides at Harvard. Major campus hassles may render students less confident in their abilities or more fearful of their circumstances, thereby increasing the risk for suicidal behaviors.

Negative Life Events and Psychological Well-being

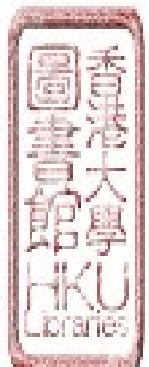
The negative life events most strongly related to psychological well-being problems were distressful life events (Damush, Hays & Dimatteo, 1997). Based on a 350 college student sample, Damush et al. (1997) suggested that experiencing distressful life events was related to greater anxiety, depression and bodily pain. In addition, stressful events in this category were associated with poorer cognitive functioning, worse perceptions of health condition, less positive affect, a lower sense of belonging, and poorer social functioning. College students who experienced life events in the family/parents area that they perceived to be negative also reported greater anxiety, depression and bodily pain than other college students. In addition, they reported worse cognitive functioning, social functioning, and health perceptions



than other students. Negative perception of family/parental life events was also associated with more dysphoria (Gore, Aseltine & Colton, 1992; Newcomb, Huba & Bentler, 1981). Students who experienced sexual life events that they perceived to be negative reported greater depression, less positive affect, and a lower sense of belonging than other college students (Damush et al. , 1997). According to Gore et al. (1992), negative autonomous life events were significantly related to poorer current health and exhibited similar significant relationships with that as did sexuality life events. Homesickness during the period of transition is most strongly associated with anxiety (Fisher & Hood, 1987). Change and transition may be associated with mental and physical disorders (Fisher et al., 1985). Researches suggested that college students' suicide ideation were related to negative life events and loneliness (Schotte & Clum, 1982).

Number of Stressors and Psychological Well-being

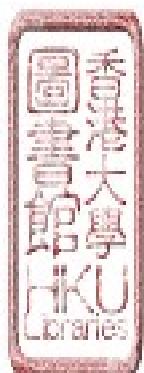
Although some adolescent stress research has focused on the effects of specific stressors, an alternative approach involves studying the relationship between cumulative life changes and negative health outcomes. Research evidence suggested that the maladjustment probably related to both changes in reactivity to environmental stressors and to their more frequent occurrence (Bronfenbrenner, 1986; Werner & Smith, 1982). Indeed, several investigators (e.g. Dubois, Felner, Brand, Adan & Evaznts, 1992; Petersen, Sarigiani & Kennedy, 1991) have argued that students were at greatest risk when they simultaneously experienced multiple adaptive challenges. Increased number of stressors within a relatively short period, but not the novelty nor types of events, were associated with increased depressive symptoms in BrooksGunn's (1991) 4-year longitudinal study.



According to DeLongis, Coyne, Dakof, Folkman and Lazarus (1982), hassle frequency was significantly correlated with symptom levels. Subjects with high frequencies of hassles were found to have relatively high levels of somatic symptoms. High frequencies of uplifts were also found to be significantly associated with high levels of symptoms. As with the relationship between uplifts intensity and overall health, the part correlation between uplifts frequency and symptoms controlling for hassles frequency was found to be nonsignificant.

Intensity of Stresses and Psychological Well-being

Intensity of stresses were divided into four levels, which were weak, moderate, strong and ambiguous (e.g. Aldwin, 1994) and the more intense the stress, the more severe the psychological well-being problem. DeLongis et al. (1982) suggested that increased intensity of stresses was positively associated with an increased somatic illness. Based on a college student research, Roberts and White (1989) suggested that students subjected to intense stress of academic, personal and interpersonal pressures, demands, and life changes were vulnerable to mental and physical ill-health. In fact, some researchers also indicated that high intensity of stresses required coping efforts, whereas low intensity of stresses did not need coping (see Matheny, Aycock, Pugh, Curlette & Cannella, 1986). Maton (1989) with reference to a college student sample suggested that high stress significantly affected psychological well-being of students, whereas low stress did not.

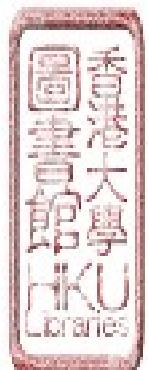


COPING RESOURCES

Many theories on stress and coping are concerned about what variables render people more or less vulnerable to adverse effects of stressful conditions. These theories share a good deal of conceptual ground but differ in certain respects because theorists emphasize or deemphasize various elements. Two variables have been repeatedly reported as the moderators in the relationship between stress and psychological well-being of college student. They are personal control and meaning in life. Issues of these two variables are addressed below.

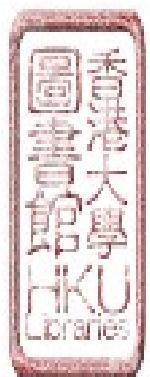
Personal Control

There was an extensive body of research linking sense of control with both physical and psychological health (Rodin, 1986). Beliefs about control, mastery, and agency were central concepts in many psychological theories of emotional well-being (White, 1959), adjustment to major life events (Janoff-Bulman & Frieze, 1983), coping with pain or stress (Miller, 1979). Research supported the idea that beliefs about control had important implications in a number of areas. For example, across a wide variety of situations, perceived control was associated with better emotional well-being, more successful coping with stress, better health and physiological outcomes, success at making behavior changes (Thompson & Spacapan, 1991). According to Folkman (1984), control appraisals concern whether personal coping resources were capable of meeting situational demands. Based on a college student sample, Peacock and Wong (1996) suggested that control perceptions were important in the coping process. Literature of college students' mental health revealed that control affected the relationships between stress and psychological well-being (Dixon, Heppner & Anderson, 1991).



In fact, literature on control generally focused on personal control. Thompson (1981) offered three reasons why personal control helped alleviate the distress stemming from chronic stressors. The first was that it increased the predictability of outcomes. When one believed the outcomes were influenced by one's own actions, one can better anticipate future consequences. Secondly, it set an upper limit on adverse consequences: "persons with control responses available know that the situation will not become so aversive that they cannot handle it" (Thompson, 1981). A third explanation was that a sense of personal control undercut feelings of helplessness and incompetence. Taylor (1983) added yet another explanation: the perception of control increased the probability that one would take actions that will improve the situation and thereby alleviate one's emotional burdens.

Researches suggested that the sense of personal control was a key determinant of successful adjustment to stress (Bandura, 1986; Schulz & Heckhausen, 1996). Personal control was expected to act as the coping resource as did actual control or it strove people's efforts for control, and then real control would appear. In a general view, early research assumed that believing one had control over aversive outcomes was stress-reducing and that believing one had little or no control over them was stress-inducing (Folkman, 1984). Then, did the sense of control really confer benefits? The answer is not as simple as it appears at first glance. Indeed, the idea that people dealt better with stressors when they had the perception of control was a recurring theme in the stress literature (Carver, Harris, Lehman, Durel, Antoni, Spencer & Pozo-Kaderman, 2000). As experiments were repeated and extended, it became clear that the relationship between control and stress was not as simple as was expected (Folkman, 1984). Believing that an event was controllable did not always lead to a reduction in stress, and believing that an event was uncontrollable



did not always lead to an increase in stress (for reviews, see Thompson, 1981). Thus, the effect of personal control in the relationship between stress and psychological well-being was also not as simple as was expected. In fact, the data on the effects of personal control fell roughly into two lines. The first line of data was related to the beneficial effects, which represented the mainstream of the literature. The second line of data was associated with the detrimental effects, which attracted few attention. These findings stimulate the present study to further review the relationship between personal control and psychological well-being within the framework of stress—coping resource—psychological well-being. We have not reviewed the extensive literature on perceived control. Instead, we take note of several studies chosen as especially relevant to the themes of this study.

It is necessary to consider what is meant by "personal control". If control is defined as the ability to get desired outcomes, or as a contingency between actions and outcomes with feedback showing that progress is in the desired direction, then it is difficult to see how control might be undesirable or maladaptive. However, this definition does not adequately capture many of the manipulations or naturally occurring variations in control that research has examined (Thompson, Cheek & Graham, 1988). These include the opportunity to avoid an aversive outcome by performing well on a task; being involved in one's own health care; practicing health-promoting behaviors; self-administration of a noxious stimulus; being the one to make a choice or a decision; instruction in cognitive techniques that could be used to reduce pain or stress; and receiving information about what to expect in a situation, which presumably allows one to prepare for a stressful event and therefore reduce its impact. There are four important characteristics of these control options. First, they are often perceptions of control that may or may not be veridical. The



perception could be inaccurate and, if so, control efforts would fail. Second, in most situations, the control available is probabilistic; that is, one's efforts may make it more likely to get a desired outcome, but success is not certain. Thus, even if one's perceptions of control were accurate, one's efforts toward control could lead to failure. Third, the desired outcome in a potential controlled situation is frequently multidimensional; that is, more than one type of goal is desired. A decision about a health issue, for example, could also have implications for other goals, such as self-esteem, interpersonal relationships, and finances. Exercising control might make the desired health outcome more likely, but could adversely affect some other goals. Fourth, perceived control is often the potential to affect an outcome. It may be rather costly to actualize that potential in an attempt to have control over a situation. The costs may involve considerable efforts, financial losses, hassles, worries, and increased stresses. These four characteristics of control options make it reasonable to assume that perceived control is not always desired and actually can be maladaptive.

It seems that when personal control was used in different studies, it has different meanings. On the one hand, personal control was treated as a perceived ability to get desired outcomes, or as a contingency between actions and outcomes with feedback. On the other hand, personal control was considered as control efforts that were led by perceived control ability. In fact, the beneficial effects of personal control in literature mainly referred to the perceived ability to get desired outcomes, or as a contingency between actions and outcomes. However, if personal control was treated as control efforts though it was led by perceived control ability, it may be related to negative psychological outcomes under some stressful conditions. As we mentioned previously, the definition of control ability does not adequately capture



many of the manipulations or naturally occurring variations in control that research has examined. Logically, control efforts may be the sequela of perceived control ability.

a. Beneficial effects of personal control

As we mentioned above, if personal control was defined as the ability to get desired outcomes, or as a contingency between actions and outcomes with feedback showing that progress was in the desired direction, then it should be associated with adaptation. For example, individuals who perceived themselves as highly self-efficacious activate sufficient efforts, which, if well executed, produced successful outcomes, whereas those with low self-efficacy were likely to cease their efforts prematurely and fail on the task (Bandura, 1986, 1997).

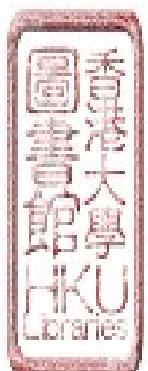
Many studies have investigated the correlates of personal control, and it has been shown to be associated with greater self-esteem (Koenig, Clements & Alloy, 1992), popularity (Nowicki & Roundtree, 1971), achievement motivation (Burger, 1992) and academic success (Cole & Sapp, 1988). It is clear that personal control was related to success in many aspects of life (Muraven, Tice & Baumeister, 1998). Also many studies supported the idea that having a sense of personal control related to better emotional well-being under stresses. For example, several studies have obtained evidence that personal control moderated the negative effects of stress (Johnson & Sarason, 1978; Kobasa, 1979). Johnson and Sarason (1978) found a positive correlation between frequency of occurrence of negative life events and psychological disorder for external locus of control college students. The inference was made that internal control students perceive themselves as having more control over negative events and that this perception of control led to a lower stress level



(Sandler & Lakey, 1982). This inference was logically consistent with laboratory research on the stress-buffering effects of control perceptions (Cohen, 1980). Internal locus of control has been shown to buffer the effects of stressful life events (Cohen & Edwards, 1989). Based on a sample of 61 college students, Ainslie, Shafer and Reynolds (1996) suggested that students who expressed a higher sense of control over their study and their personal lives, reported lower levels of stress. They also suggested that when students felt helpless in managing the challenges they face, they were more likely to feel overwhelmed by them. Conversely, the greater their sense of efficacy and influence over these challenges, the more they were likely to feel that they could manage, with a consequent lowering of stress. Given that in a college preparatory school environment where academic demands were high and represented a fairly constant stressor, students who felt more in control of their lives appeared to manage that stress more effectively.

b. Detrimental effects of personal control

Although personal control often relates to lower distress, this is not always so. Indeed, some have argued that situations exist in which perceptions of personal control are actually detrimental to well-being (Burger, 1989; Carver et al., 2000; Folkman, 1984; Thompson, 1981). Some studies suggested that having a sense of personal control in situations that offered few opportunities for actual control led to difficulties. Based on Carver et al. (2000), women with dispositional preferences regarding personal control might have experienced greater distress when they saw that they cannot control the happenings to them. According to Wortman, Sheedy, Gluhoski and Kessler (1992), those with views of the world as controllable and predictable may be particularly vulnerable when faced with an uncontrollable event. Thompson et al. (1988) suggested that perceptions of control may be maladaptive



when the attempt to exercise control was ineffective and led to failure. It is more stressful to experience a failure when one has tried to achieve success or avoid the negative outcome than if one expected or accepted the failure.

Rothbaum, Weisz and Snyder (1982) reviewed the evidence that those who see a fairly high chance of failure, either because of the structure of the situation or because of low self-esteem, will attempt to avoid the disappointment of failure by not exercising the available control to obtain a sought-after goal. Burger, McWard and LaTorre (1989) found that most participants who were asked to give a blood sample relinquished control over this procedure to the experimenters, who were viewed as more experienced. Apparently, this giving up of control to others occurred in an effort to avoid an undesired outcome. A similar principle seems to underlie results reported by Miller (1979). Her participants thought they were being tested for reaction speed. Each had a partner and only one of the pair could respond on a given trial. Participants were told that they would be shocked each time they (or the partner) failed to react within a specified time. Those who believed their partners had faster reactions than they did relinquished control, presumably to avoid a painful outcome.

Control may also not be preferred in situations in which another agent was seen as possessing greater skills or knowledge than oneself. Transferring control to that person was likely to be seen as a more effective way of getting desired outcomes than exercising the control oneself. Burger, McWard, and LaTorre (1986) tested this idea by giving subjects the choice of drawing their own blood sample or having another person do it. When the other agent was the experimenter, who was presumed to be experienced and knowledgeable, 70% preferred not to draw their own blood;



but only 38% made this choice when the other agent was an inexperienced assistant. Thus most subjects did not choose to have control if a more effective agent was available. There was some evidence that control options that required effort and attention to execute were no more effective than not having control, or can actually increase arousal in comparison to situations in which no control was available to influence a stressful event.

Solomon, Holmes and McCaul (1980) found that self-reported anxiety about receipt of a painful shock was reduced if the subjects believed they could avoid the shock by successful performance on a task, but only if the task required low effort. A high effort-task control option produced as much anxiety as the condition without control. Difficulty in exercising control was more arousing than low-effort control and just as arousing as a situation in which no control was available. Other studies have also found that having to perform well on a task to avoid electric shock was more arousing than administration of the shock without an opportunity to avoid it (Houston, 1972). Admittedly, exercising control is conceptually different from perceived control. Nonetheless, the former may be the sequela of the latter. Findings based on exercising control are in line with the conceptual argument related to perceived control.

Control can also have negative social consequences. Perhaps a person had the skills with which to exercise control over an aversive condition, but exercising those skills might result in damage to an important interpersonal relationship or in an embarrassing social interaction, thus he did not use his skills. In a study of the coping efforts of low-income mothers, for example, Dill, Feld, Martin, Beukema and Belle (1980) described how a woman was inhibited from doing something about her



child's behavior problems because to do so would likely involve "humiliating intrusions" from the school system, health and mental health services, or social workers. After reviewing research on perceptions of control, Burger (1989) identified several conditions that he believed cause people to relinquish control or to experience distress under conditions of perceived control. Of special relevance at present is his conclusion that personal control is undesirable when it reduces the likelihood of attaining a desired outcome or when it increases the likelihood of an undesired outcome.

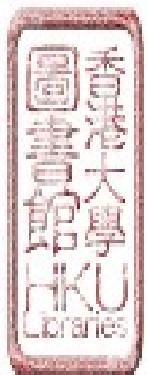
c. An alternative view

Some theorists did not view personal control as critically important. For example, Carver and Scheier (1981, 1990, 1994, 1998) suggested that anticipations of an outcome are what matter. They argued that people considered both external circumstances and personal control in forming expectancies about outcomes. The expectancy then related to emotional reactions and subsequent behavioral efforts. Indeed, in this model, affect and confidence versus doubt about outcomes were viewed as two subjective expressions of the same psychological mechanism (Carver & Scheier, 1998). The critical element in this model was whether the desired outcome seemed likely to occur, not how it was to occur. There were two contexts in which perception of personal control was necessary (Carver et al., 2000). First, sometimes the goal (the desired outcome) was explicitly something about oneself. The only way that outcome can possibly occur required perceptions of personal control. Without personal control in that situation, there will be distress. Second, situations existed in which exercising personal control was the only way to obtain a desired outcome because no other favorable causal force was in play. In such a case, unless the person perceives control and exercises it, the outcome will not occur.



Carver and Scheier's outcome anticipation model largely avoided the possible detrimental effects of personal control since the critical element in this model is whether the desired outcome seems likely to occur, not how it occurs. This model enlightens our thinking and we present it in a summary below.

Literature review revealed two data sets about the effects of personal control. Although there has been some interest that perceptions of control are not always adaptive, the negative side of having personal control has generally been ignored. However, when using control requires efforts; when control options do not have a high probability of success, or actually result in failure; and when a more effective agent is available, then the opportunity to control one's environment is less likely to be preferred and which opportunity may increase distress. Based on the unexpected findings of personal control, Carver et al. (2000) suggested an alternative view that what really matter is the likelihood for desired outcome to occur, not how it occurs. In fact, the expectation of the occurrence of the outcomes could also be defined as "perception of control" (see Thompson et al., 1988), only that it does not address who control, whether by self or by others. In other words, perception of control is important, it is possible that detrimental effects are only caused by personal control rather than by control. Thus, we still maintain that perception of control is important, but we may move beyond perception of personal control, and explore control beyond oneself. This exploration may provide an answer to the question: Can people possess control and still adequately prepare themselves for failure?



Meaning in Life

College student researches suggested that suicidal individuals lack important beliefs and values for staying alive (Linehan, 1981). Students without strong adaptive reasons for living were more likely to give up in attempts to resolve their stress and hopelessness, and were therefore more likely to move from suicidal ideation to overt forms of suicidal behavior (Bonner & Rich, 1987). According to Dixon et al. (1991), suicide ideators were found to have a lower total Reasons for Living scores than did non-ideators. Petrie and Brook (1992) also suggested that a profound sense of meaninglessness may eventually function as a precursor to suicide.

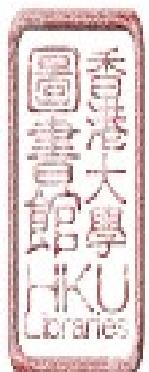
Welter (1987) suggested several causes of college students' meaningless life based on a survey of a quarter of a million college students as below:

1) Choosing money over meaning of life

Students were asked to identify their goals in life. In 1967, about 83% chose the answer "developing a meaningful life". In 1984, this answer was chosen by only 47%, about only half of the 1967 figure. In contrast, about 43% of those surveyed in 1967 chose the goal "being very well-off financially". Since then, there has been a rather steady increase in college freshmen choosing that goal. In 1984, 71% chose it as their main goal in life;

2) Pursuing affluence of life

It is not only the choice of money over meaning, but also the actual lifestyle that contributes to meaninglessness. When people lived on little money, survival



had great meaning; when living in affluence, however, people lack the motivation which filled the emptiness;

3) Pursuing hedonism

Striving for hedonistic values is usually counter-productive and is sometimes destructive; and

4) Losing a sense of gratitude

A sense of gratitude is important because it places people to experience meaning in life.

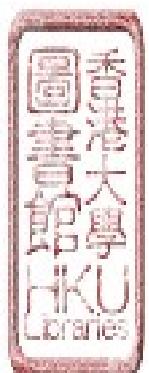
Furthermore, Welter (1987) also suggested the dynamics of meaninglessness as below:

1) Compensation

If people did not find meaning in their lives they were "stuck" in an existential vacuum. Since their search for a meaningful life is frustrated, they may compensate by pursuing pleasure or power instead. Frankl discussed the "Sunday neurosis" which occurs when the week's activities were completed and when people have a little time to think of the emptiness of their lives. This "sickness" contributed to alcoholism, juvenile delinquency, and other societal dilemmas;

2) Lack of responsibility

Frankl (1971) has a categorical imperative: "Live as if you were living already for the second time and as if you had acted the first time as wrongly as you are about to act now!" This imperative emphasizes the importance of our choices, and the



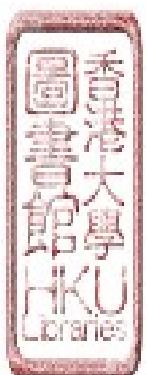
moral nature of choice. It also suggests that if we do not think seriously about life, we would make wrong choices that would result in an empty life; and

3) Neuroses

Elisabeth Lukas (1979) reported that "worldwide research has shown that 20% of all cases of psychological illnesses are caused not by childhood traumas or past conflicts but by an existential frustration and value conflict". Existential vacuum brought about inner frustration. Frankl made an important distinction here. Concern over the "worthwhileness of life was a spiritual distress but by no means a mental disease".

The notion that a sense of meaninglessness is important to psychological distress, and conversely a sense of meaningfulness to psychological well-being is a central component in a number of influential theories (e.g. Antonovsky, 1987; Frankl, 1971). Meaning in life is a concept, which has had central importance for existential psychiatry and psychology, and more recently has influenced the mainstream of psychology (Zika & Chamberlain, 1992). There are different definitions of meaning in life. According to Battista and Almond (1973), a meaningful life as defined in terms of positive life regard refers to an individual's belief that he is fulfilling his life in terms of his highly valued life-framework or life-goals. This definition logically implies that the development of positive life regard is dependent upon:

- 1) Commitment to some valued personal understanding of life;
- 2) The generation of an internal "scale" from this understanding of life which the individual can use as a measure of the fulfillment of his life; and



3) A positive self-evaluation of one's life in terms of this "scale"

Meaning in life according to Reker and Wong (1988, p.221) is "the cognizance of order, coherence, and purpose in one's existence, the pursuit and attainment of worthwhile goals, and an accompanying sense of fulfillment". A person's sense of meaning is believed to be generally stable, undergoing gradual transformation across the life-span in conjunction with changing beliefs and value systems (Reker & Wong, 1988).

Most psychological theories explained individual development as a function of the resolution of inherent needs or stages of development through the interaction of the individual with his social environment. The psychological perspective thus represented a potentially valuable method for explaining both the nature and development of an individual's commitment to some meaning of life, and the process through which this meaning may or may not be fulfilled. A great number of authors have written on the development of beliefs and morals using Freudian, social, and existential psychological viewpoints. The writings of James (1902) and Buhler (1933) have specifically involved the development of world-views and meanings in life and thus seem especially valuable for the study of the development of positive life regard. A second set of psychological theories, generally based on clinical experience, has centered on the process by which individuals develop "mental health." The Jungian concept of individuation (Jacobi, 1965) and the existential concept of authenticity (Bugental, 1965) seem to be most directly related to the development of positive life regard. A third set of psychological theories has emphasized the resolution of stages of development in the etiology of psychological states. Maslow's (1953) description of an entire hierarchy of needs that must be satisfied before an individual can accept "growth" needs and experience "life



validation" and "peak experiences" through the development of "self-actualization" is obviously directly applicable to the study of the development of meaning in life.

The writings of Victor Frankl made a substantial contribution towards the development of a theoretical foundation for meaning in life, as well as suggesting clinical implications that arise from the loss of meaning. Frankl (1959, 1967) believed that life had meaning under all conditions, even under suffering conditions. He asserted that when a person's search for meaning was blocked, existential frustration resulted, which could eventually lead to "noogenic neurosis", a pathological condition. Maddi (1967) described a similar condition, "existential neurosis", which he suggested had cognitive, affective, and behavioral components. According to Maddi, the syndrome "...is characterized by the belief that one's life is meaningless, by the affective tone of apathy and boredom, and by the absence of selectivity in actions." Furthermore, a person suffering from existential neurosis experiences alienation from self and society.

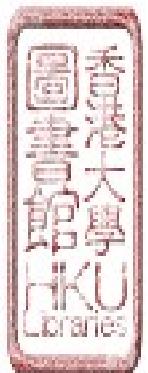
The writings of Frankl, Maddi and others inspired some researchers to investigate the life-meaning concept, although many of these early studies were unpublished (Yalom, 1980). These investigations almost exclusively used the Purpose in Life Test (PIL) developed by Crumbaugh and Maholick (1964) to assess Frankl's construct of meaning in life. More recently, the life-meaning construct has influenced psychological models of stress and coping. Lazarus and DeLongis (1983) contended that sources of personal meaning influenced the stress and coping process throughout the life-span. They suggested that a relatively stable feature of personality, and patterns of commitment affected the way situational events were appraised in terms of their possible impact on well-being, as well as on the way these



events were managed. According to Lazarus and DeLongis, life-encounters which challenged important commitments were likely to be appraised as a threat, increasing a person's vulnerability to stress. However, this vulnerability may also serve a positive function by driving a person towards an action that alleviated the threat, and thus maintained coping. Patterns of commitment were viewed as necessary, since their absence would lead to a pervasive state of meaninglessness (Zika & Chamberlain, 1992).

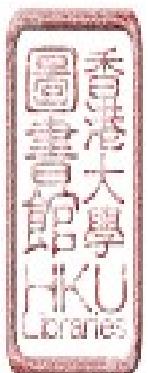
Spiritual well-being is defined as a personality attribute conceived of having one vertical dimension connoting one's perception of a relationship to God, and one horizontal dimension connoting one's perception of life-meaning or purpose, or satisfaction with one's existence (Paloutzian & Ellison, 1982). Some researches proposed that perception of a relationship to God buffered the relationship between high life stress and well-being (e.g. Maton, 1989). Other researches indicated that perception of life meaning or purpose moderated the relationship between negative life change and depression (Brennan, Fehring & Keler, 1984; Fehring et al., 1987; Tubesing, 1980). A positive relationship has been established between both dimensions of spiritual well-being and high self-esteem (Febring et al., 1987). Furthermore, a negative relationship between spiritual well-being and negative-mood states such as loneliness, depression, and tension has emerged through the work of other investigators (Leasor, 1983; Miller, 1985).

A number of other studies have explored the relation of meaning in life to mental health outcomes. According to Chamberlain and Zika (1992), there is a clear link between people's search for meaning and their emotional health. Ganellen and Blaney (1984) concluded that alienation from self, a construct closely



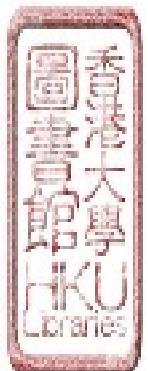
associated to meaning, moderated the effects of life stress on depression. Newcomb and Harlow (1986) found in two different studies that perceived loss of control and meaninglessness in life moderated the relation between uncontrollable stress and drug abuse. Harlow, Newcomb and Bentler (1986) found meaninglessness to moderate between depression and self-derogation, and subsequent drug abuse. Along similar lines, Coleman, Kaplan and Downing (1986) reported that drug addicts were less likely than non-addicts to have a well-defined meaning in life. Zika and Chamberlain (1987) reported meaning in life to be a strong and consistent predictor of psychological well-being.

Fehring et al. (1987) conducted a study based on a sample of 435 college students. The hypothesis to be examined was that depression in response to changes in life would be lower in students with high levels of spiritual well-being and high spiritual maturity than students with low levels of spiritual well-being and spiritual maturity. They also reported that spiritually oriented social activity may have a modifying influence on depressive responses to negative life changes among some college students. The results suggested that spiritual well-being moderated the depressive response to negative life changes. The expected relationship between depression and spiritual well-being emerged. The inverse relationship between spiritual well-being and negative-mood states was also evidenced. Individuals' sense of meaning and purpose in life has a greater impact on maintaining low levels of depression than on having a relationship with God. The results were reinforced by other investigations (Leasor, 1983; Miller, 1985).



Maton (1989) also administered a study based on first-semester college freshmen. The study included both a semi-structured interview and self-report questionnaires. The findings supported the view that individuals under high levels of life-event stress were likely to benefit from perceived spiritual support. Students who had experienced three or more uncontrollable life events, with higher levels of perceived spiritual support reported more favorable well-being than did those with lower levels. There were no significant relationships between spiritual support and well-being for the low-stress samples. Maton (1989) further suggested that spiritual support may influence well-being through directly enhancing self-esteem and reducing negative affect (emotional support), or through enhancing positive and adaptive appraisals of the meaning of a traumatic event (cognitive mediation). Such emotional and cognitive benefits may further lead to an increased capability to pursue adaptive stress-related coping strategies, and to an enhanced capacity for perceiving and receiving functional social support from others, including fellow religious believers.

Results from these studies were similar to those of the earlier investigations. Meaning in life was consistently related to positive mental health outcomes, while meaninglessness was associated with pathological outcomes. Several theoretical accounts of this association have been proposed. The most predominant view, arising from the clinical work of Jung, Frankl, Maddi and others (see Yalom, 1980), is that some types of psychopathology result because of a failure to find meaning, and conversely that the attainment of meaning was healing to the psyche. Debats (1996) indicated that meaning in life and well-being operated interactively: people's sense of well-being depended partly on the ways they ascribed meaning to their life experiences. Conversely, people's perceptions of what was meaningful were



influenced by their sense of personal well-being. The relationship between meaning in life and well-being was complex and more studies were needed to investigate how meaning in life exerted its effects on outcomes of well-being (Debats, 1996).

Summary

Literature review on the issues of personal control and meaning in life suggested that both of these two variables are crucial in the relationship between college stress and psychological well-being. There have been, however, some contradictory findings suggesting that in some circumstances high levels of personal control may bring damage to health-related outcomes. Regarding meaning in life, the findings of its direct and the moderating effects are consistent, but we are more interested in how it functions as a coping resource? The question arises because literature showed that different meanings in life all play their parts in buffering. We think a common variable might be underlying them, and thus facilitate them all to function as a buffer.

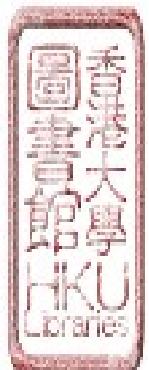
Thompson (1981) provided three reasons to explain how personal control helps alleviate distress stemming from stresses. 1) It increases the predictability of outcomes; 2) It sets an upper limit on adverse consequences; and 3) It undercuts feelings of helplessness and incompetence. The first two reasons address people's expectations of desired outcomes or consequences through personal control. In other words, what people really concern is the outcomes or consequences, whereby personal control is a possible way to achieve them. The third reason emphasizes the subjective feelings of helpfulness and competence also through personal control. In other words, the purpose is to obtain the feelings of helpfulness and competence,



and personal control is a possible way to obtain them. Cohen and Lazarus (1979) also suggested several targets of personal control: 1) To reduce harmful environmental conditions and enhance prospects of recovery; 2) To tolerate or adjust to negative events and realities; 3) To maintain a positive self-image; and 4) To maintain emotional relationships with others.

As personal control is generally treated as a possible means to achieve other purposes, rather than the ultimate purpose per se, moreover, as personal control sometimes leads to negative psychological outcomes, rather than just positive outcomes, it is expected that there may be some other ways that could also achieve the same purposes as does personal control, but avoid its negative effects. In fact, the alternative view proposed by Carver et al. (2000) is such an attempt. Their alternative view suggested that what really matters is the likelihood for the desired outcome to occur, not how it will occur. In fact, the expectation of the occurrence of the outcomes could also be regarded as "perception of control" (see Thompson et al., 1988), but it does not address who is in control, whether by self or by others.

In other words, it is the perception of control rather than who is in control that plays the crucial part in the positive psychological outcomes. Personal control sometimes leads to negative psychological outcomes not because of the perception of control, but because of the focus on personal control. Thus, a sense of control beyond personal control may be a way to achieve the same purposes as does personal control but without its attending negative effects. We shall further explore why personal control could also give rise to detrimental effects on psychological well-being at a theoretical level in the next chapter.



Based on our literature review on meaning in life and spiritual coping resources, there is consistent evidence that meaning in life and spiritual coping resources could moderate the relationship between college stress and psychological well-being. However, in literature, meaning in life is described in association with a variety of concepts like: engagement (Sartre, 1943), fulfillment and self-actualization (Maslow, 1962), commitment and self-transcendence (Frankl, 1967), integration and relatedness (Buehler, 1968), sense of wholeness and belonging (Weisskopf-Jelson, 1968), sense of coherence (Antonovsky, 1979), and responsibility (Yalom, 1980). These concepts of meaning in life in fact could be divided into two somewhat opposite sets: self-actualization and self-transcendence. If all these concepts of meaning in life are essential to psychological well-being, then the substance of meaning in life seems not that important, what matters is a sense of meaningfulness. The role played by all these different meanings in life in the relationship between stress and psychological well-being is not clear, we propose that there is a common variable that might be underlying them, and thus they can all function as buffer.

Taken together the issues regarding personal control and meaning in life, can we assume that personal control and meaning in life are in fact associated with each other? We can at least find two links between them: First, both of them are related to expectancies; Second, both of them emphasize the significance of psychological anticipation of the future. The term *expectancies* is used to refer to beliefs that desired outcomes would occur, either due to one's own efforts or to other factors not under one's control (Erickson, Post & Paige, 1975; McGee, 1984). If we assumed that the desired outcomes would make life meaningful, it would appear, then, personal control and meaning in life are linked positively.



The linkage of personal control and meaning in life is important, and thus, we may find possible answers to questions regarding personal control and meaning in life. That is, the proposed underlying variable of meaning in life may be some kind of control; and when meaning in life is taken into account, people may exercise control over events, and still prepare themselves adequately for possible failure. We may further assume that personal control and meaning in life may be a component of the other under stressful conditions to induce psychological well-being. However, when meaning in life or spirituality is taken into account, personal control would lose its inherent meaning. Control would no longer be personal, but rather spiritual-related. A meaning in life, once combined with personal control, would play a bigger role than either alone. In one word, when linking personal control and meaning in life or spirituality together, they formulate a new construct. It is expected that this new construct may represent some more powerful coping resource because it is based on the sublimation of existing coping resources. The next chapter will focus on the development of the new construct as a coping resource.



CHAPTER 3

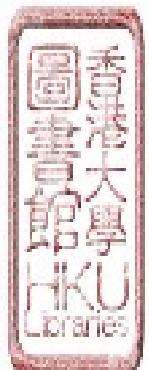
SELF-TRANSCENDENCE AND VISION IN LIFE

This chapter reports our attempt to link meaning in life or spirituality with personal control. We assume that when meaning in life or spirituality works with personal control together, a new construct could be established. The construct may be construed as a stable attitude with important implications as a coping resource with which people cope with stresses and regulate their behaviors. That is, it serves as a coping resource in times of stress.

The first section of this Chapter shows an analysis of the two major coping resources. Some theoretical views are provided. The second section includes some empirical findings on self-focus and ill-being, aiming to further support the analysis in the first section. The third section then deals with some theoretical approaches of self-transcendence and well-being. In the final section, a new construct is established which includes the alternative views on personal control and meaning in life, and a phenomenological analysis based on observations, and the new construct.

THEORETICAL VIEWS ON COPING RESOURCES

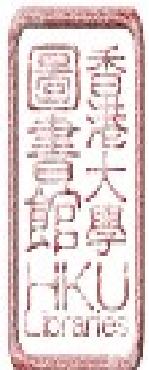
Literature review revealed two major influential variables viz. personal control and meaning in life in the relationship between college stress and psychological well-being. Personal control has some limitations or weaknesses when it acts as a



coping resource. We could infer from the alternative view of Carver et al. (2000) that it is the perception of control rather than who is in control that plays the crucial part in the positive psychological outcomes. We further postulate that personal control sometimes leads to negative psychological outcomes not because of the perception of control, but because of the person in control. It is necessary to further analyze the issues of personal control at a theoretical level that would serve to support the above postulations. Such analysis is also necessary to find out other control than personal control which is the essence of personal control and is pivotal in the relationship between college stress and psychological well-being. Regarding meaning in life, since all different meanings in life function as coping resources, even if we suppose that meaning in life is essential to psychological well-being, we still have to establish whether it is essential that one is committed to meaning in life. We further postulate that a common variable might be underlying meaning in life, and thus different meanings in life can all function as coping resources. The analysis would provide us with the supportive evidence for the postulations above. It is also necessary to discover the link between personal control and meaning in life as we foreshadowed in Chapter two.

Personal Control

There are several reasons that lead us to theorize that it is more stressful to experience a failure when one has tried to achieve success or avoid the negative outcome than if one anticipates failure at the start or accept failure after the event.



First, those who expect to be in control and attempt to exercise control may be cognitively unprepared for failure. This assumes that if exercising control to get a desired change was not achieved, it would be more problematic. Intuitively, it would seem that emphasizing one's limited ability or the role of external factors or highlighting the positive aspects of an undesirable condition might reduce the motivation to attempt control. Thus those who are cognitively best prepared for a negative experience would be least likely to try to avoid it. Conversely, those who expect to be able to exert control and avoid a negative outcome might not be well prepared for failure and, therefore, might be more devastated by it. In line with this view, Rothbaum et al. (1982) suggested that those attempted to change the environment to achieve desired outcomes were likely to feel helplessness when the efforts to exert control were unsuccessful and the undesired event occurred than those who did not so attempt. However, the assumption that expecting and exercising control left one less well-prepared for failure remains questionable until there is further research evidence.

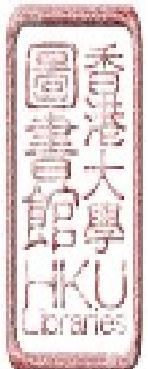
Second, when one's control efforts fail he may be maladaptive if others held him responsible for the negative outcome. For example, a person may not want control over the decision on where to go on vacation because, if the vacation turned out badly, he or she may be held responsible for the outcome. Although no research has been conducted directly on the hypothesis that failure of control may render one maladaptive if others held him responsible for the negative outcome, there was evidence to this effect. For example, tardy confederates who offered an excuse that events were beyond their control provoked less anger, resentment, irritation, and dislike than confederates who offered an excuse involving controllable events or those who offered no excuse at all. This suggested that when one had



control over a negative situation, one was likely to be held responsible for that situation by others. Not only would others more likely to blame the individual for an event or held the person who had control over the outcome responsible, but they were more likely to evaluate the person negatively (see Thompson et al., 1988). Thus, in situations in which people found it stressful or harmful to be evaluated negatively by others, control may not be desired as it may increase stress.

Third, unsuccessful efforts to exert control may lead to more stress than relinquishing control because the attempt to control a situation may lead to blame when the control effort failed and negative consequences ensued. Blaming oneself was related significantly to feeling worse about oneself and to feeling more incompetent in situations which one tried but failed to control. Furthermore, in situations where failures arise from the loss of control, self-blame would lead to worse emotional outcomes. Finally, disappointment arising from unfulfilled expectations is one way in which exercising control can be stressful.

In summary, possible reasons that one would feel more stressful in experiencing a failure after he/she has tried to control than relinquishing control at the start are: lack of preparation for failure; blamed by others; blaming oneself and disappointment. Based on these reasons, people often refrain from exercising control in a situation that is liable to fail, presumably to avoid internal attributions for the failure. Thus, if a control could avoid internal attributions for failure, even if the control failed, it would not lead to more stress than without control. Since our major purpose is to explore a control with which people adequately prepare themselves for failure, it is also necessary to find out why personal control should reduce stresses and negative psychological outcomes.

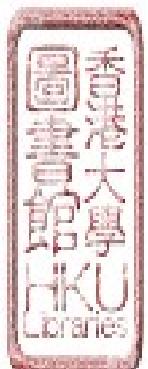


A number of theories, hypotheses, and speculations have been postulated to explain why personal control should reduce stresses and in turn negative psychological outcomes. These theories can be classified into three different groups:

- a) Theories that reduce control in predictability and explain why predictability is beneficial (see Miller, 1979 for a review);
- b) Theories that explain the effect of controllability in terms of how it reflects on one's self-image; and
- c) Theories focus on controllability as a signal about future outcomes.

a. Predictability as a kind of control

Several theorists proposed that personal control reduced stressful reactions because it allowed the person to predict certain important aspects of the situation. The safety-signal hypothesis (Seligman, Maier & Solomon, 1971), for example, states that events were less aversive with behavioral control because people knew when the noxious stimulus would be delivered. They were therefore able to relax when no stimulus was coming, a luxury not possible for those who cannot predict when the noxious event would occur. Similarly, controllability has also been proposed to reduce aversiveness because the predictability led to lesser cognitive overload. A person who can predict when an event would occur does not have to keep searching the environment for signs that a stimulus was imminent (Cohen, 1980). Another prediction explanation, the preparatory-adaptive response hypothesis (Kimmel, 1965), was that personal control reduced pain and stress because it allowed one to predict when the noxious stimulus would occur, thus enabling one to prepare physiologically for it. Less stress was experienced because of the hypothesized reduced physiological impact of anticipated events. Johnson's (1984) incongruency hypothesis was a slightly different prediction hypothesis. It



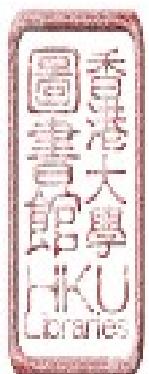
explained the effects of information about sensations to be experienced in terms of a reduced incongruity between expected and experienced sensations. Accurate information reduced the incongruity and therefore reduced negative emotional responses.

b. Controllability as a reflection of self

Personal control may be beneficial and lack of personal control detrimental because it reflected on the person's self-image. According to deCharms's (1968) theory of personal causation, individuals need to feel a sense of mastery and of personal competence in their environment; a lack of control may lead to feelings of incompetence. Reactance theory (Brehm, 1966) postulated that individuals felt aroused and experienced negative emotions when their freedom to act as they please was threatened. Learned helplessness theory (Seligman, 1975) dealt with the absence of reactions because one's actions cannot lead to desired outcomes, as may be the case over an event which one has no control. These theories can explain the motivational state following an uncontrollable event and hence the decremental performance in the postevent period. Experience with a painful stimulus that was out of one's control may arouse feelings of incompetence, anger, or the perception that efforts were not correlated with the outcomes generated. These reactions could adversely affect performance immediately following an uncontrollable event.

c. Controllability as a message about outcomes

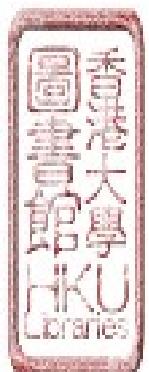
Controllability in a situation may act as a signal about the outcomes that may be generated in that situation. According to the minimax hypothesis proposed by Miller (1979), having control in a situation presumed that one would be able to minimize maximum future danger. In other words, people with control responses



available know that the situation would not become so aversive that they cannot handle it; the control option can be exercised prior to that point. Miller's hypothesis was developed to explain the effects of behavioral control, but it seems equally applicable to cognitive control and the effects of information. With both behavioral and cognitive control, individuals believed that the trying situation would not exceed the limits of what they can endure. According to this hypothesis, information would also be effective to the extent that it reassured people that the sensations they experience would not be unbearable.

It is interesting to note that, the minimax hypothesis also predicted that in some situations, individuals preferred no control (Miller, 1979). When control in the hands of another person was seen as effective in minimizing future danger, such as a skillful professional administering a hypodermic, then less personal control would be preferred. Here, it may be necessary to clarify again that personal control mainly referred to control efforts which was assumed as the subsequent step of perceived control ability (see Chapter 2). One would predict, then, that reactions to stressful events, such as surgery or dental work, would depend not only on the patients' personal sense of control in the situation but also on their perceptions of the interests and intentions of those who were in charge of the events. If a patient believed that the responsible people were dedicated to minimizing harm and pain, then stress should be reduced. The minimax hypothesis can explain decreased anticipatory anxiety and increased tolerance with control.

In summary, comparing with the others, the minimax hypothesis points to a more common theme found throughout the literature on control, pain, stress, and reactions to misfortune, which is the meaning of the event to the individual. It



seems that the minimax hypothesis could mostly avoid internal attributions for failure because it emphasizes meaning. This hypothesis could provide an adequate explanation for most positive effects of personal control. Those who study people's reactions to misfortune observe that individuals search for a meaning for an event; the meaning they assign to the event determines their reactions and their ability to cope (Bulman & Wortman, 1977). Similarly, the effects of control in an aversive situation may rely on the meaning of control for the person going through the aversive event (Averill, 1973). What is important in understanding reactions to potentially stressful events? Miller's (1979) minimax hypothesis captures one important meaning: an assurance that one will not face an event that is beyond one's limits of endurance (see also Lazarus, 1966). Personal control may change the meaning of an event from one that is potentially unendurable to one that is within the limits of one's endurance, therefore, less anxiety is experienced and the stimuli are more easily tolerated and less destructive. Thus, the endurable-unendurable dimension of meaning can probably explain many positive effects of personal control. According to Thompson (1981), another meaning is the extent to which a misfortune is seen as part of a plan rather than a random event. Individuals seem to have a need to see events in their lives as part of an orderly, meaningful world (Bulman & Wortman, 1977), such as part of the plans of God or flowing from their own plans and goals. Individuals who see an accident as a logical consequence of their freely chosen lifestyle coped well as their own victims.

Taken together reasons that personal control may lead to stress when it failed, and theories that personal control should reduce stresses and in turn negative psychological outcomes, two points enlighten our thinking about the control we are exploring. First, it should be able to avoid internal attributes for failure. Second,



it could show the meaning of stress and control. Undoubtedly, there are other meanings that are important in understanding people's ability to deal with aversive events besides those we mentioned above. A large body of research has addressed the relation between controllability and stress. It is clear that the meaning of a situation is an important key to understanding reactions to stresses. As personal control is just one of the possible controls, and the person indeed sometimes restricts the control, there is a need to explore the control beyond personal control.

Meaning in Life

Previous researches on meaning in life generally based on one or two of the four theoretical approaches. The first two relate to the nature or development of an individual's commitment to some personal understanding of life (Bugental, 1965; Frankl, 1963); the other two emphasize the conditions under which an individual will perceive his life as fulfilling (Battista & Almond, 1973; Cantril, 1965).

a. Philosophical approach

Philosophical models postulated that positive life regard developed only from will to meaning and fulfillment of the intrinsic meaning of life. Although these models identified variously this intrinsic meaning as stemming from man (humanistic models) (Fromm, 1955), from life (self-transcendent models) (Frankl, 1963), from God (religious models), or from Being (existential models) (Bugental, 1965), they all assumed that there was only one true meaning of life. Although most scholars would probably deny that there was a single meaning of life if confronted directly on this issue, they, nevertheless, approached the problem of meaning by trying to explicate some single conceptual framework from which to



understand the meaning of life.

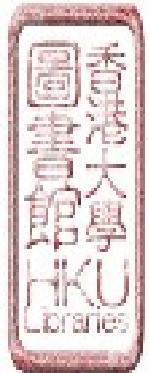
b. Relativistic approach

The relativity model stated that will to any system of beliefs can serve as a life-framework for the development of positive life regard. Thus, this model shifted the emphasis away from the nature of an individual's belief system and emphasized his commitment to it (see Battista & Almond, 1973). The philosophical model proposed that the content of belief was a determinant of positive life regard, while the relativistic model only proposed that the process of believing itself was a determinant of positive life regard.

Although many researchers, such as Maslow (1953) and Frankl (1963) emphasized a philosophical theory to the study of meaning in life, they postulated relativistic approach of its development. For example, Frankl, who has championed the necessity of commitment in the development of meaning in life, also postulated that meaning only developed when an individual was will to beliefs that transcend himself and which were "founded" in the "objective" ultimate meaning of the world (Fatry, 1968). The result has been that most of the writings on meaning in life have reflected a basically philosophical approach, whether intended or not. However, they then turned to the relativistic approach.

c. Transactional perspective

The transactional theory, as developed by Cantril (1965), was a system of theories that saw an individual in terms of a set of needs or goals that he attempted to fulfill through socially determined roles. A transactional model of life regard was thus ultimately founded on the concept of social roles. A transactional model

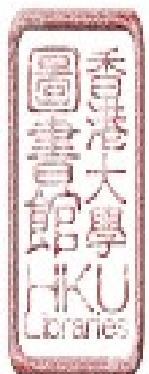


provided a mechanism for predicting the development of positive life regard.

d. Phenomenological approach

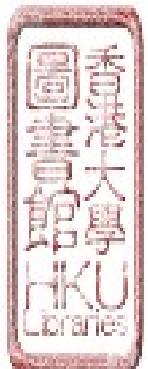
Phenomenology, the study of the nature and structure of consciousness, was a fourth perspective that can be utilized in predicting the development of positive life regard (Battista & Almond, 1973). The phenomenological approach is concerned with the process by which an individual evaluates himself, and discusses the evaluation process as a function of the rate at which an individual perceived himself as progressing toward his goals. Thus, if the preceding models were conceptualized as elucidating the determinants of an individual's goals and the rate of progress toward his goals, the phenomenological model may be viewed as the structure by which this rate of progress was evaluated. First, it was clear that the degree of positive life regard experienced by an individual would be a function of his current goal-position relative to his ultimate life-goal. Second, the degree of positive life regard experienced by an individual would also be a function of the rate of progress that he is making toward his life-goal. Third, the degree of positive life regard experienced by an individual would also be a function of his comparison of his present goal-position and rate of change with his past goal-positions and rates of change. Fourth, the degree of positive life regard experienced by an individual would be a function of his comparison of his current goal-position and the rate of change with his predicted current goal-position and rates of change from points in the past.

In conclusion, most of the writings on the development of meaning in life have reflected a basically philosophical approach, and some focused on a relativity perspective. Transactional theory and phenomenological approach may refer to



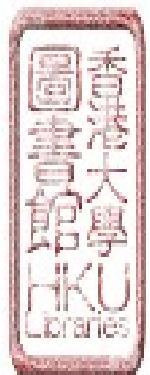
how we actually develop values and beliefs about meaning, which somewhat beyond what we are studying. Thus, our analysis is mainly focused on philosophical and relativity approaches. Although most writings on meaning in life have reflected the philosophical approach, but their contents of beliefs are not enough. Battista and Almond (1973) suggested that the relativity perspective is clearly preferable to the philosophical approach as the basis for further study of the conditions under which people will develop positive life regard. First, the wide variety of belief systems under which individuals have developed meaning in life does not appear reducible to one fundamental system. For instance, the Zen philosophy of union through the dissolution of the ego appears to be contradictory to the existentialists' belief in men's need to develop his own unique ego and act accordingly. Second, the relativity model promotes tolerance towards all systems of beliefs and is thus inclusive of all the philosophical models of the development of positive life regard. Third, it discourages the employment of vague and broad psychological needs for man, such as "growth" or "self-transcendence" needs, in an attempt to cover all of the different belief systems under which positive life regard has developed. Fourth, it discourages abstract philosophical discussion over which system of beliefs is "ultimately" better, and emphasizes the responsibility for each individual to find his own beliefs.

We believe a relative approach to the study of meaning in life, for which the process of believing itself is a determinant of positive life regard. We also believe in the philosophical approach for which the substance of belief is a determinant of positive life regard. In a word, we believe that there is a meaning in life, and when one will to it, it would benefit the relation between stress and psychological well-being. Although there are the wide varieties of belief systems under which



individuals have developed meaning in life, the belief systems revolve generally around a central issue--self or selfless (great self). Yalom (1980) distinguished between two broad classes of meaning: cosmic meaning which "...implies some design existing outside of and superior to the person and invariably refers to some magical or spiritual ordering of the universe", and terrestrial meaning which is personal and has entirely secular foundations. Yalom (1980) argued that it would be possible to have terrestrial meaning without cosmic meaning, but the reverse was unlikely. People with cosmic meaning would experience personal meaning fulfilled in harmony with the cosmic meaning. Second, we accept the relativity model not for promoting tolerance towards all systems of belief, but because this model emphasizes the necessity of commitment. Third, we accept the relativity model because in a philosophical perspective, growth and self-transcendence are not necessarily contradictory. Fourth, although each individual has the responsibility to find his own beliefs, some beliefs may not be beneficial within the framework of stress and psychological well-being. Then, which belief system could be beneficial within the framework of stress and psychological well-being? Is it self-related or selfless-related or both? This is the core of this study.

In the preceding pages, we have viewed some coping resources at a theoretical level. In a nutshell, personal control sometimes leads to more stress and in turn negative psychological outcomes which may be mainly caused by the internal attributions for failure than stress caused by relinquishing control. Moreover, expecting and attempting to control sometimes is related to ill-being probably because of the impairment of self-image under uncontrollable stresses. Although there are the wide variety of belief systems under which individuals have developed meaning in life, the belief systems are generally around a central issue --self-focus



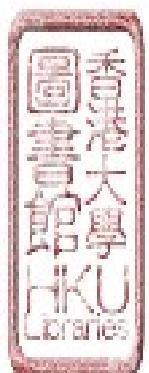
versus self-transcendence. The common issue of them implies the need to further explore around self-focus and self-transcendence in the relationship between stress and psychological well-being. It is expected that the explorations will provide us with an idea on whether self-focus or self-transcendence is related to psychological well-being especially under stressful conditions. Then, a more effective coping resource may be discovered. In the following section, we first show some empirical findings on self-focus and ill-being. These findings will further provide us with the empirical evidence of our theoretical analyses on the issues of coping resources being discussed.

SELF-FOCUS AND ILL-BEING

Several theoretical conceptualizations of self-focused attention (e.g. Carver & Scheier, 1981) are related to a variety of specific clinical disorders such as alcohol abuse (Hull, 1981), depression (Musson & Alloy, 1988; Pyszczynski & Greenberg, 1987), negative affect (Gibbons, Smith, Ingram, Pearce, Brehm & Schroeder, 1985), anxiety (Carver & Scheier, 1983), test anxiety (Sarason, 1986; Wine, 1982), social anxiety (Buss, 1980), and self-esteem (e.g. Ingram, 1990). Although self-focused attention was somewhat a temporal action, rather than a stable attitude, it still could tell when people were self-oriented, and what would be the most possible psychological outcomes.

Self-focused Attention and Negative Affect

Gibbons et al. (1985) assessed the relation between levels of affect and self-focused attention in individuals already experiencing noticeable emotion. They



conducted two experiments and the results showed significant increases in negative affect in the self-focus condition. Moreover, in both of these experiments, a self-focused attention manipulation was reliably linked to increases in negative affect under which individuals are already suffering. Scheier and Carver (1977) found that a different group of subjects high in experimentally induced self-focused attention reported greater levels of negative affect after a mood-induction procedure than did non-self-focused subjects.

Several studies have examined the intensity of fear as a result of self-focused attention. Carver, Blaney, and Scheier (1979) selected subjects who were moderately fearful of snakes and then separated them according to whether they expressed relative doubt or confidence regarding their ability to approach a snake. They found subjects whose self-focused attention was experimentally manipulated reported more arousal and a greater sense of inadequacy than did non-self-focused subjects. Furthermore, subjects who were doubtful withdrew earlier in approaching the snake when they were in the self-focused condition.

Self-focused Attention and Depression

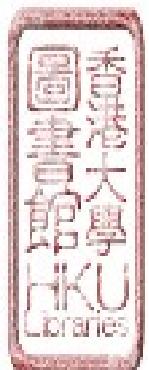
Several authors have discussed the theoretical possibility that an excessive degree of self-focused attention occurs in depression and may mediate a subset of depressive features (e.g. Lewinsohn, Zeiss & Duncan, 1988; Musson & Alloy, 1988; Pyszczynski & Greenberg, 1987). The first empirical study to demonstrate a relation between depression and self-focused attention was reported by Smith and Greenberg (1981). They found a significant relation between the Private Self-Consciousness sub-scale of the Self-Consciousness Scale (Fenigstein, Scheier &



Buss, 1975), a dispositional measure of self-focusing and a shortened version of the Minnesota Multiphasic Personality Inventory Depression scale (Dempsey, 1964). These results were subsequently replicated and extended in two studies by Ingram and Smith (1984) in college students. Two experiments reported by Smith, Ingram, and Roth (1985) again found significant relations between measures of depression and self-focused attention in college students. Some research has also indicated the association between increased self-focused attention and clinical depression (e.g. Ingram, Lumry, Cruet & Sieber, 1987). Several researchers have suggested that a particular self-focused style may be characteristic of depression (Pyszczynski & Greenberg, 1985, 1986). Another study (Greenberg & Pyszczynski, 1986) indicated that although both depressed and nondepressed individuals appeared to have similar self-focusing tendencies following failure, these effects dissipated for nondepressed individuals, but were maintained over a longer period of time for depressed people.

Self-focused Attention and Anxiety

As early as 1952, Mandler and Sarason described test-anxious individuals in a performance situation as "self rather than task oriented". Numerous other theoretical approaches have suggested that increases in self-focused attention accompany anxiety states (e.g. Sarason, 1986; Wine, 1980, 1982). Based on a digit symbol task study, Mandler and Watson (1966) indicated that high anxiety subjects reported substantially more self-focused attention than did low anxiety subjects. To the extent that thinking about how one was doing could be considered self-focused, these results suggested that anxiety states were associated with self-focused attention. Marlett and Watson (1968) also found that ninth-grade subjects with high test



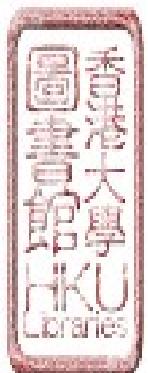
anxiety reported more self-focusing than did low test-anxious subjects. Similarly, Ganzer (1968) found that test-anxious subjects made more self-evaluative and apologetic task-irrelevant comments while working on a serial verbal learning task than did low anxious subjects.

Although the majority of studies examining self-focused attention in anxiety have addressed test anxiety, several self-focused attention studies have investigated other types of anxiety. Hope and Heimberg (1985), for instance, found significant relations among social anxiety, public self-consciousness, and private self-consciousness. In the same study, Hope and Heimberg (1985) also found a positive correlation between private self-consciousness and generalized anxiety. Evidence for heightened self-focused attention in social anxiety was also found in a study by Hope, Heimberg, Zollo, Nyman and O'Brien (1987). In this study, college students were selected for high and low social anxiety; they then kept a diary of their thoughts during social interactions. Content analyses of these diaries, examining specifically self-focused versus non-self-focused thoughts, suggested that socially anxious subjects were significantly more self-focused during their social interactions than were nonsocially anxious subjects.

In conclusion, data suggesting that elevated self-focused attention characterizes numerous disorders and theoretical perspectives would be required to meaningfully account the attentional processes. Two such theories are thus provided below.

Self-absorption

Self-absorption was developed by Ingram (1990) to describe the maladaptive self-focused attention. The term *self-absorption* was simply aimed at capturing the

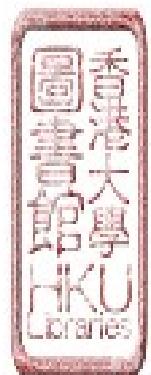


dysfunctional quality of maladaptive self-focused attention.

Three attention process parameters were outlined: degree parameters, duration parameters, and flexibility parameters. Self-absorption was defined as a dysfunctional shift in the combination of these parameters. For instance, excessive internal attention (degree parameters) was proposed to correspond with a greater likelihood of maladaptive functioning; mildly self-focused attention would be unlikely to be associated with psychopathology, whereas more extreme shifts would be more apt to characterize a disorder. Sustained internal attention (duration parameters) was also a necessary element of self-absorption and suggested that internal attention was more likely to be dysfunctional when it was sustained for protracted periods of time. Finally, self-absorption also encompassed cognitive intransigence (flexibility parameters). Recalling that adaptive attentional focusing was a flexible process, this parameter indicated that self-absorption was characterized by a rigid reliance on internal attention across a variety of situations. Internal attention was clearly appropriate in many situations; however, it was also clearly less appropriate in some situations. Although internal attention represented the process, the general content of self-absorption was self-relevant by definition and thus quite nonspecific. The content of self-absorbed attention in psychopathology can vary considerably.

Self-regulation

In line with Carver and Scheier's (1981, 1982) approach, Pyszczynski and Greenberg (1987) suggested that disruption that led to depression initiated a self-focused attention process which resulted in self-evaluation. These factors led to a



self-regulatory cycle from which the depressed individual did not disengage. As a result of this perseveration, depressed individuals developed a self-focusing "style" that results in self-esteem deficits, exacerbated negative affect, and task performance deficits. Pyszczyndki and Greenberg (1987) further speculated that the depressive self-focusing style could account for "negative automatic thoughts, anxiety, sleeplessness, poor concentration, anger, aches and pains, fatigue, and psychomotor retardation". Moreover, they suggested that the self-focusing style caused a motivation to maintain a negative self-image in which positive thoughts, signs of competence, and personal value become anxiety provoking. In short, Pyszczynski and Greenberg suggested that self-focusing was the central and integrative process in virtually every category of depressive symptoms and features.

Maslow, even though a prominent leader of the self perspective, regretted that self-actualization had been interpreted to mean selfishness. Maslow's later writings show an oriental influence, as he expanded his ideology to incorporate the goal of transcendence. To transcend is to directly experience not me, nature, cosmos, and feel a unity with them. In Maslow's model, the healthy person was priestlike, mysticlike, and godlike. Maslow's ideal person was not anti-spiritual (Tamney, 1992). Maslow's writing from self-actualization to self-transcendence may reflect also some other scholars' awareness that the maintenance and enhancement of psychological well-being is related to self-transcendence.

In summary, numerous investigators, working largely independently, have explored the role of self-focused attention in diverse disorders. Similarly, theoretical models describing the role of self-focused attention in psychological problems have been advanced. Taken together, self-focus was reported to be

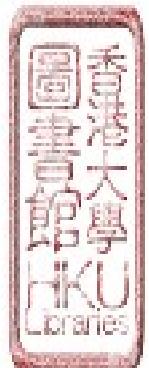


related to ill-being both empirically and theoretically. In the following section, we will present the theoretical perspectives on self-transcendence and psychological well-being.

SELF-TRANSCENDENCE AND WELL-BEING

According to Frankl (1959), self-transcendence is that the more one forgets oneself--by giving oneself to a cause to serve or to another person to love--the more humane he is and the more he actualizes himself. Based on Frankl's work, Fabry (1988) later suggested that self-transcendence is the specific human capacity to reach beyond oneself and act for the sake of someone one cares about, or for the sake of a meaningful cause. Self-transcendence in the present study refers to a higher living state that is beyond self, within which people search for self-detachment and boundless self.

Walsh (1989) claimed that human species' view of self was in grave danger, whereas oriental philosophy may provide novel insights for well-being. Kuhn (1970) indicated that oriental Buddhist psychology was not only profound, but quite startling to Western ways of thinking, and ideally it should be supported by considerable background data, logic, and discussions as was usually necessary when discussing paradigmatic assumptions different from the conventional ones. Kuhn's claim implied the necessity of blending Western and oriental ways of thinking and theoretical approaches. Not only Kuhn, some other Western philosophers and psychologists also recognized strongly the benefits of oriental philosophy to the Western philosophy and the significance of blending both together (e.g. Pachuta, 1989).



Buddhism Self-detachment

In Buddhism, attachment is the source of all sorrows and sufferings. Depression is always the aggregation of sorrows and sufferings. Sorrows and sufferings end when an individual is freed from attachment. Therefore, depression ends when an individual is freed from attachment. In Buddhism, attachment consists of law-attachment (法執) and self-attachment (我執). Law attachment refers to the attachment of Utopian laws or phenomena. Self-attachment refers to the loss of true self, but involved in the attachment of the entity or boundary self that is a normal format of self. The attachment is caused by ignorance (無明) and craving (貪愛). Ignorance refers to false knowledge for the truth. Craving refers to an individual striving to possess something that should not belong to him/her. Human beings suffer because of self-delusion, insatiable desires and striving to possess the inevitable crumble. Buddha proclaimed that the cure is to reach a higher state of being, wherein self-knowledge has eradicated delusion, attachment, and desire. Buddhist psychology asserts that not only is psychological pain caused by false knowledge and covetousness, but physical illness can also be traced to these factors. Insight (正見) and enlightenment (覺悟) are the keys to eliminate attachment.

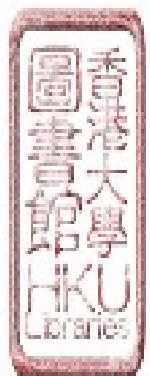
"Non-self" points out that there is no permanent, unchanging being. The person does exist in the conventional sense: the "I" is a useful linguistic device to refer to the ever-changing physical and mental elements that constitute the individual. But in the absolute sense, in the sense of a permanent substance created by God, surviving death, united with God, or going to hell or heaven, the "I" is an illusion (Conze, 1975). Self is fluid and empty. According to Buddhism, emptiness and



nonbeing do not mean simply nothingness or nihilism, rather, these terms indicate the void of self, with no ontological connotation (Mizuno, 1996). As a result, the state of non-self has been defined as "great self", the state of mind of an enlightened person (Harvey, 1995).

Buddhism teaches that impermanence is the source of sufferings and the root of non-self. Although this teaching has implied the negative effects of impermanence, such as old age, sickness, and death, it also encompasses positive changes. Sadness is the result of impermanence, but so is happiness, for impermanence means that suffering and pain can give way to joy. Thus, it is the basic truth of impermanence that enables religion to teach the way from imperfection to perfection (Mizuno, 1996). Since everything is impermanent, we can lose our health, wealth, social status and reputation. Understanding of the true nature of impermanence helps us eliminate attachment to self and possessions and the associated pride and instills in us humility and consideration (Mizuno, 1996). Since everything is impermanent, each moment is important and should thus be fully lived. Our present life is the sum of the good and bad effects of the past, and good is the key to further good. We make the best of life by giving our utmost attention to the actions of each moment. Because everything is impermanent, it is all the more important to make the best of every minute we have.

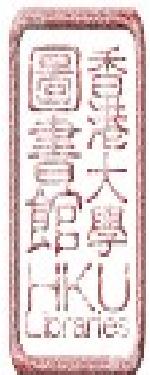
The understanding of non-self enables us see human life and society in proper perspective i.e. exactly as they are (Mizuno, 1996). Perfected and fulfilled human life is gained from the attainment of non-self (Mizuno, 1996). Specially, the notion of non-self or empty-self functions as a brilliant device which is used to overcome human-being's deep-seated cravings (Harvey, 1995).



The most frequently discussed Buddhist method for developing mental health are meditation, through which to understand the causes of sufferings, to create psychological harmony, and as a result, to enhance well-being. In addition, meditation is believed to increase control appraisal and correct knowledge of self, eventually, to let go of dysfunctional beliefs, self-statements, and assumption (Mikulas, 1978). By eliminating attachment, we eliminate suffering and realize truth. The cessation of the self paradoxically creates a sense of compassion, wholeness, connection with other people, flexibility, timelessness, joy, equanimity, and acceptance. The available empirical evidence suggests that beliefs in great self or selfless and practices have some definite mental health benefits such as greater acceptance of death, greater empathy, reduction of general anxiety, increased insight, greater cognitive performance, and an enhanced sense of well-being (Groth-Marnat, 1992).

Taoism Boundless Self

According to Taoist philosophy on one's harmony with the universe (天人合一), we are part of the universe. The Yin and Yang represent the fundamental dualities, opposites, and polarities of the universe; yet, they also represent the unity of the circle. The circle represents the whole universe and contains all aspects of the universe, including opposites: Yin/Yang, white/black, female/male, night/day, earth/heaven, death/life, and so on. Yin/Yang is not only outside of us in the universe but also within us. It is our good/evil, darkness/light, rest/activity, softness/hardness, front/back, top/bottom, death/life, earth/heaven, and so on. As Lao Tzu put it: people can see beauty only because there is ugliness. All of us can know good because there is evil. Therefore have's and havenot's exist together;



difficulty and ease complement each other; long and short contrast each other; high and low compare with each other; front and back follow one another (Feng & English, 1972). Our integration of all these things into whole; it is a complete circle with no ending. When self is in harmony with the universe, it develops into a self without boundaries that reaches the goal of psychological well-being by different ways, the same goal as achieved by the Buddhist “non-self”. Moreover, oneness with the universe is a natural given. Since one continually seeks balance and harmony within this oneness, the person himself prevents both mental and physical illnesses.

In conclusion, Taoist philosophy teaches us to find meaning in life from Yin and Yang, that is from the fundamental dualities, opposites, and polarities of the universe both outside of self and inside of self. Buddhist philosophy further teaches people that detachment (去我執) is the way to find meaning in life, detached from possessing something that should not belong to us since striving for such inevitable would be futile.

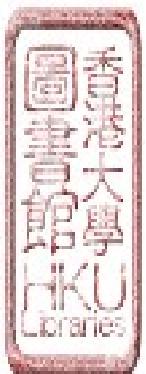
Frankl's Self-transcendence

Frankl (1959) stresses that the true meaning of life is to be discovered in the world rather than within man or his own psyche, as though it was a closed system. Frankl termed this constitutive characteristic "the self-transcendence of human existence." It denotes the fact that being human always points, and is directed, to something, or someone, other than oneself-- be it a meaning to fulfill or another human being to encounter. The more one forgets oneself--by giving oneself to a cause to serve or another person to love--the more human one is and the more one actualizes oneself. What is called self-actualization is not an attainable aim at all,



for the simple reason that the more one strives for it, the more he would miss it. In other words, self-actualization is possible only a side-effect of self-transcendence. Based on Frankl's work, Fabry (1988) suggested that self-transcendence is the specific human capacity to reach beyond yourself and act for the sake of someone you care about, or for the sake of a cause that means something to you. Self-transcendence is an area where meaning can be found.

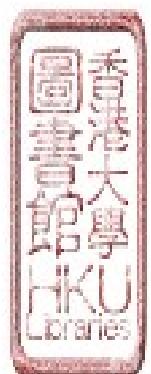
Self-transcendence is important because it encompasses all other areas where meaning is available (self-discovery, choice, uniqueness, and responsibility), and because it provides meaning in exactly the area where you feel defeated: it turns our defeat into victory (Fabry, 1988). However, there is an inherent problem--how can you be motivated to transcend your instinctive egocentricity? Why should you do anything for others? According to Fabry (1988), self-transcendence is not expected to forget his/her self-interests, but rather to transcend them, to include others into his circle of self-interests. The easy life often seems empty, and meaning comes with the challenge of turning defeat into victory. Many people are resistant to reaching out beyond themselves to find satisfaction. But it is worth the efforts, because self-transcending behavior helps you to see the three-dimensional fullness of your person: your body, your psyche, and your spirit. The self that is being transcended is the body/psyche part of you. The self that is transcending is your spirit. Self-transcendence makes you aware of the fact that what you are (your spirit) can win over what you have (your body and psyche). This awareness opens you up to meaning potentials (Fabry, 1988).



According to Fabry (1988), self-transcendence as a road to meaning is available to everyone, in all circumstances and at all ages. Its value is most dramatically evident for people who are suffering from meaningless pain and grief. Self-transcendence can be achieved by anyone who stays up with a friend, takes a neighbor to the hospital, visits someone who is sick, invites a new neighbor over for coffee, or does any of the kind acts that comes naturally.

Self-transcendence is the way to letting go, and then gaining a sense of inner power and inner peace. Letting go means choosing not to hold onto things and people, not to become hooked by what is "out there". It is one of the greatest paradoxes of life that we are connected to all other human beings, yet we do not have to be attached to them or things in order to feel whole. According to Brigham, Davis and Cameron-Bulman (1994), seeing yourself in a cooperative effort on this earth rather than in a competitive one or seeing yourself in a new relationship with your "possessions" or body is another way of letting go, which is in nature the same as self-transcendence. When you let go, you remove the need to prove yourself right or others wrong. Self-transcendence is a way of getting well.

On the theoretical view, self-transcendence contributes positively to psychological well-being. Although we have not found many empirical findings which use the term self-transcendence directly, many researches on meaning in life indeed implied the effects of self-transcendence. For example, Zika and Chamberlain (1992) based on a review indicated that many investigations used the Purpose in Life Test (PIL) developed by Crumbaugh and Maholick (1964) to assess Frankl's construct of self-transcendence or meaning in life. After reviewing this body of research, Yalom (1980) concluded that a lack of meaning was associated with



psychopathology, whereas positive life meaning related to strong religious beliefs, self-transcendence values, clear life-goals, and psychological well-being. Schwartz, Sagiv and Boehnke (2000) indicated that because the self-enhancement versus self-transcendence dimension of values referred to the differential pursuit of self-interests versus the interests of others, it was especially relevant to the distinction between micro and macro worries. Moreover, giving priority to self-transcendence values was associated with low micro worry (ingroup or extensions of self) and high macro worry (society, world, or universe). Micro worry was negatively associated with mental health, whereas macro worry was positively related to well-being. Some other researches such as Silver, Boon and Stones (1983) searching for meaning in misfortune based their works on Frankl's self-transcendence. They suggested that the ability to place an accident in a broad, philosophical perspective influenced subjects' ability to coping effectively. Based on Frankl's meaning in life, Debats (1996) indicated that meaning in life and well-being were positively associated with each other.

So far, a consistent pattern of the issues of different coping resources is revealed, for which meaning or spirituality not only functions as a coping resource, but is also crucial in sense of control when it serves as a coping resource. Arraying values along the self-focus versus self-transcendence was the key issue of sense of control. This reinforces the view that the critical factor discriminating ill-being from well-being is self-focus versus self-transcendence. Since the crucial factor for the effects of coping resources is recognized as meaning versus non-meaning, moreover, as self-transcendence versus self-focus, alternative views on the coping resources are necessary. Such alternative views may lead to a striking outcome as a new coping resource may be discovered as a result of our study.



VISION IN LIFE AS COPING RESOURCE

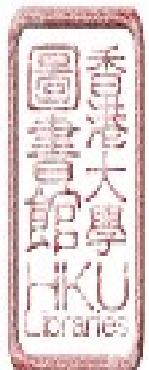
This section is divided into three major parts. The first part shows the alternative views based on the coping resources being discussed. The second part reports on the observations from interviews, which serve to provide phenomenologically supportive evidence for the alternative views. In this part, we also report on the observed association among the alternative views. In the final part, a new construct is established which represents the new coping resource.

Alternative Views

The alternative views are to view the coping resources in a spiritual context. In line with the coping resources being discussed, the alternative views are life control versus personal control, self-transcendence meaning versus self-focus meaning.

a. Life control versus personal control

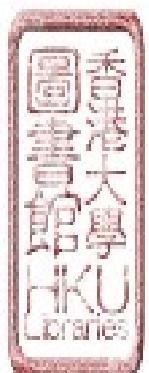
For this alternative view, a brief review of the previous discussions is necessary. We mentioned that people often refrain from exercising control in a situation that is liable to fail for avoiding internal attributions for the failure. Thus, if a control could avoid internal attributions for failure, even if the control failed, it would not lead to more stress than without control. We also discussed that the effects of control in an aversive situation may rely on the meaning of control for the person going through the aversive event. Personal control may change the meaning of an event from one that is potentially unendurable to one that is within the limits of one's endurance. Taken together, two points enlighten our thinking for the control we are exploring: First, it should be able to avoid internal attributions for failure. Second,



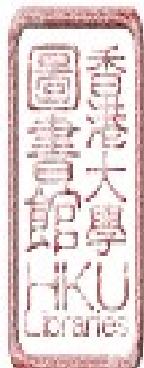
it should be able to show meaning of the stress and of the control.

It is expected that there is meaning to avoid internal attributions for failure. If meaning is an important key to understanding reactions to stressful events, there are undoubtedly other meanings that are important in understanding people's ability to deal with aversive events. Baugh (1988) contended that controlling one's thoughts would control emotions. Moreover, in the reality of life, one of the important controls was to give up control in impossible situations. A more accurate statement was that a sense of control could be gained by giving up a desired control that was beyond one's power or ability. Baugh's statement was based on the understanding that although much in people's lives was under their control, other aspects of their lives were beyond their control. For example, people cannot control certain changes, stop their bodies and minds from aging, or get others to do things their way. Thus, when not giving up means not accepting reality, there was strength in accepting powerlessness when powerless was the reality. Bauth (1988) then suggested that turning the urge over to God and submitting to God's will provide relief to the inner struggle--and, therefore, was a control by giving up control. To surrender our wills to God means to behave as we believe God would want us to behave and to accept whatever happens as a result. In surrendering, one was better able to bear the emotional pain of facing the outcome because surrender generated none of the frustration involved with losing control.

According to Baugh (1988), surrender necessitated giving up self-centeredness and self-glorification. However, in our opinion, giving up self-centeredness leads to giving up personal control rather than the other way round. Thus, surrender will not necessarily lead to giving up self-glorification, because surrendering is not just



giving up passively. First, when people are committed to self-transcendence, they possess the sense of being harmonious with the universe, and therefore, they do not desire self control, but rather they sense that their lives are always under a larger control. Second, based on Baugh's statement of giving up control, one of the most frequently asked questions is "I'm already to surrender now, how do I do it?" When people are committed to self-transcendence, the answer would be simple. We keep up our efforts no matter what has happened and what will happen. People do so because they believe that all they have done and all they will do would contribute to the whole from where they emerged. Frankl's (1970) contention is also suitable here. According to Frankl (1970), meaning is pursued as a primary goal, duty can ensue. It is inferred that control for control's sake--that is, without meaning--is hollow and self-defeating. Control can ensue from living out the self-transcendence of human existence. Thus, there is indeed no clear distinction between giving up control and gaining control. Control is always there. Third, when people are committed to self-transcendence, there would no longer be uncontrollable stresses for them. Stresses may be seemingly uncontrollable at some given moment, but not forever. People's efforts may not relate to the desired outcome immediately or even after a long period, but all the efforts contribute to the desired outcome finally. When people are committed to self-transcendence, there would no longer be controllable stresses (personal control) either. Thus, people would not expect what they could control or what they could not. What they can do is just doing their best no matter what has happened and what will happen. Thus, our spiritual control might be not only useful under high stresses, but also under low stresses. In fact, some seemingly controllable stresses are indeed uncontrollable by person.



In conclusion, we now take our three considerations together and label it by *Life Control*. Simply put, *life control is the sense of life being in control, that is, a great control by the universe.*

A final but important question is what is the relationship between life control and personal control? Literature has shown three different links between God control and personal control, which are negative link (e.g. McIntosh, Kojetin & Spilka, 1985), positive link (e.g. Silvestri, 1979), and no link at all (e.g. Ritzema, 1979). However, we believe that life control and personal control are positively correlated to each other. Personal control as we mentioned previously may change the meaning of an event from one that is potentially unendurable to one that is within the limits of one's endurance. At this point, life control plays the same function. The major difference may be that personal control is limited, whereas life control is unlimited.

b. Self-transcendence meaning versus self-focus meaning

The concept of meaning in life is associated with a set of theories that are dissimilar in their views as to how meaning can be developed. The present discussion is to consider this major issue. In the existing literature meaning in life is described in association with a variety of concepts. Some researchers (e.g. Debats, Lubbe, & Wezeman, 1993) argued that despite the great differences that exist among these theorists, they concur a sense of meaningfulness is essential to psychological well-being. However, the effects of different meanings on psychological well-being under stresses are unclear, especially under high stresses. In fact, some of them such as Maslow (1972) regretted that self-actualization had been interpreted to mean selfishness. The findings of contradictory relations



between religious commitment and mental health also suggested that not all meanings necessarily contribute positively to well-being under stresses (see Gartner, Larson & Allen, 1991). Sometimes, their contributions are converse.

Many Western meaning researchers were influenced by oriental philosophy, and their theories reflected that selfless is the bone of contention of meaning in life though it was described in different ways. Although Frankl speaks of human existence instead of enlightenment, his description of the purpose of self-transcendence mirrors oriental philosophy: "Only as a man withdraws himself in the sense of releasing self-centered interest and attention, will he gain an authentic mode of existence." (Gould, 1993). Derelection and self-transcendence help a person accept life, a hallmark of humanity which is shared by Buddhism and meaning analyses. The parallels between Frankl's existential psychology and the classical teachings of the Chinese are easily discerned, especially in relation to what Frankl calls the existential vacuum. Both Taoism and Confucianism deal with this problem, and both recognize that the existential vacuum involves a crisis in moral and cultural values. Among the key humanistic psychologists, besides Maslow, the others were also influenced by oriental selfless thinking. Binswanger (see Gould, 1993) goes beyond Freud's psychological model of the self using being in the world as a basis for an ontological model of self. Binswanger highlights not only the unity of a person seen existentially before any psychoanalytic split into subject and object, but also the relationship between the person and his/ her environment. Carl Rogers (see Gould, 1993) believes that psychological adjustment comes from an open, assured, and relaxed self that uses experience to replace distorted values with those that are authentic. Allport (see Gould, 1993) contends self's ability to stand outside of one's self. Allport also recognizes that a meaningfully integrated self

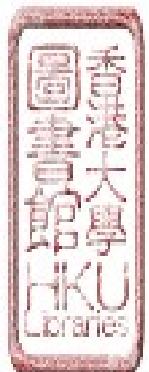


must be able to self-transcend in facing the sufferings of life.

In conclusion, we refer meaning in life to self-transcendence meaning only within the framework of stress-coping resource-psychological well-being. In other words, we do not reject other meanings of life, what matters is self-transcendence meaning can be justified as an effective coping resource, but other coping resources such as fulfillment and self-actualization or self-enhancement meaning are not clear yet. *Meaning in Life, then, only refers to self-transcendence meaning* in this study. So far, self-transcendence meaning is discussed only in the belief/cognitive system. However, a belief system without commitment may not directly function as a coping resource.

c. Will to meaning

According to Frankl, man's search for meaning is the primary motivation in his life and not a "secondary rationalization" of instinctual drives. Based on Fabry (1988), will to meaning is the strongest motivation to living and acting. Human are beings in search of meaning. Seeking meaning in your life enables one to develop his/her capacities and endure hardships. The founder of psychotherapy, Sigmund Freud, considered the desire for pleasure to be the highest motivational force. Freud's student Alfred Adler considered the desire for power to be our strongest incentive. Both are important: people act to find pleasure and to achieve power. However, according to Frankl, pleasure is not a primary goal. It is a by-product of having done something meaningful. Power is not an end in itself, but a means to an end that is attained by using power in a meaningful way. Meaning is neither a by-product nor a means to an end. Meaning is the ultimate goal. If one's will to meaning is ignored or repressed, one feels empty. Ultimate meaning--the meaning



of life--is inaccessible to people. It is like the horizon--people can strive towards it, but will never reach it. People can pursue ultimate meaning, but can never attain it. Ultimate meaning is a matter of faith, of assumption, of personal experience.

In accordance with current conceptions of commitment (Hollenbeck & Klein, 1987; Novacek & Lazarus, 1990), commitment describes the extent to which personal goals are associated with a strong sense of determination, with the willingness to invest efforts. According to Gould (1993), commitment is the ownership of life wherever and whenever it was experienced. It is basically a passionate decision that involves the whole self.

For Frankl, dereflection and self-transcendence require commitment. Thus, people would be able to volunteer to do a deed; or find meaning in suffering; or love another individual. In our view, self-transcendence also requires commitment. Then, what would happen when one committed to self-transcendence? We try to answer this question based on the major coping resources discussed. Thus, people may sense life control by transcending personal control, and may find meaning in life through transcending self. In conclusion, *will to meaning refers to commitment and determination to self-transcendence meaning* in this study.

In summary, as stated at the beginning of this chapter, the primary purpose of this chapter is to report our attempt to establish a link between meaning in life or spirituality with personal control, the relation between them would function as an effective coping resource. We further assume that when meaning in life or spirituality works with personal control together, a new construct would be formulated since it is describing a phenomenon that researchers have largely



overlooked. In a spiritual context, personal control is alternatively viewed as life control, and meaning in life is focused on self-transcendence meaning. Before we further explore the relations between the alternative concepts, and formulating the new construct, a phenomenological analysis is necessary based on observations and interviews.

Observations and Interviews

People differ widely from each other in how they approach the world. Some people tend to be positive in their outlook. These people generally view things with a positive attitude. They do not distort reality but rather view it with relative objectivity. Given what appears to be an easily observed phenomenon, one might reasonably assume that the phenomenon has been the subject of thorough research in the past. Such is not the case, however. A review of the relevant mental health literature reveals that very little attention has been paid to such phenomenon, and to the possibility that the phenomenon may have important consequences for mental health.

Through the phenomenological analysis, we try to achieve two purposes: First, to suggest the existence of the phenomenon on which the new construct is established. Second, to provide the basis of a reliable and verifiable preliminary operational definition of the new construct. The phenomenological analysis is mainly based on the results of in-depth interviews, which were conducted before our main study. We interviewed 30 healthy and happy students including some Ph.D. students in HKU and some undergraduate students in Beijing. The results supported the existence of the phenomenon in which some students generally view things with a positive attitude, and without distorting reality but rather view it with a

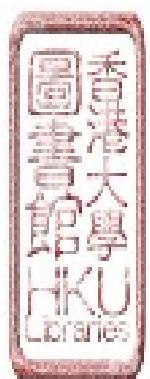


relative objectivity. Three aspects are included in participants' reports when asked them about their attitude of life. These three aspects are attitudes of self, of control and of future. Thus, it is inferred that these aspects taken together may represent the phenomenon we are exploring. Furthermore, these aspects may together provide a preliminary definition of the construct based on the phenomenon. The following shows the different aspects of this phenomenon.

a. Relative positive attitude of self

Traditional mental health asserts that the well-adjusted individuals possess accurate knowledge of self. Other evidence indicates that most normal individuals possess a very positive view of self (see Greenwald, 1980, for a review). However, our observation of college students seems somewhat different. We have found that most of the healthy and happy students did not judge their positive traits overwhelmingly more than their negative attributes as Brown (1986) and Aliche (1985) had reported, though they regarded their positive traits relatively more than negative attributes. Moreover, most of the healthy and happy students did not regard that they possessed a very positive view of self as Greenwald (1980) had suggested, though they viewed the self in a relative positive way. In a word, most students viewed themselves as positive and objective. We think that such positive attitude of self keeps the students healthy and happy. Results of our interviews are shown below.

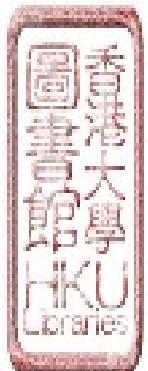
When we asked the students to indicate whether they were more intelligent than most of their classmates or other people who are comparable with them, all of the students responded in the negative. Furthermore, all of them said it depends on the specific aspects. When we asked the students to indicate whether they were more



intelligent than those who did not possess high degrees such as sale persons, almost all of them said it depends on the specific aspects. When we asked the students to describe themselves by some positive and negative personality adjectives, all of them claimed in an objective manner to have possessed more positive traits than negative attributes. We think they were objective based on the examples they provided. For example, we interviewed a Ph.D. student from the Department of Physics, University of Hong Kong, who taught in Tsinghua University in Beijing before coming to Hong Kong. She published her paper at *Science* in her first year in HKU. When asked to evaluate her IQ, she said, "my observation power, logical thinking and analytical ability could be better than the average, but my memory and imagination may only be average or even lower." We further asked students to indicate how they dealt with their weaknesses, almost all of them said they were not bothered and did not think about the weaknesses often. We asked them how can they ignore the weaknesses, some of the participants replied that the weaknesses were not important. Others reported that they would be unhappy when thought about the weaknesses, so they keep them out of their mind. In a word, the students are aware of both positive and negative aspects of self, but their attitudes toward themselves are quite positive and objective.

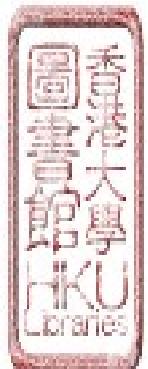
b. Relative positive attitude of control

Many theorists have maintained that a sense of personal control was integral to the self-concept and self-esteem. People's belief in personal control were sometimes greater than that which can be justified (Taylor & Brown, 1988), and such positive illusion of control could benefit psychological well-being. In contrast, realistic perceptions of personal control appeared to be more characteristic of individuals in a depressed affective state than individuals in a nondepressed affective



state (Taylor & Brown, 1988). However, our observation of college students seems somewhat different from those above. We have found that most of the healthy and happy students did not overestimate their control over happenings to them, but maintained a relative objective view. For example, some undergraduate students in Beijing reported that they could control the amount of efforts they would like to devote on preparing an examination, but they could not control the grades they could make. Moreover, most of the healthy and happy students did not think only self control was good, but believed that a sense of other control was also good. Sometimes, they even thought that a sense of other control was better than the sense of personal control, because the former could give them unexpected pleasure or happiness. Many healthy and happy students reported that they have never expected to have control over everything. Based on our observation, it seems that the sense of personal control was not as important as Western literature has suggested. What really concerned the healthy and happy students was a sense of life being in control rather than the process of how to control or who is in control. We consider that it is this positive attitude of control that keeps the students healthy and happy. Our five major questions and the results are presented below.

First, how many happenings to you do you think you have control by yourself? Almost all of the participants reported that they could control some happenings but many of the happenings indeed were beyond their control. Second, if you cannot control the happenings to you, will you simply give up the efforts of control? Almost all of the participants responded that they would not give up their efforts since efforts may help them gain some control than making no efforts at all, and making the efforts would make them feel better. Third, do you feel bad because you cannot control something? Almost all of the participants said that they did not

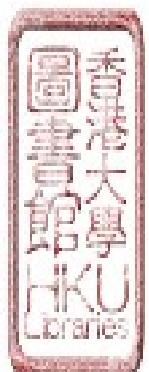


feel that bad since they never expected to have control over everything. Fourth, do you believe in fate or in a greater control? Many of the participants answered "yes", at least sometimes. The final question is: would it make any difference in your feeling if you succeeded by luck or if you succeeded by personal control (e.g. working hard to reach the targets)? Many of the participants answered that if they could have control by themselves alone, that would of course, be marvelous. However, they were mostly concerned about the results of things or matters rather than the processes leading to the results. Thus, if they cannot control by themselves alone but still had the chance to succeed, that would be marvelous also.

c. Relative positive attitude of future

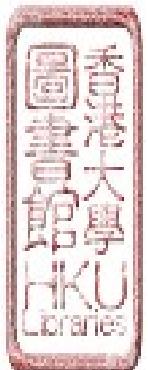
Research suggested that most healthy and happy people were future oriented. Optimism pervaded people's mind about the future. Research also suggested that most healthy and happy people believed that the present was better than the past and that the future would be even better (Brickman, Coates & Janoff-Bulman, 1978). In a survey of Americans about the future, the majority of Americans surveyed were hopeful and confident that things could only improve (Free & Cantril, 1968). When asked what did they think was possible for them in the future, college students reported positive possibilities four times more than negative possibilities (Markus & Nurius, 1986). Researchers thought such optimism was actually unrealistic or was positive illusion.

However, findings based on our observation of college students seem somewhat different from the findings above. Most of the healthy and happy students thought that it was difficult to predict future because many things were beyond their sole control. Many students reported that their past may be better than the present and



they cannot predict whether the future will be even better than the present. However, many of them were hopeful that things would be better in the future because of their many past and present experiences which could help them cope better. In a word, most healthy students seem to have adopted a very open, relative objective and positive attitude to their future rather than overwhelmingly optimistic. We think that the positive attitude of the future keeps the students healthy and happy. The following are some examples. When asked what did they think of their future, almost of all of the students said that it would be hard to predict since many things were beyond their control. When asked whether their present was better than the past and that the future would be even better, many students replied that their past might be better than the present, and they could not predict future. However, their experiences would help them cope better in the future, and therefore, their future may be better than the present.

Comparing with the two major coping resources being discussed, relative positive attitude of control would appear to be comparable to personal control plus spirituality, and therefore it could be represented by life control. Relative positive attitude of self would appear to be comparable with self-transcendence and therefore meaning in life. Relative positive attitude of future would appear to contrast with will to meaning. The phenomenological observation implies that positive attitudes of control and future do not emphasize ego. Based on this observation, we have found that the difference between positive attitude of control and personal control is that positive attitude emphasizes spirituality, whereas personal control does not. We further assumed that in this phenomenon, the three positive attitudes of self, of control and of future are interrelated to each other. Together they represent a more



powerful spiritual-oriented coping resource. Within the framework of stress--coping resource--psychological well-being, the absence of one of them could diminish the effects of the coping resource. The theory presented below is intended as an attempt to support our assumptions.

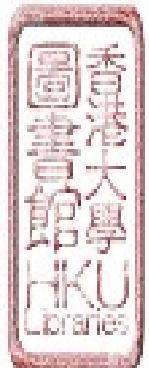
The Construct

Based on the observations of our in-depth interviews, the first important thing to present theoretically the new spiritual-oriented coping resource is to justify the relations among life control, meaning in life and will to meaning. Thus, we begin this discussion with an attempt to justify the association among these three concepts.

a. Relations of the concepts

First, meaning is indeed related to personal control. According to Thompson (1981), having personal control may change the meaning of an event from one that is potentially unendurable to one that is within the limits of one's endurance. Thus, the endurable-unendurable dimension of meaning can probably explain the many positive effects of personal control. Thompson (1981) also suggested that another meaning of control was the extent to which a misfortune was seen as part of a plan rather than a random event. In other words, control could play as a coping resource because it provided a positive meaning to the person in stress.

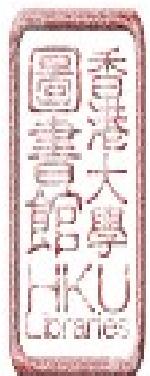
Second, personal control has its limitations as a coping resource as we discussed previously. It seems that control per se may not be sufficient to explain how it can serve as a buffer in all stresses. This analysis once again implies that control alone is not enough as a coping resource, but rather life control matters. Life control refers to transcending personal control which is derived from a belief in



self-transcendence meaning.

Third, when meaning in life hinges on self-transcendence meaning, will to meaning refers to will to self-transcendence meaning. We also indicated previously that when meaning in life is discussed only in the belief/cognitive system, the belief system lacking in commitment could not function as a coping resource. Thus, will to meaning and meaning in life dependent on each other within the framework of stress- coping resource- psychological well-being.

Fourth, the three concepts of life control, meaning in life and will to meaning are also interrelated at the conceptual level. Life control, meaning in life and will to meaning all concern expectancies. All of them emphasize the significance of spiritual anticipation of the future. Specifically, will to meaning refers to the commitment to meaning in life, and life control is assumed to be the result of commitment to meaning in life. Thus, self-transcendence meaning is the essence in these spiritual sets. It would appear then, that life control, meaning in life and will to meaning are conceptually related. Although self-transcendence meaning is the core in these spiritual sets, when taking them into the framework of stress- coping resource- psychological well-being, the belief of self-transcendence may not be the final determinant as a coping resource. We think perhaps only when people believe in self-transcendence meaning followed by will to the meaning, and a sense that life is under control, the spiritual-oriented coping resource made of these three components would work more effectively than the individual component by itself. Thus, a sense of life control may be the final determinant when considering the construct within the framework of stress-coping resource- psychological well-being. We even assume that meaning in life could function as a coping resource and



affected by an underlying variable. The discussion so far suggests that the variable may be life control. It might be argued that other meaning (e.g. existential meaning) could also act as a coping resource, and also because of life control. This is a question worth further exploration.

Furthermore, it is assumed that the relative positive attitude of control is caused by transcending personal control, and thus it could be represented by life control; the relative positive attitude of self is because of transcending self, and therefore it could be represented by meaning in life. The relative positive attitude of future is because of transcending personal control and self, as well as commitment to the transcending. Thus, life control, meaning in life and will to meaning are not only conceptually interrelated, but also phenomenologically interrelated. The conceptual relation and the phenomenological relation are comparable to each other. It is expected that the relation among positive attitudes of self, of control and of future describes the same phenomenon from different aspects. The relation among life control, meaning in life and will to meaning therefore conceptually interprets the phenomenon also from different aspects. Based on this interrelationship, we formulate a new construct which we name Vision in Life. Life control, meaning in life and will to meaning then represent the three components of Vision in Life.

Terminology

The term Vision is selected based on the following considerations: the Oxford Thesaurus (1994) defines Vision as "illusion, mirage, mental picture, image, dream, prescience..." Vision is used generally in three domains. First, in religion, vision is belief. Second, in organization, vision is somewhat the mission. Third, in



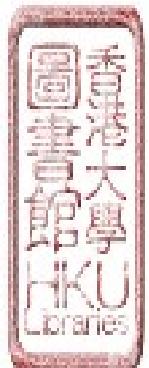
politics, vision represents foresight.

The present study formulates Vision in Life rather than Vision because Vision in Life points to a specific phenomenon that we have delineated already in the preceding chapters. However, the specific phenomenon refers to vision and is closest to the underlying meaning of vision among terms that we have considered. This is the reason why we use Vision in Life to interpret the phenomenon.

Definition

Vision in Life is defined as a person's belief in self-transcendence meaning and will to the meaning, therefore the perception of life being under control. Three factors are crucial in this definition which are self-transcendence meaning, will to the meaning and sense of control. First, will refers to commitment and determination. Second, self-transcendence meaning refers to a higher living state that is beyond self. Third, sense of control refers to belief and perception of a great control that is beyond self. These three factors constitute the three components of Vision in Life, which are Life Control, Meaning in Life and Will to Meaning.

It is assumed that Will to Meaning is a motivation system which consists of searching for meaning in life and committed to that meaning. Meaning in Life is the value system, which emphasizes people's beliefs, identification and insights of a higher living state that is beyond self. Life Control reflects the outcome of willing to and believing in self-transcendence meaning, with which people believe and perceive their lives are bolstered and controlled by a power beyond or larger than self.



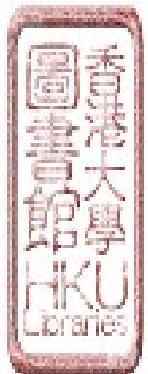
The further explanation of this definition is that people will to meaning, and it is a ceaseless process in people's life. In our definition, will to meaning is mainly focused on relativistic meaning, which is having a meaningful life. Will to meaning also refers to philosophical meaning. That is commitment to self-transcendence meaning. The proposed value for mental health is that not only belief but also commitment to the belief serves to maintain and enhance people's psychological well-being under stresses.

Self-transcendence meaning is the value for which meaning in life is beyond self. According to Buddhism, there are two meanings here. The first meaning, namely, "that which is not mine," teaches us to detach ourselves from the egoism directed towards all things, including its own self. The second meaning, "that which does not have an ego," indicates the state of being which is free from the just-mentioned kind of egoism. It also means that in such a state, we will be able from the first time, to see the truth. If self is boundless and is in harmony with the universe, then gain and loss may be just moving something from one place to another place; success and failure along life's journey may be just different ways of encouraging new efforts. Regarding the relationship between self and self-transcendence, it would be as Talmudic said: "If I am not for myself, who will be for me?" and "but if I am for myself alone, what am I?" Self-transcendence proposes at least three major values for mental health: First, since there is no ego, the individual could take others into consideration when considering his/her self interests. Second, since something gained, something lost or gain and loss are in nature dialectically associated with each other, there is no need to be concerned about either gain or loss so much. Third, since success and failure are different ways of generating new efforts, what does success or failure matter? In a word, the



meaning of life is immersed in the caring of others, in the insight of dynamic links between gain and loss and thus accepting both of them, also in the enlightenment of the dialectical process between success and failure and therefore ceaseless efforts regardless of success or failure. This is the true meaning of life. Thus, the problem is to help people to discover it rather than to create it, especially under stressful conditions. The coping resource is inside people themselves rather than outside in some other places. It is just as what Frankl (1971) claimed the meaning in our existence is not invented, but rather detected.

Regarding life control, it is assumed as the outcome of will to self-transcendence meaning. That is, when people are committed to self-transcendence meaning, they could always sense control. Baugh (1988) interpreted gaining control by giving up control through accepting powerlessness. However, our interpretation is that giving up personal control is indeed breaking up the boundary of personal control or extending and transcending personal control to a greater control. This is an active action rather than a passive one. Life control proposes at least three major values for mental health: First, when people are committed to self-transcendence meaning, there would be no more uncontrollable stresses for them. But then, the stresses may be seemingly uncontrollable at some given moment, even though not forever. Second, people's efforts may not relate to the desired outcome instantaneously or even in a long period, but all the efforts contribute to the desired outcome finally. Third, when people are committed to self-transcendence meaning, there would be no more controllable stresses (personal control) either. Thus, people would not expect what they could control or what they could not. What they can do is just keep up their efforts no matter what has happened and what will happen. Thus, life control is useful not only under conditions of high stresses, but also under



conditions of low stresses. In other words, life control is useful at all times whether there is stress or not.

The three components of vision in life are described as below, and the characteristics of high scorers we interviewed are: 1) View on Meaning in Life: They perceive both loss and failure as inevitable yet meaningful. They sense deeply the dialectic links between gain and loss that one gains here and losses there and vice versa. They also sense deeply the dialectic links between success and failure, that is, success here and failure there and vice versa. They have only a weak sense of rejecting loss and failure, likewise, they only have a weak sense of accepting gain and success. 2) View on Will to Meaning: Our high scorers have a strong urge to seek meaning in life, whereas, they have a weak desire to live without meaning. 3) View on Life Control: They firmly believe their lives are being in control, whereas, they sense weakly that their lives are uncontrollable. They have a strong sense that their efforts contribute to the desired outcome finally, whereas they have a weak desire to give up their efforts if the desired outcome did not appear immediately or even after a long period. They expect firmly not just personal control, whereas, they have weak sense of giving up efforts if person cannot control. The low scorers we interviewed have opposite characteristics.

Buffering Effect of Vision in Life

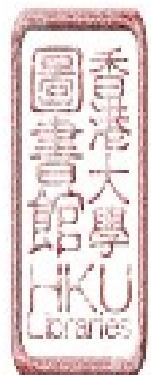
We think the buffering effect of vision in life may take place in several processes. In these processes, belief is the pivotal and starting point, whereas accommodation is the core and the lodgment.



First, it is the belief of self being harmonious with the universe, the belief of Yin and Yang representing the fundamental dualities, opposites, and polarities of the universe, and the belief of impermanence. Once such beliefs internalized as people's philosophy of life, then the philosophy leads to the strong sense that loss and failure is inevitable yet meaningful, as well as the strong sense of a linkage between gain and loss, as well as between success and failure in daily life. These beliefs are important for mental health because most stresses are in fact caused by the sense of loss or failure. The proposed value for mental health is that people could hold the belief of success in failure, also the belief of gain in loss. Such beliefs would serve to buffer.

Second, it is the imagination and fantasy of good in evil, of joy in sadness and of happiness in unhappiness. Such imagining and fantasy are generated by beliefs and they function almost as the coping resources. The difference may be that beliefs are more conscious and more logical, and therefore more confirmable, whereas imagination and fantasy are more unconscious and more illogical, and therefore less confirmable. The imagining is also important for mental health. The second proposed value for mental health is that people could imagine joy in sadness, and happiness in unhappiness. Such imagination would serve to buffer.

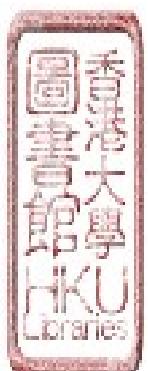
Third, it is the expectations of positive in negative, of success in failure. Such expectations are also generated by beliefs and they function largely like beliefs as the coping resources. The difference may be that beliefs represent more internalized philosophy and more stable attitude for life, whereas expectations are more motivational and more situational. Expectation is important for mental health. Thus, people could expect positive in negative, and expect success in failure. Such



expectation would serve to buffer.

Fourth, it is the accommodation of frailties, sins, weaknesses, evils, and losses. People could accommodate poor and severe realities because they believe such realities are inevitable, also because they believe the realities are impermanence and meaningful. Therefore, accommodation is the outcome of internalized belief of self-transcendence. Thus, this accommodation is not only passive, but rather active sometimes because it is established on the belief that positive and negative are in balanced and dynamic existence. Accommodation is important for mental health. Thus, people could accommodate not only their strengths but also their weaknesses, not only good reality, but also poor and severe reality. Such accommodation would serve to buffer.

Finally, it is the blend of optimistic and realistic thinking. The blend of optimistic and realistic thinking serves to understanding true self and true life. The self can be seen as egoless self, and life as suffering-life. The blend of optimistic and realistic thinking is important for mental health. Thus, people are prepared for whatever suffering, whatever loss and whatever pain in their lives. Such blend thinking would serve to buffer.



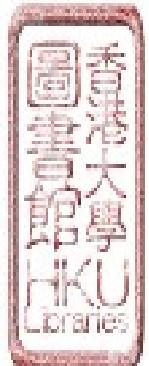
CHAPTER 4

CONCEPTUALIZATION OF RESEARCH VARIABLES

Stress, coping and psychological well-being have been used widely in many ways. These terms as concepts touch on many disciplines, there are widespread uncertainty about the boundaries of these concepts. This chapter attempts to conceptualize our research variables--college stress, coping resource and psychological well-being through comparing the various definitions of stress, coping and psychological well-being.

COLLEGE STRESS

College stress was assumed as the independent variable in the present study. The conceptualization of college stress is guided by a general discussion of stress. Thus, we first discuss stress, then, college stress. There are in fact two distinct areas of ambiguity surrounding the term stress (Wheaton, 1997). The first area of ambiguity is whether the term stress should be reserved for a problem emanating from the social environment, defining a stimulus problem, or for a response state of the organism as manifested by biological definitions or as embodied by the term "psychological stress". The second area of ambiguity the term stress has to do with the substance of stressors themselves. A variety of terms have been used to refer to stress, including *role strains* (Pearlin, 1983), *life difficulties* (Brown & Harris, 1978), the somewhat problematic *daily hassles* (Kanner, Goyne, Schaefer & Lazarus, 1981), and *traumas* (Norris, 1992). These terms are used to avoid the word stress, and it is

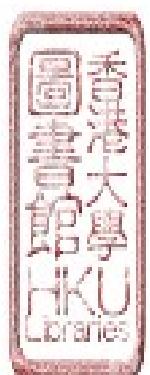


clear that these terms are intended to stand for types of stress. The following is a discussion about defining stress and stressor.

Three basic types of stress are typically delineated: systemic or physiological, psychological, and social (Selye, 1991). Systemic stress is concerned primarily with the disturbances of tissue systems (e.g. Cannon [1929], 1953; Selye [1956], 1976b), psychological stress with cognitive factors (e.g. Lazarus, 1966), and social stress with the disruption of a social unit or system (e.g. Smelser, 1963). While many believe the three types of stress are related, the nature of the relationship is far from clear (Mason, 1975a). Moreover, there is no agreement on the definition of “stress” among those researchers closest to the field (Selye, 1991).

Selye's classic work on stress ([1956], 1976b) is a useful reference point, since it influenced much of what is assumed about stress in the psychosocial model. Selye (1976) defined stress as a response elicited by some external event (stimulus). Selye's stress model included four stages:

- 1) Stressors- consisting of a wide variety of events and conditions that represent threat or insult to an organism;
- 2) Conditioning factors- that alter the impact of the stressor on the organism, as in coping resources in the psychosocial model;
- 3) The general adaptation syndrome (G.A.S)- an intervening state of stress as indicated by a physiological state of the organism; and

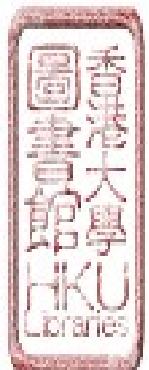


4) Behavioral responses-which can be adaptive or maladaptive.

In his view, human stress responses go through these stages starting with an alarm reaction to a threat. However, if stress continued, physiological arousal arose. If the body's resources in enduring stress were depleted, then the organism entered into the exhaustive stage. Selye linked stress responses to various illnesses. This approach did help us understand possible health consequences of prolonged exposure to stressful events, and led researchers to thinking about health-related outcomes once they consider stresses as functional, physical, psychological and social well-being (Damush et al., 1997). However, the definition fails to inform us of the sources associated with the development of these health outcomes. Moreover, it provides little information as to how these outcomes are related to their sources.

Holmes and Rahe (1967) defined stress as a stimulus event. They referred to stress primarily as life events or changes that affect people, whether the changes were welcomed or not. However, this approach seems to have confused the stressor with stress.

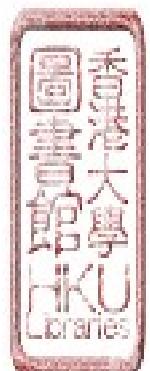
Caplan (1981) defined stress as “a marked discrepancy between the demands made... and the organism’s capability to respond, the consequences of which will be detrimental.” Such definitions imply that stress is always destructive or harmful. However, many authors adduce evidence that the dose-response curve for stress is nonlinear: mild stressors often seem to be benign and sometimes even seem to be growth promoting.



Where does the modern stress concept come from? Dohrenwend and Dohrenwend (1974) trace the use of the term to the pioneering experiments of Cannon (1929) on the effects of pain, hunger, and emotions on bodily changes. In applying this model, Dohrenwend and Dohrenwend (1970) utilized a crucial distinction drawn by Koos (1946) between “troubles” and exigencies of daily life. The former referred to situations that block the usual patterns of daily activities and call for new ones, the latter referring to the patterns that persist over time. The notion of stress is restricted to issues that reflect changes in the usual pattern of daily life. In this approach, stress is linked to the requirement of change.

An alternative to the biological stress model is the stress model in engineering (Smith, 1987). In the engineering model, stress is essentially an external force acting against a resisting body that may or may not operate within normative limits. Thus, one could say that stress also becomes a stressor when the level of force exceeds structural integrity. It appears that stressors and stress are not distinguished in the engineering model—they both refer to the external force, pressure, or threat to the body.

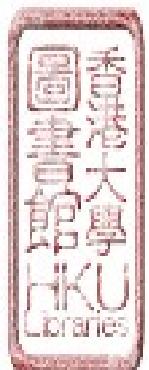
Lazarus and Folkman (1984) defined stress as a stimulus-response transaction. In their view, the stress one experiences is not in a situation or in a person but rather in the transaction between the situation and the person. The consequences of the transaction were how the individual appraised and adapted to the interaction (Weiten, Liroy & Lashley, 1990). This approach emphasizes the importance of two concepts in determining an individual's experience of stress: appraisal and coping. According to Lazarus and Folkman (1984), there are two types of appraisal. Primary appraisal is the initial evaluation of whether a condition is stressful.



Secondary appraisal involves assessment of whether a person has the ability to deal with stressful demands. This is the appraisal of coping. This approach treats stress as a process which involves the understanding of the interplay among stressors (e.g. environmental and/or internal demands), intervening factors (e.g. personal and/or environmental resources) and stress reaction (physical and/or psychological well-being). Indeed, Lazarus and Folkman (1984) have argued that stress can best be understood through the study of the above relationships.

In the case of stress resulting from having to adapt to university life, this relational approach can foster an understanding of the interplay among stressors experienced by students, the manner they cope with the difficulties, and the effects of these difficulties on their psychological well-being. Therefore, the stimulus-response transaction approach is adopted by the present study as the definition of stress and based on which to further define college stress. College stress is then defined as a college stressor-response transaction. This approach treats college stress as a process which involves the understanding of the interplay among college stressors, intervening factors (e.g. personal and/or environmental resources) and college stress reaction (physical and/or psychological well-being).

This study conceptualized college stress as a three-component construct which consists of stresses from academic hassle, personal hassle and negative life event. Based on the literature below, the sources of stress are distinguished into hassles and negative life events.



Much of the earlier literature on the sources of stress has concentrated on major life events (see Holmes & Rahe, 1967; Kaplan, 1979; Mechanic, 1974). However, these approaches have received extensive criticism. The criticism covered such issues as psychometric problems, the lack of representativeness of the sampled events among varying sociodemographic groups, and the absence of concern with psychological mediators such as the significance of events and the resources available for coping with them (see Delongis et al., 1982). Moreover, life events are correlated only weakly with health outcomes in general, with the average correlation being around 0.12 (Rabkin & Streuning, 1976).

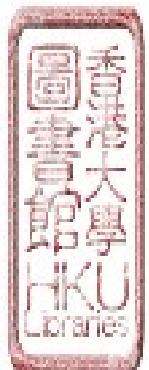
Alternative theoretical and methodological approaches for investigating stress and its associated processes have been proposed. For instance, Lazarus and Folkman (1984) developed a cognitive-phenomenological model of stress and coping. They emphasized the cumulative impact of day-to-day events (microstressors), which have personal meaning and significance for the individual (proximal variables) more than major life events (distal variables). Proximal variables predict human reactions better than distal ones because they express the here-and-now pressures of living as these are sensed or appraised by the individual. This model was supported by a series of papers addressing the adaptational significance of the relatively minor stresses and pleasurable events that characterized everyday life (e.g. Lazarus, Cohen, Folkman, Kanner & Schaefer, 1980).

The relationship was much stronger between everyday experience and psychological distress than between major life events and distress, and multiple regression analyses showed that most of the variance in symptoms accounted for by major life events was shared with hassles (see Wu & Lam, 1993). A similar pattern



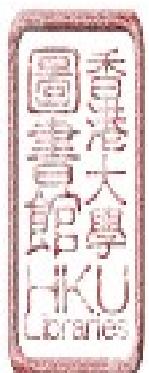
of results for hassles, major life events, and somatic health was found in other studies (e.g. Zarski, 1984). The proximal-distal dimension refers to the order of various environments according to their conceptual proximity “to experience, to perception, to interpretation, or to psychological response” (DeLongis et al., 1982). In this study both of them were taken into account in defining the source of college stress. We further divide hassle into academic hassle and personal hassle mainly based on the literature as follows. Archer and Lamnin (1985) suggested that hassles of college students included academic hassle and personal hassle based on an open-ended questionnaire format. Furthermore, academic hassle included tests, grade competition, and career. Personal hassle consisted of intimate relationships, finances, and interpersonal conflicts. Carney, Peterson and Moberg (1990) also identified the most pressing concerns were in the personal and academic areas. These findings were the same as the results of a previous study (Carney & Savitz, 1980). Murphy and Archer (1996) compared college stressors of 1985 and 1993, and also revealed these two major kinds. Thus, we categorize hassles of college students into academic and personal hassles.

Life events, as embodied in the literature, have the following characteristics. They are discrete, observable events standing for significant life changes and possessing a relatively clear onset and offset (Wheaton, 1997). The most popular conceptualization of life event is that advocated by Holmes and Rahe (1967). According to Holmes and Rahe, life events or life changes are defined as objective experiences that disrupt, or threaten to disrupt, an individual's usual activities, causing a substantial readjustment in that individual's behavior (Holmes & Rahe, 1967). Over the past 20 years, comments have been made to further enrich the concept of life events as acute stressors. First, it has been argued that greater

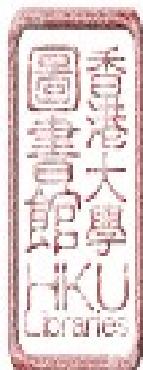


importance should be given to understand the perception of life events as desirable, voluntary or scheduled than the occurrence of life events per se (Pearlin, 1982). Second, the choices of life events for a particular study should be situation-specific. It is assumed that different situations are associated with different sets of stressful life events. The most widely used measures of adolescent life experiences are the scales developed by Coddington (1972). The underlying assumption of Coddington's scales is that both negative and positive events require adjustment and are therefore stressful. This conceptualization of life stress, however, has been strongly criticized by later researchers. The adult literature has shown that it is undesirable or negative life experiences, rather than life change per se, that account for the significant relation between life stress and mental health problems (e.g. Zautra & Reich, 1983). Other researchers also indicated that it is negative rather than positive life events that show substantial relationships with outcomes such as depression and psychosomatic symptoms (see Thoits, 1983). This study regards negative or undesirable life events as acute stressors.

Hassles refer to chronic stressor, which tend to create an aura or background of stress against which an individual lives, or strives to live, a normal life (Trad & Greenblatt, 1990). They persist over a longer period of time without reaching a noticeable peak or high point (Wheaton, 1983). Moreover, unlike acute stressors, chronic stressors may or may not be initiated by discrete events (Cohen, Kamarck & Mermelstein, 1983). Thus, chronic stressors can be described as long lasting and as structured social and economic antecedents of stress, involving the more enduring problems, conflicts and threats that many people face (Pearlin, 1981).



There are many specific examples of chronic stress situations in literature, among them Wheaton (1997) suggested nine such situations. 1) Threats. Chronic stressor is often defined as the continuing possibility or expectation of potential harm. Threat also exists as a form of pressure. 2) Demands. The word “demands” and accompanying term such as overload, are among the most commonly used in defining the nature of stress. 3) Structural Constraints. Structural constraints is essential to understanding the problems posed strictly by the structure of the social environment that leave an individual with reduced opportunities, choices, or alternatives. 4) Under-reward. The notion of underreward is derived from the Equity Theory (Walster, Berscheid & Walster, 1976), a theory of social exchange that postulates stable social exchange under conditions of equity, defined as an equal ratio of outputs to inputs for the two parties involved in a relationship. 5) Complexity. Complexity can be a positive feature of social life, such as when it expresses the fine points of an enjoyed or understood activity or when it is the source of continued interest in work tasks. 6) Uncertainty. Complexity and uncertainty usually feed each other in the following sense. At a given level of complexity, uncertainty multiplies the effects of complexity, and at a given level of uncertainty, complexity multiplies the effects of uncertainty. 7) Conflict. Both the fear of bringing the conflict to the surface and the ritualized enactment of the conflict become sources of chronic stress. 8) Restriction of choice. This may be an important source of chronic stress in many lives. Restriction of choice does not need to occur within or because of roles. It may also occur directly as a function of ascriptive or achieved social status. 9) Resource deprivation. Whether resource deprivation should be considered a form of stress is a controversial issue. This is a closely related concept to the notion of restriction of choice.



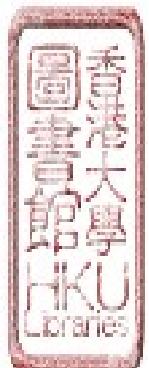
In several previous publications, Lazarus and his colleagues discussed a scale they constructed to measure “hassles” by which they mean the “irritating, frustrating, distressing demands and troubled relationships that plague us day in and day out” (Lazarus & DeLongis, 1983). Hassles are seen as “microstressors” and, as measured by Lazarus and his colleagues, showed much stronger relationships with psychological distress than did a measure of rarer and more frequently studied life events (Kanner et al. 1981). In the following parts, we will delineate academic hassle, personal hassle and negative life event as explained by college student respectively.

Academic Hassle

Academic hassle is defined as hassle related to college study which persists over a longer period of time without reaching a noticeable peak or high point. Moreover, academic hassle may or may not be initiated by discrete events such as failure in examinations. Academic hassle in this study refers specifically to those related to demands or overload (e.g. too many homework and too many tests); under-reward (e.g. low learning efficiency). Examples of academic hassle are homework, tests and finals.

Personal Hassle

Personal hassle is defined as all campus hassles except academic hassles, which persists over a longer period of time without reaching a noticeable peak or high point. Like academic hassle, personal hassle may or may not be initiated by discrete events. In our study, personal hassle refers specifically to those related to personal conflict, threats (e.g. health problem and financial problem), restriction of choice and resource



deprivation (e.g. living condition) and complexity and uncertainty (e.g. take part in social activity).

Negative Life Event

Negative life event of college student is defined as discrete, observable negative or undesirable life event which happens on campus and has a relatively clear onset and offset. A negative life event of college students refers to the objective qualities that are those inherent in the events themselves, unaffected by differences among students who experience them. They should result in relatively similar responses from all who experience them. Examples are failure in examinations and being told off in public.

In conclusion, the concept of stress has received considerable theoretical and empirical attention in recent years, yet much "confusion and controversy" remain. Attempts have been made to integrate various points of view and finally we conceptualize college stress as stresses of academic hassle, personal hassle and negative life event. The independent variable of our study will be then measured based on this conceptualization of college stress.

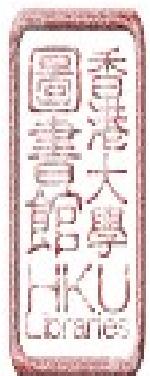
COPING RESOURCE

To define coping resource, we first need to define coping. We also need to define the relevant concepts such as coping trait/style and coping strategy. The concept of coping is found in two very different theoretical/research literatures, one derived from the tradition of animal experimentation, the other from ego psychology



(Lazarus & Folkman, 1991). According to Miller (1980), coping consists of the learned behavioral responses that are successful in lowering arousal by neutralizing a dangerous or noxious condition. Similarly, Ursin (1980) stated that "the gradual development of a response decrement in the animal experiments as well as the human experiments is coping." The animal learns to cope through the lowering of drive tension by positive reinforcement. In the ego psychology model, coping is defined as realistic and flexible thoughts and acts that solve problems and thereby reduce stress (Lazarus & Folkman, 1991). The main difference between the treatment of coping in this model compared to the animal model is the focus on ways of perceiving and thinking about the person's relationship with the environment. Although behavior is not ignored, it is treated as less important than cognition. Another difference between the two models is that the ego psychology approach differentiates among a number of processes that people use to handle person-environment relationships.

Based on the explorations of the two different literatures, Lazarus and Folkman (1984) defined coping as a stabilizing factor that can help individuals maintain psychosocial adaptation during stressful periods; it encompasses cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the individual's resources. External demands refer to the event itself and internal demands refer to the emotional reactions to the event. Therefore, coping has two widely recognized major functions: regulating stressful emotions (emotion-focused coping) and altering the troubled person-environment relation causing the distress (problem-focused coping). Coping usually includes both functions (Folkman, Lazarus, Dundel-Schetter, DeLongis & Gruen, 1986). In his later writing, Lazarus (e.g. 1999), however, viewed coping along with three lines:

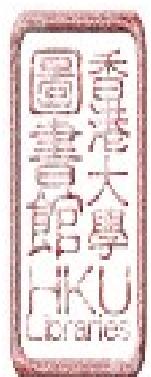


coping as trait and style, coping as process and coping as resource. Thus, coping is not always stable, but sometimes could be viewed as a process. Coping, according to Matheny et al. (1986), is any effort, healthy or unhealthy, conscious or unconscious, to prevent, eliminate, or weaken stressors, or to tolerate the stress in the least harmful manner. Although all agree that coping refers to efforts to reduce stress, some researchers give significant attention to psychodynamic processes, whereas others limit their attention to the person's conscious efforts to deal with stressors. Furthermore, some include all efforts to cope, both healthy and unhealthy, whereas others limit their definitions of coping to healthy methods.

Based on the definitions above, our study define coping as healthy efforts both conscious and unconscious to prevent, eliminate, or weaken stresses. Efforts imply that coping is stable and process. Thus, we view coping in the same ways as Lazarus did.

Coping as Trait or Style

Coping trait is regarded as properties of people that dispose them to react in certain ways in given situations. Examples of traits that have been identified with coping include repression-sensitization, coping-avoiding or monitoring-blunting (e.g. Miller, 1980). A coping style differs from a trait primarily in degree, and usually refers to broad, pervasive, encompassing ways of relating to particular types of people such as the powerful or the powerless, the friendly or the hostile, the controlling or the permissive, or to particular types of situations such as ambiguous or clear, imminent or distant, acute or chronic, evaluative or nonevaluative (Lazarus & Folkman, 1991). According to Lazarus (1999), there are two ways to view



coping from the trait/style perspective. One is merely to describe coping patterns that seem habitual--that is, they have some degree of stability by correlating coping thoughts and actions in the group of people over time or across conditions. This is a theoretical approach to structure because a coping trait is defined empirically by its stability or consistency over time and conditions. In this usage, traits and styles are not different from each other; both are defined empirically as actions that are characteristic of the individual (Lazarus & Smith, 1988).

A second approach is to derive from a theory the personality dispositions or traits that might influence stable coping action patterns. In effect, such a disposition, say, a goal or a belief, leads to the formation of a stable style of coping over time and across transactions. Dispositions can be shown consistently to shape coping thoughts and actions, which can then be referred to as styles that to some extent transcend the environmental conditions being faced. In this approach, trait and style represent different types of constructs.

Lazarus (1999) indicated several limitations of viewing coping as trait/style. One important limitation of the trait/style approach is that it reduces coping to a contrast between two extremely broad opposing styles. It oversimplifies the extremely rich and varied kinds of coping thoughts, actions, and strategies people employ under stress. Second, the coping styles approach has ignored goal-oriented intentions and integrative strategies that could be defined as motivation, which people use in dealing with harm, threat, and challenge. A third limitation is that the coping styles usually ignore the very large middle portion of the style distribution. In other words, and especially when it is viewed as a dimension, a style's predictive power is based on a small minority of subjects at either end of the distribution, so



that the middle group does not contribute to the outcome variance.

Coping as Process

Lazarus and Folkman (1984, p.141) offer the following process view of coping: "We define coping as constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person." To put this more simply, coping is the effort to manage psychological stress. Coping as a process, according to Lazarus (1999) mainly refers to that coping strategies which change from a point in time to another as the encounter unfolds or from one encounter to another, which is an empirical definition of what is meant by a process. In general, coping strategies are separated into approach and avoidance domains based on an individual's orientation toward a stressor (Holahan, Moos & Schaefer, 1996). In addition, each of these two domains is divided into categories that reflect cognitive and behavioral coping. Accordingly, four basic categories of coping processes are formulated: cognitive-approach, behavioral-approach, cognitive-avoidance, and behavioral-avoidance. Approach coping strategies, such as problem solving and information collecting, can moderate the potentially adverse influence of both negative life changes and enduring role stressors on psychological functioning (Billings & Moos, 1981). In contrast, avoidance coping, such as denial and withdrawal, is generally associated with psychological distress--the association is even stronger beyond the initial crisis (Holmes & Stevenson, 1990). Lazarus (1999) also pointed out that in fact there is no universally effective or ineffective coping strategy. There is also much research suggesting that denial is useful in elective surgery.

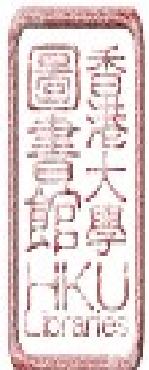


Lazarus (1999) further indicated that some coping strategies are tied to personality variables, whereas others are tied to the social context, that is, coping as trait and process. Moreover, certain coping strategies, such as positive reappraisal, showed significant within-subject consistency from encounter to encounter. In other words, if positive reappraisal was employed by a person in one encounter, it was likely that that person would use it again in another encounter. However, other coping strategies, such as seeking social support in one encounter, was much less likely to be used again by that person. Lazarus also pointed out some limitations of the process approach, the major of which is that coping strategies sometimes can be converted into a trait/style approach.

It seems that coping style and coping strategy are affected by coping trait and cannot be totally independent of it. In other words, to explore coping as a trait would be the basis of other approaches. In fact, positive coping trait could also be treated as a personal coping resource.

Coping Resource

Coping resource, according to Folkman and Lazarus (1984), refers to one's capabilities for dealing with potentially demanding events and may be thought of as aspects of the functional intelligence which are needed for everyday living. Matheny et al. (1986) defines coping resource as conditions or attributes that decrease the likelihood that demands will be perceived as stresses or increase the effectiveness of coping behaviors. Pearlin and Schooler (1978) did not relate coping resource to what people do, but to what is available to people in developing their coping repertoires. Coping resource is thus what individuals "draw on in



order to cope" and resources "precede and influence coping strategy and coping style"(Lazarus & Folkman, 1984).

Coping resource includes physical, social, and psychological assets that are useful in dealing with demands (Matheny et al., 1986). Matheny et al. (1986) reviewed various coping resources studies and identified five coping resources that strengthen one's general resistance to stresses.

- 1) Social support. This resource refers to a network of supporting friends or relatives across which one can spread the shock of stressful events. About 54% of the studies in this field cited this resource.
- 2) Beliefs/Values. Functional beliefs and bio-positive values are resources that cause one to appraise demands as being less stressful. In this kind of studies, about 43% cited this resource.
- 3) Confidence/Control. This resource refers to faith in one's ability to coping successfully with stressfully situation. In this kind of studies, 34% cited this resource.
- 4) Wellness. This resource refers to one's overall health and wellness and includes physical fitness, proper weight control, high energy levels, and the absence of high-risk behaviors such as smoking and excessive drinking. In this kind of studies, 37% cited this resource.
- 5) Self-esteem. This resource refers to the tendency to accept and reward oneself. It suggested the feeling of being competent and well-functioning. In this kind of studies, 17% cited this resource.

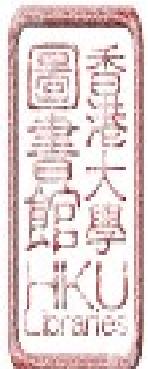
According to Pearlin and Schooler (1978), coping resource mainly refers to social resources and psychological resources. Psychological coping resources are the personality characteristics that people draw upon to help them withstand threats posed by events and objects in their environment. These resources, residing within the self, can be formidable barriers to the stressful consequences of social strain (Pearlin & Schooler, 1978). A variety of dispositional factors appear especially



important as coping resources, including self-efficacy (Bandura, 1982), optimism (Scheier, Weintraub & Carver, 1986), internal locus of control (Lefcourt, 1992), self-esteem (Rosenberg, 1965), positive thinking (Ingram & Wisnicki, 1988), hardiness (Kobasa, 1979, 1982), and sense of coherence (Antonovsky, 1987). Social coping resources are types of social support received from formal and informal networks. Social resources can strengthen coping efforts by providing emotional support that bolsters feelings of self-esteem and self-confidence, as well as by providing advisory guidance that aids in assessing threat and in planning coping strategies. Wheaton (1983) distinguishes between environmental and personal coping resources. Environmental resources are defined in terms of the availability of social support, especially from family, friends, or co-workers; in terms of the individuals' participation in voluntary organizations; or, more generally, in terms of overall social integration. Personal resources are facets of personality that, by affecting such factors in coping situations as the range of responses to be considered and the effort to be expended, may increase an individual's potential for dealing effectively with stress.

Vision in Life as Coping Resource

Vision in life is explored as a coping resource in this study. Vision in life, as defined by us, consists of three components, which are life control, meaning in life and will to that meaning. It is assumed that will to meaning is a motivation system, which consists of searching for meaning in life and committing to that meaning. Meaning in life is the value system, which emphasizes people's beliefs, identifications and insights of a higher living state that is beyond self. That is, life control reflects the outcome of people who believe in self-transcendence meaning

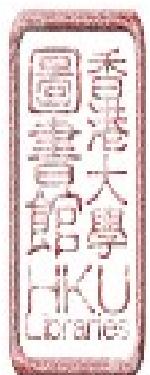


and willing to it, with which perceive their lives as bolstered and controlled by a power beyond or larger than self. We treat vision in life as a spiritual coping resource mainly based on the following: 1) The phenomenological observation revealed that most healthy and happy college students possess vision. 2) Vision in life consists of different coping resources. a) As we mentioned above, beliefs/values can be a coping resource (see Matheny et al., 1986). Vision in life possesses such a belief/value system, and which is meaning in life. b) We also reported that confidence/control can be a coping resource (see Matheny et al., 1986). Vision in life also possesses such a confidence/control system, and which is life control. 3) Vision in life possesses the necessary elements as a coping resource. We discussed several elements of vision in life which serve as coping resources. For example, imagination/fantasy, expectation, accommodation and blend of optimistic and realistic thinking all function as coping resources (see Chapter 3). Thus, it is expected that vision in life is a coping resource. Furthermore, since vision in life hinges on spirituality, it is a spiritual coping resource. In a word, if a person has vision in life, he/she will possess the capability to deal with perceived stresses.

According to Aldwin (1994), there are two possible ways in which coping resource can affect well-being. First, there may be direct effects on health outcomes. Second, coping resource may moderate or buffer the effect of stress on well-being. In the present study, both direct and buffering effects of vision in life on psychological well-being are explored.

a. Direct effects

Based on Aldwin (1994), many studies of coping resource and well-being implicitly assume a direct effects model, by simply using a correlational paradigm,

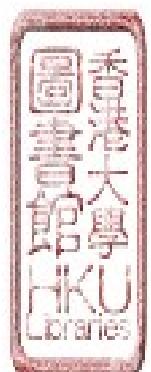


such studies assume a simple link between particular coping resources and particular types of outcomes. The more the coping resource is utilized, the lower the psychological or physical distress. This is a simple, bivariate approach to the problem. In short, coping resource is assumed to have direct, causal effects on whatever outcome variable that is under study. In direct effect model, the coping resource will be associated with a given outcome, regardless of the level of stress. In our study, it is expected that vision in life will be associated with a given outcome, regardless of the level of college stress.

b. Moderating effects

The buffering model postulates that the coping resource has an effect on outcomes only to the extent that the coping resource moderates the effect of stress on the outcome. That is, coping resource will affect outcomes only because it reduces the negative effects of stress, especially at higher stress levels. It is expected that vision in life will affect psychological well-being only because it reduces the negative effects of college stress, especially at higher stress levels.

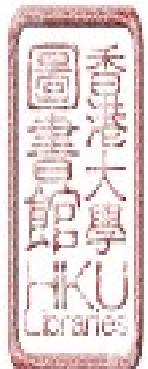
In coping research, the interpretation of direct versus buffering effects may be more complex. Aldwin and Revenson (1987) suggested that direct effects support the idea of personality-based coping resource, whereas, interaction effects support a model of coping resource based on person-situation interactions. In this study, vision in life affects health outcomes will provide an answer to the more basic question of whether vision in life is primarily a function of personality or an expression of the joint effects of both the person and the situation.



PSYCHOLOGICAL WELL-BEING

Three groups of literature provide theoretical guidance in understanding the meaning of psychological well-being (Ryff, 1995). *Developmental psychology* offers numerous depictions of psychological well-being. These perspectives include Erikson's model of the stages of psychosocial development, Buhler's formulation of basic life tendencies that work towards the fulfillment of life, and Neugarten's descriptions of personality change in adulthood and old age. *Clinical psychology* also offers multiple formulations of well-being, such as Maslow's conception of self-actualization, Rogers' view of the fully functioning person, Jung's formulation of individuation, and Allport's conception of maturity. Finally, the literature on *mental health*, such as Jahoda's formulation of positive criteria of mental health and Birren's conception of positive functioning in later life. These perspectives, even in combination, have had little impact on the empirical research on psychological well-being. The neglect stems, in part, from a lack of operational definitions and measures (Ryff, 1995).

According to Diener (1984), definitions of well-being can be grouped into three categories. First, well-being is defined by external criteria such as virtue or holiness. In normative definitions, well-being is not thought of as a subjective state, but rather as possessing some desirable qualities. Such definitions are normative because they define what is desirable. The criterion for well-being of this type is not the actor's subjective judgment, but the value framework of the observer. Second, social scientists have focused on the question of what leads people to evaluate their lives in positive terms. This definition of well-being has come to be labeled life satisfaction and relies on the quality of the respondents to determine



what is a good life. A third meaning of well-being comes closest to the way the term is used in everyday discourse. Well-being denotes a preponderance of positive affect over negative affect (Bradburn, 1969). This definition of well-being thus emphasizes pleasant emotional experience. This may mean either the person is experiencing mostly pleasant emotions during his life period or the person is predisposed to such emotions, whether or not he or she is currently experiencing them.

The area of subjective well-being has three hallmarks based on Diener (1984). First, it is subjective. According to Campbell (1976), it resides within the experience of the individual. Notably absent from definitions of subjective well-being are the necessary objective conditions such as health, comfort, virtue, or wealth. Although such conditions are seen as potential influences on subjective well-being, they are not seen as an inherent and necessary part of it. Second, subjective well-being includes positive measures. It is not just the absence of negative factors, as is true of most measures of mental health. Third, the subjective well-being measures include typically a global assessment of all aspects of a person's life.

Researchers in the field thus agreed that psychological well-being consists of generally two important aspects, viz., positive and negative affect (see Boey & Chiu, 1998). Hence, both positive mental health (e.g. happiness and life satisfaction) and mental ill-health (e.g. anxiety and depression) are taken into account in the evaluation and measurement of psychological well-being. In line with this division, also considering the discussions above, we finally conceptualize that psychological well-being includes both positive and negative aspects. Here, it may be questioned that if positive mental health and mental ill-health are opposite poles of a same

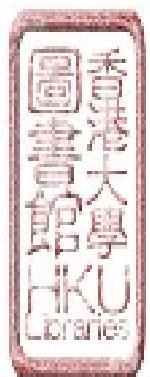


continuum of psychological well-being or if they do refer to two independent constructs and realities that should be measured on two independent axes? It has been proposed that positive mental health and mental ill-health are two interrelated but globally independent constructs that should be measured on two independent axes (Sante, 1988). Furthermore, we use positive affect and self-esteem to indicate mental health, and negative affect and general health status to indicate mental ill-health on the basis of reasons provided below.

Mental Health Status

In 1970s, Goldberg developed a scale to measure nonpsychotic psychiatric distress in populations of different characteristics. Goldberg's (1972) General Health Questionnaire (GHQ) consists of questions about social activities, psychological and physical symptoms and is designed to reveal indications of depression, agitation, apathy, and anxiety. This scale is also employed as a first-stage screening instrument in epidemiological studies and community surveys. In its original form (Goldberg, 1972), GHQ consists of 60 items measuring the respondent's psychological distress symptoms and maladaptive behavior which might be of clinical significance. Later on, a 30-item version and other shortened versions (e.g. 20-items and 12-items versions) were developed to exclude items related to physical illness. Thus, the shorter versions include only social activities and psychological symptoms.

For the factorial structure of the GHQ extracted from Chinese students, Chan and Chan (1983) concluded that it measured five aspects of psychopathology, namely, anxiety, depression, inadequate coping, insomnia and social dysfunctioning.



Utilizing the translated Chinese version of the GHQ-30, Chan (1985) found that the English and Chinese versions were comparable at the scale level and factor analytic procedures showed that five factors could be extracted, including anxiety, depression, interpersonal problems with anhedonia, sleep disturbance with dysphoria, and social dysfunctioning with dysphoria. While the first two factors extracted were found to have high coefficients of congruence between the Chinese and English version, the last three factors were less stable across versions and they were factorially mixed. Based on these research findings, mental health status refers to psychological symptoms such as depression and anxiety as well as some social symptoms. According to the two-factor theory of psychological well-being, mental health status could be an appropriate indicator of the negative aspect.

Positive Affect and Negative Affect

In 1960s, Bradburn developed a scale to measure emotional well-being (1969) and found that positive and negative affect items were relatively independent of one another. Bradburn proposed that happiness is composed of two separable components—positive affect and negative affect. It was found that although the positive and negative affect scales were virtually uncorrelated with each other, they each showed independent and incremental correlations with a global well-being item (Bradburn, 1969). Bradburn hypothesized that happiness is really a global judgment people make by comparing their negative affect with their positive affect. Thus, his Affect Balance Scale (ABS) score is derived by subtracting the sum of negative items from the sum of positive ones. Bradburn's positive affect scale asks whether the respondents, during the few weeks prior, have felt, for example, proud because someone complimented them about something they had done and pleased



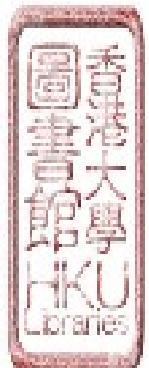
about having accomplished something. The negative affect scale asks, for example, if the respondents felt upset, depressed or very unhappy when criticized by someone.

Humanistic psychologists such as Rogers and Maslow maintained that concern with psychopathology overlooks the positive aspects of life. Bradburn's conclusion that positive and negative affect are independent supported the long-standing argument of the humanists that psychologists focus too exclusively on the negative, and Bradburn's proposal supports the idea that absence of negative affect is not same as the presence of positive affect. According to Bradburn's findings, attempts to enhance life satisfaction must both reduce negative affect and increase positive affect.

In the present study, since stress oriented to negative rather than positive experiences, the identification and detection of negative affects are considered essential for the maintenance and promotion of psychological well-being under stress. However, to increase positive affect is also important. Therefore, this study adopts Bradburn's two—factor theory as two indicators of psychological well-being.

Self-esteem

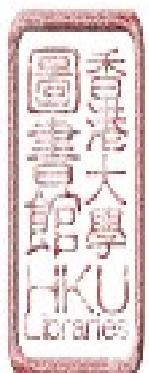
Self-esteem is a central aspect of psychological well-being (e.g. Taylor & Brown, 1988) and is strongly related to a variety of measures of well-being or adjustment. For example, self-esteem is a better predictor of satisfaction with one's life than any objective characteristic of individuals, such as income or age (Crocker, Luhtanen, Blaine & Broadnax, 1994). People who are high in self-esteem tend to experience more positive affect, and tend to interpret information about themselves



and the world in ways that are flattering to themselves (see Taylor & Brown, 1988).

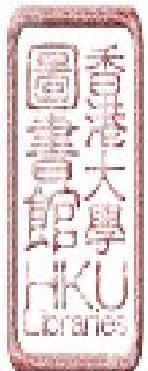
Looking at the general body of research on self-esteem today, it is evident that most of this literature deals with global self-esteem, that is, the individuals' positive or negative attitude towards self as a totality (Rosenberg, Schooler, Schoenbach & Rosenberg, 1995). According to Rosenberg et al. (1995), the attitude includes both cognitive and affective elements. That attitudes are cognitive is evident from the fact that they refer to objects—an attitude represents some thought about a particular thing (e.g. person, material object, group, idea, etc.). That they are also affective is shown by the fact that attitudes have both directions (i.e. a positive or negative orientation toward some object) and intensity. Decades ago orthogonal principal component factor analyses carried out by Kohn and Schooler (1969) revealed that the Rosenberg Self-esteem Scale (Rosenberg, 1979) contained two components—self-confidence and self-deprecation. They later confirmed that a two-component model that separates the positive and negative aspects of self-esteem provides a better fit to the data than does the single general component model. Owens (1993) has also shown that both components fit well into a second-order construct of global self-esteem. In contrast with Positive Affect Scale and Negative Affect Scale (Bradburn, 1969), the positive and negative attitude of self-esteem reflected more stable, more general and more appropriate on-line evaluations of events that occur in lives. Thus, self-esteem may be more appropriate to represent positive and negative aspects than PAS and NAS.

Regarding the cognitive element of self-esteem, it could also contrast with life satisfaction. Researches (see Diener & Diener, 1995) suggested that life satisfaction and self-esteem are variables that both represent global evaluations; in the former



case an evaluation of a person's entire life and in the latter a judgment of oneself. Life satisfaction is a construct that is central to the subdiscipline of SWB (Diener, 1984), and self-esteem is a cardinal concept in personality research. In Diener and Diener's (1995) study, self-esteem and life satisfaction are significantly correlated with each other, and the correlation between them ($r = .47$) is much higher than that between life satisfaction and the other relevant variables such as family satisfaction ($r = .36$) and satisfaction with finances ($r = .37$). The correlation between self-esteem and life satisfaction was $r = .55$ by Campbell (1981). Thus, it is expected that the cognitive elements of self-esteem and life satisfaction could contrast with each other to a large extent. Notwithstanding this, when taken culture into account, it is still questionable whether self-esteem could appropriately indicate the psychological well-being of Chinese students.

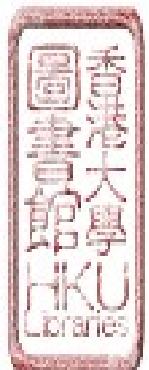
Kitayama and Markus (1994) questioned the universal importance of self-esteem. They pointed out that in Western cultures people are taught to like themselves, and to do so is a sign of mental adjustment. In cultures in which the collective is emphasized, however, feeling good about oneself may be a sign of maladjustment. Diener and Diener (1995) suggested that an additional explanation for the differential importance of self-esteem in collectivist and individualistic nations was in terms of the socialization of affect. They found that students in the United States believe positive affect to be more normative, whereas students in Korea and China were more receptive of the experience of negative affect. Diener and Diener (1995) further suggested that life satisfaction may be based more on positive feelings in individualistic nations, for example feelings about self. Conversely, in collectivist nations life satisfaction might be influenced by a more prevalent negative focus and therefore be more dependent on how many problems



and social conflicts the person faces. However, the situation in China today is somewhat different from the arguments above. As the acculturation processes are occurring in China, China has been changed from a closed to an open society, from the forced acceptance of communistic values to the mingling with capitalistic and communistic orientation (see Chu, 1985). Feelings of self in adolescence are more and more important. They pursue many things relevant to self such as self-freedom, self-authority, self-privacy, and many college students reported that their life goal is self-actualization. Seeing the mingling values of Chinese adolescence, self-esteem can be an appropriate indicator of psychological well-being for them.

Regarding the present study, we select self-esteem as an indicator of psychological well-being also because of two reasons below. First, we believe self-esteem could represent more stable affects both negative and positive than do PAS and NAS. Second, according to Jahoda (1959), positive mental health should be related to the attitudes of an individual toward his/her own self.

In conclusion, after viewing studies on psychological well-being, we define psychological well-being as including positive and negative aspects. Positive aspect referred to positive affect and self-esteem. Although self-esteem could be used either two-dimensional or unidimensional, we use it in this study as unidimensional, and it is considered as positively oriented. Negative aspect of psychological well-being, however, refers to negative affect and mental health problems.



CHAPTER 5

CONCEPTUAL FRAMEWORK

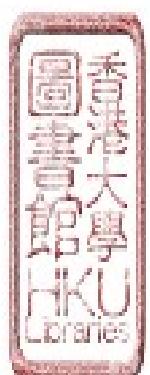
The present study of conceptual framework consists of three sections. The first section delineates the nature of the relationships among three main variables; the second section highlights the direct impacts of college stress on psychological well-being; the third section focuses on the proposed effects of vision in life on psychological well-being under college stress. Two sets of hypotheses are proposed in section two and section three.

MAIN RELATIONSHIPS

The relationships among three main variables—college stress, vision in life, and psychological well-being of college students are the main focus of this study. The analysis of the nature of the main relationships among these three variables provides the theoretical foundation to the conceptual rationale of the hypotheses proposed in the following sections.

College Stress and Psychological Well-being

According to Lazarus (1999), stress stimulus or stressor is the external input, stress response or reaction is the output. College stress refers to perceived stress of academic hassle, personal hassle, and negative life event, therefore, it is the output. When there is stress there are also emotions, though not always the case. Lazarus

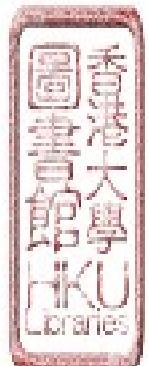


(1999) called them stress emotions. When there are emotions, even positively toned ones, there is often stress too. Lazarus (1966, 1968) also suggested that stress was an aspect of a larger set of issues that included the emotions. Thus, he subsequently set about transforming the construct of appraisal to fit the emotions (see Lazarus & Averill, 1972). Lazarus (1999) concluded that stress applies not only to the so-called stress emotions, but also to those emotions that are positively toned and to the relational conditions that surround them.

Regarding college stress and psychological well-being, they could be comparable with the unity of stress and emotion to some extent. In this study, psychological well-being is measured at three different levels: mental health status, positive and negative affect, and self-esteem. Mental health status and positive and negative affect to a large extent refer to emotions. Although stable self-esteem could not be emotional (see Kernis, Grannemann & Mathis, 1991), the result of our present study, based on a cross-sectional survey, could only tell the level rather than the stability of self-esteem. Thus, it is possible that self-esteem is related to emotion, i.e. there is college stress, there are changes in psychological well-being too.

Coping Resource in College Stress and Psychological Well-being

Coping resource is usually linked to stress rather than emotions. Most emotion theorists have either overlooked coping resource or treated it separately from the emotion process. This is unfortunate because coping resource is an integral part of the process of emotional arousal (Lazarus, 1999). According to Lazarus (1999), we should view stress, emotion, and coping resource as part of a part-whole relationship. In the present study, it is the part-whole relationship



among college stress, psychological well-being, and coping resource. Separating them is justified only for the convenience of analysis. However, the separation distorts the phenomena as they appear in nature. The three concepts, college stress, psychological well-being, and coping resource, belong to and form a conceptual unit, with psychological well-being being the superordinate concept because it includes stress and coping resource. In this conceptual unit, the college stress is treated as an independent variable in the present study, psychological well-being is treated as a dependent variable, and vision in life is assumed to be a coping resource.

COLLEGE STRESS AND PSYCHOLOGICAL WELL-BEING

College stress consists of academic hassle, personal hassle, and negative life event according to our definition in Chapter 4. This study analyzes the impacts of college stress on psychological well-being in terms of academic hassle, personal hassle, and negative life event. The comparison between impacts of hassles and negative life event on psychological well-being was conducted.

College Stress and Psychological Well-being

Literature suggested that stresses of college students could adversely affect their psychological well-being though this association is not upheld for all types of stressors (see Murphy & Archer, 1996). According to DeLongis (1985), the stress process is triggered when “a situation occurs which the individual experiences as stressful, and negative emotions are generated by the individual”. These emotions create a number of bodily changes. Findings on some adolescence study suggested that the more the stresses the poorer the health and the lower the well-being on both

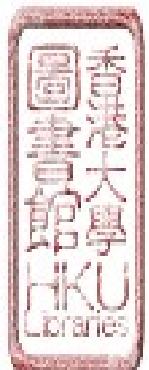


short term (i.e. symptoms and mood) and long term measures (i.e., overall health status) (see Wu & Lam, 1993). Literature on college students mental health showed that depression, as one of the serious negative psychological outcomes of stresses, has been found to be significantly prevalent and severe among college students than among same-age non-student populations (Mishara, 1982). College students who experienced high stress were more likely to report more somatic symptoms than those who experienced low stress (Chan & Lee, 1992; Lai, 1995). Students attending college may be at a significantly greater risk for suicidal behaviors than those individuals not attending college (Silver et al., 1984). Based on the findings reported in previous studies, the following hypothesis is proposed:

Hypothesis_{1.1}: College stress exerts a negative impact on psychological well-being

Academic Hassle and Psychological Well-being

Hassles can be strongly related to depression and illness (McIntosh et al., 1995). According to Houston (1972), major hassles that related mostly to psychological detrimental were academic problems. Heinz et al. (1984) pointed out that intense anxiety of students arises from academic expectation, performance, and social factors such as interpersonal relationships. Monks and Heath (1954) reported that about 18% of Harvard students in a study had anxiety, depression, and emotional sensitivity. Hassles related to examinations and tests were found to be related to overall health status and well-being (see Wu & Lam, 1993). Major academic hassles may render students less confident in their abilities or were fearful of their circumstances, thereby increasing the risk for suicidal behaviors. Based on these previous findings, the following hypothesis is proposed:



Hypothesis_{1.2}: Academic hassle exerts a negative impact on psychological well-being

Personal Hassle and Psychological Well-being

Most of the studies that examined the relationship between hassles and well-being have found that individuals with relatively high levels of everyday stress were more likely to be psychologically and somatically worse off than those experiencing lower levels of stress (see Wu & Lam, 1993). Hassles related to difficulties in interpersonal relationships were found to play an important role in both health and mood (Wu & Lam, 1993). Personal stress might initiate, maintain, or exacerbate depression (Coyne, 1976). Based on Hong and Lam (1992), interpersonal stress may cause more psychological well-being problems for Chinese people since they tend to be collectively oriented (e.g. trying hard to win others' acceptance). According to Delongis (1985), stress related to one's management of time and work was related significantly to mood, and overall health status. Positive relation between social hassles in the home and psychological distress symptoms occurred only among students living in crowded apartments (Lepore, Evans & Schneider, 1992). Thus, the following hypothesis is formulated:

Hypothesis_{1.3}: Personal hassle exerts a negative impact on psychological well-being

Negative Life Event and Psychological Well-being

Damush et al. (1997) reported that experiencing distressful life events was related to greater anxiety, depression and physical illness. Constantini, Brann and Lemoline (1974) correlated life changes with depression in college students. A



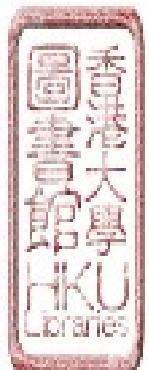
modest positive relationship between the amount of life changes and the symptoms of mental illness has been identified in several investigations. The predominant mental-health symptom of life changes is depression (Constantini, Brann & Lernoline, 1973). College students who experience negative life events in the family/parents area reported greater anxiety, depression, and physical illness than other college students. Students who experience sexuality life events that they perceived to be negative reported greater depression, less positive affect. Homesickness during a transition period is most strongly associated with anxiety (Fisher & Hood, 1987). Researches suggested that college students' suicide ideation are related to negative life events and loneliness (Schotte & Clum, 1982).

Given these findings, the following hypothesis is proposed:

Hypothesis_{1.4}: Negative life event exerts a negative impact on psychological well-being

Hassles and Negative Life Event on Psychological Well-being

Much of the earlier literature on the sources of stress has concentrated on major life events (e.g. Kaplan, 1979; Sarason, Johnson & Siegel, 1978). However, life events correlated only weakly with health outcomes in general, with the average correlation being around 0.12 (Rabkin & Streuning, 1976). DeLongis et al. (1982) also indicated that the relationship between life event scores and health outcomes is extremely weak. According to Lazarus and his colleagues (see DeLongis et al., 1982; Lazarus et al., 1980), daily stressors have been conceptualized as making an independent contribution to psychological well-being. Daily stressors are thought to moderate the effects of more major forms of stressful life experiences (Caspi, Bolger & Eckenrode, 1987). In other words, major life events influence health

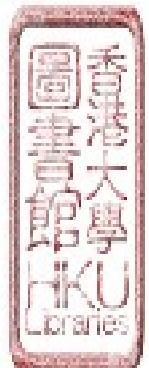


outcomes by affecting the individual's pattern of stressful daily events and strains (e.g. Kanner et al., 1981). Hassle shared most of the variance in health that could be accounted for by life events, and when effects of life events were statistically removed, hassles and health remained significantly related (see DeLongis et al., 1982; Zarski, 1984). In the study by Kanner and his associates (1981), the relationship was much stronger between everyday experience and psychological distress than between major life events and distress, and multiple regression analyses showed that most of the variance in symptoms accounted for by major life events was shared with hassles. Based on these findings, the following hypothesis is proposed:

Hypothesis_{1.5}: Academic and personal hassles exert more significant negative impacts on psychological well-being than negative life event

EFFECTS OF VISION IN LIFE ON PSYCHOLOGICAL WELL-BEING

The main characteristic of people with strong vision in life is that they tend to be positive in their outlook in general. These people do not distort reality but rather view it relatively objective. In general, they view themselves, their future and their world positively while at the same time they could also perceive their own weaknesses. In other words, they possess both optimistic and realistic outlook. They tend to be positive in their outlook on things since they could accommodate things into their visions, so that they are somewhat different from those with positive illusions. Taylor and Brown (1988) postulated that the cognitive-processing mechanism of positive illusions is imposing filters which distort incoming information in a positive direction, and isolating and representing negative



information in as unthreatening a manner as possible. In contrast, the core of the cognitive-processing mechanism of vision might be that the vision schema accommodates all the incoming information in itself. It is expected that many people who could maintain their psychological well-being under both low and high stresses to a large extent because of the effects of their vision in life. Moreover, evidences of high stresses which could elicit existential or spiritual coping (Peacock & Wong, 1996; Peacock, Wong & Reder, 1993) supported that the effects of vision in life under high stresses would be more significant in the interest of psychological well-being. In other words, there are interactive effects between stress and vision in life on psychological well-being. Thus, it is expected that vision in life not only has direct effects but also has buffering effects in the relationship between stress and psychological well-being. The effects of vision in life are shown below:

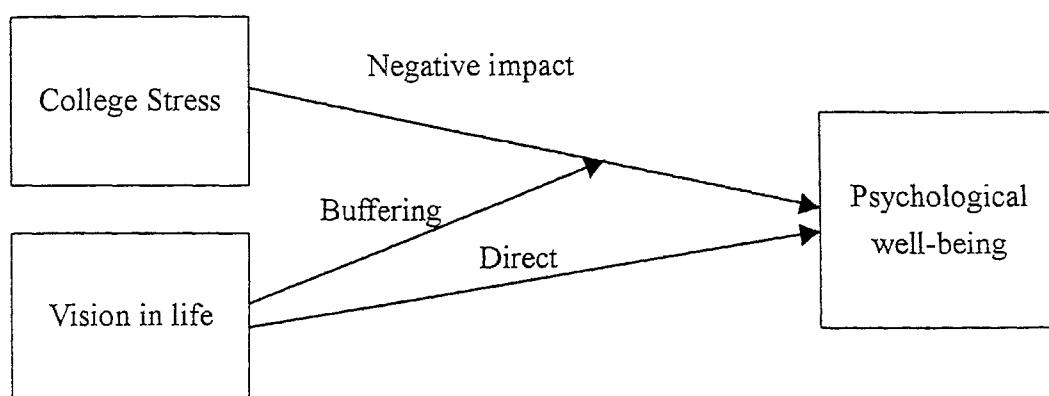
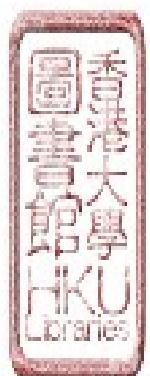


Fig. 5.1. Effects of Vision in Life and College Stress on Psychological Well-being



In preceding chapters, the ultimate purpose behind the formulation of the new construct—vision in life is to investigate the effects of vision in life in the relationship between stress and psychological well-being of college students. In other words, the present study is interested in examining the roles played by vision in life in coping practices. This study represents an initial attempt to determine whether the construct of vision in life would have predictive utility in college students. A set of hypotheses is established, and it is expected that with the support of these hypotheses, the construct of vision in life and its function as a coping resource can be established.

Vision in Life on Psychological Well-being under College Stress

According to the buffering effects of vision in life described in Chapter 3, we have taken into account five elements in exploring the possible effects of vision in life and college stress on psychological well-being. The result of our exploration represents the core issue of this study.

Firstly, belief creates emotion, and meaning in life buffers emotion. According to Ellis (1977), human belief and emotion do not constitute two disparate or different processes, they overlap significantly. Emotions and behaviors do not merely stem from people's reactions to their environment but also from their thoughts, beliefs, and attitudes about that environment. According to Chang and Zurilla (1996), irrational beliefs can lead to anxiety and depression in a college population. It has been found in Zika's study (Zika & Chamberlain, 1992) that meaning in life has a direct effect on psychological health, whereas, some other studies have established its function as a moderator of stress (Ganellen & Blaney,



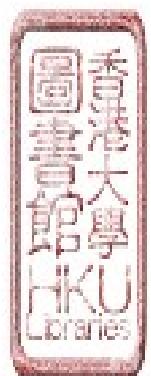
1984; Newcomb & Harlow, 1986). In some investigations meaning in life was found to operate as a moderator of mental health outcomes (e.g. Harlow et al., 1986; Reker, 1985). Furthermore, research has shown that individuals who are able to find meaning in severe situations, cope better after the event than those who are unable to find meaning. In addition, a number of studies have investigated the interactive effects between trauma and process of ascribing meaning to life with a wide variety of populations, including survivors of holocaust, combat, natural disasters and untimely bereavement (e.g. Janoff-Bulman, 1992; Wortman & Silver, 1989). A central issue in the research is to assess how survivors establish some meaning or purpose in the profoundly disrupting events they have experienced. Fehring et al. (1987) based on a college student sample suggested that spiritual well-being showed stronger inverse relationships with negative moods, depression, loneliness and tension under high stresses than low stresses. A stronger positive relationship has also been shown between spiritual well-being and high self-esteem, social competence, and purpose of life under high stressful than low stressful conditions among college students (Paloutzian & Ellison, 1982).

Secondly, imagining and fantasy moderate emotions. According to Ellis (1977), imagining and fantasy moderate emotions just like what thinking does. People not only think about what happens to them in words, phrases, and sentences, but also do so in nonverbal ways, including images, fantasies, dreams, and other kinds of pictorial representations. Such images contain the same kind of cognitive messages as verbal self-statements, these cognitions help people change their emotions, behaviors, and disturbances significantly. In fact, psychoanalytic writers have pioneered in proposing that images and fantasies have enormous influence over the emotions and behaviors of most people (Freud [1926], 1965). Many



nonpsychoanalytic therapists have also emphasized fantasy in their work. According to Ellis (1977), specific studies that validate the important connection between subjects' imagining and emotive and behavioral changes. Furthermore, imagining also functions on generating beliefs of control under stresses. According to Maddux (1995), imaginary experiences are one of the determinants of self-efficacy beliefs. People can generate beliefs about personal efficacy or inefficacy by imagining themselves or others behaving effectively or ineffectively in future situations (Cervone, 1989). Although imagining oneself performing successfully or unsuccessfully is not likely to have as strong an influence on self-efficacy as the actual success or failure, it does play an important role in the interest of psychological well-being (Cervone, 1989). Although research has not yet established directly the buffering effects of imagining and fantasy, considerable evidence from clinical research using imagining and fantasy to treat mental health problems caused by severe stresses (see Brigham et al., 1994) provided some support. Brigham et al. (1994) indicated that one's perception of stress affects very much one's image of the world, of others, and of oneself. Changing perceptions of stressful situations eventually involves a shift in which one takes responsibility for his or her stress—from the outside world to one's innermost being. Therefore, imagining is important for dealing with stresses. In fact, low stress does not need to be treated, imagining is more important under high stresses (see Brigham et al., 1994).

Thirdly, expectations moderate behavior and emotion. According to Ellis (1977), when people expect that something will happen or expect that others will act or respond in a certain way, they act significantly different than when they have other kinds of expectations. Their cognitive expectation moderates importantly their emotional disturbance. Ellis' (1977) pioneering argument has received



confirmation by therapists like Frank (1961, 1968) and etc. A study by Carver et al. (1979) on a college student sample indicated that students who have unfavorable expectancies focus on those expectancies and the subjective distress associated with them. Favorable expectancies were associated adversely with distress. Based on Taylor et al. (1998), anticipation of emotions is related to self-achieving or reaching a good regulatory processes of college students. Moreover, envisioning the successful completion of a task or resolution of a stressor is related to self-help processes. Subjective distress and self-regulation are generally related to moderate or high stresses, in other words, low stress does not cause distress and there is no need to be regulated, the effects of expectation and anticipation of them imply the buffering process.

Fourthly, accommodation (acceptance) affects mental health. Throughout the history of psychology, a dominant position has been maintained that the psychologically healthy person is one who maintains close contact with reality (Jahoda, 1958). Maslow (1950) stated, “our healthy individuals find it possible to accept themselves and their own nature without chagrin or complaint. They can accept their own human nature with all of its discrepancies from the ideal image without feeling real concern. It would convey the wrong impression to say that they are self-satisfied. What we must rather say is that they can take the frailties and sins, weaknesses and evils of human nature in the same unquestioning spirit that one takes or accepts the characteristics of nature” (p.54). Accommodation of reality is a postulated cognitive-processing mechanism of vision in life in this study.



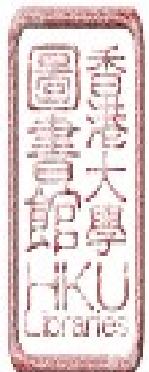
Fifthly, optimism and reality together contribute positively to psychological well-being. The greatest declines in students' positive feelings about university life appear to occur when the perceived discrepancy between expectations and reality is likely to be the most salient (Berdie, 1966). Pancer, Hunsberger, Pratt and Alisat (2000) suggested that students with both optimism and reality about university life tended to adjust better to stressful circumstances than students who had simpler expectations, either optimism or reality alone. Pancer et al. (2000) also argued that optimistic thinking is not necessarily simplistic thinking such as illusory thinking. Jackson, Pancer, Pratt and Hunsberger (in press) found that a significant proportion of those who were about to enter university had optimistic and realistic expectations about university life, these students had prepared themselves for experiences that might challenge them and promote their growth as individuals. Moreover, an optimistic outlook may serve to enhance adjustment to the university, it can motivate students to bring about positive outcomes, and to construe their experiences in a positive way (Aspinwall & Taylor, 1992; Zirkel & Cantor, 1990). In summary, these studies all suggested that optimistic and realistic expectations are more likely to lead to good adjustment to university. Pancer et al. (2000) further suggested that individuals with both optimistic and realistic expectations about university life would be less likely to suffer when they are confronted with the inevitable challenges and difficulties, they would be more likely to develop strategies to deal with these challenges and difficulties. Although the adjustment of students who experienced low levels of stress tended to be relatively good, the adjustment of students who had experienced higher levels of stress appeared to partly depend on their optimistic and realistic expectations about university life (Pancer et al., 2000).



Based on the analysis of five major elements of vision in life, the first hypothesis concerning vision in life is established:

Hypothesis 2.1: Vision in life is associated with psychological well-being, and the association is more significant under higher college stresses than lower college stresses

Researches indicated that those students who have difficulty in coping with their academic problems may become hopelessly overwhelmed when confronted with such stressors. Moreover, students with less life tasks to pursue and with vague meaning in their lives (Zirkel & Cantor, 1990) will be more distressed when they encounter high levels of academic stresses. In line with the ABC model of emotional dysfunction that irrational beliefs moderate the impact of stress upon psychological distress, Bernard and Cronan (1999) suggested that levels of distresses were greater among irrational students who experienced high levels of academic stress than other students. Based on these research findings, some researchers suggested that students who have clear and meaningful educational goals tend to adjust better compared with those who lack such goals (Wessell, Engle & Smidchens, 1978). Taylor et al. (1998) reported that mental imagining could relieve test anxiety in a college student sample. Students with academic problems reported improvements in positive affect and greater use of active problem-solving strategies following a mental imagining, especially under higher academic stresses (Taylor et al., 1998). Fehring et al. (1987) suggested that students with an integrated spiritual outlook are able to cope with academic stresses better. Maton (1989) suggested that spiritual support buffered the negative impacts of academic stress on psychological well-being. In conclusion, all the meaningful goal, belief, mental



imagining, and spiritual are very closely related to vision in life, the findings of their effects in the relationship between academic stress and psychological well-being could infer to the same effects of vision in life. Thus, the second hypothesis is proposed as following:

Hypothesis₂₂: Vision in life is associated with psychological well-being, and the association is more significant under higher academic stresses than lower academic stresses

Researches indicated that personal hassles are strongly and consistently related to students' mental health problems, especially for those lack of purposes and gratitude (see Welter, 1987). In fact, both Buddhism and RET started with the premise that "hassle" is the human life's predicament (Kwee & Ellis, 1998), people perceive cumulative hassles in part stem from their irrational thinking such as demandingness and low frustration tolerance. In line with Lazarus and Averill (1972), people's emotions under stresses of everyday hassles stem from their cognition, and according to Ellis (1977), this is irrational thinking. Dohrenwend and Dohrenwend (1978) suggested that everyday hassles could be related to depression and illness for those who believe that these hassles threaten their higher-order goals. For example, after a small argument with a friend, someone may infer the friendship is in jeopardy, whereas others may not. According to Linville (1987), everyday hassles may predict illness and depression only for people who interpret these hassles as relatively major events. McIntosh et al. (1995) based on a college student sample reported that ruminative students tended to be depressed under high stresses of everyday hassles. Based on Pyszczynski and Greenberg (1987), people who are self-focused tend to ruminate more and to be more depressed than the



people who are outwardly focused, especially under higher stresses of daily hassles. Parr (1998) suggested that resilient students have deeply felt and held goals. Often, these goals spring from a determination to overcome obstacles, to correct a wrong, or to build a future that dismisses the limitations of the past. These students are less likely to be distracted by daily frustrations, the resilient effects are more effective under higher stressful daily frustrations than lower one. According to flow theory (Csikszentmihalyi & Csikszentmihalyi, 1988), sense of flow is letting go of self-consciousness (transcendence of ego). Studies across settings (classroom, home, and work) and activities (daily routines, homework, athletic competition, etc) have consistently shown that flow is more closely associated with low negative emotions, and the association is more significant under higher stressful conditions than lower stressful conditions (Csikszentmihalyi & Csikszentmihalyi, 1988). Additionally, having flow experiences is associated with higher levels of self-esteem, and the effects of flow are more significant under higher daily stresses than lower daily stresses (Wells, 1988). Thus, the third hypothesis is formulated as follows:

Hypothesis_{2,3}: Vision in life is associated with psychological well-being, and the association is more significant under higher personal stresses than lower personal stresses

Theories based on RET suggested that emotional distress under stresses is caused by dysfunctional thinking such as demandingness and low frustration tolerance (see Weinrach, 1996). Thus, the best way to conquer distress is to change the irrational thinking. According to Kwee and Ellis (1998), irrational thinking, such as demandingness and low frustration tolerance, mainly stem from self-attachment (我執), RET helps people strive for an “egoless state of being.” Rivkin and Taylor (1999) suggested that mental imagery was related to more positive



affect under stresses. Lazarus and DeLongis (1983) asserted that sources of personal meaning influence the stress and coping process throughout one's life-span. They argued that patterns of commitment affect the way situational events are appraised in terms of their possible impact on well-being, at same time they influence the way these events are managed. According to Lazarus and DeLongis (1983), life-encounters that challenge important commitments are likely to be appraised as a threat, increasing the person's vulnerability to stress. However, this vulnerability may also serve as a positive function by driving a person towards an action that alleviates the threat and maintains coping. Antonovsky (1979) argued that people with a strong sense of coherence perceive the things they experienced in life as meaningful, and expect that the things they experience in the future will continue to be meaningful. According to Paloutzian and Ellison (1982), students who could perceive things as meaningful have higher self-esteem than those who could not.

Maton (1989) reported the buffering role of spiritual support based on a college student sample. The Maton's findings suggested that students under high levels of life-event stress are likely to benefit from perceived spiritual support. Specifically, spiritual support may be especially likely to benefit individuals under high levels of life stress because of their enhanced vulnerability to psychological distress (Dohrenwend & Dohrenwend, 1981) and their intensified search for explanations to help make sense of traumatic life events. In two different studies, Newcomb and Harlow (1986) found that meaninglessness in life moderates the relation between perceived uncontrollable stress and drug abuse. They found that meaninglessness moderates depression, self-derogation, and subsequent drug use. Based on Fabes

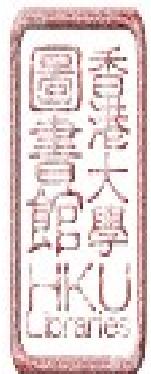


and Eisenberg (1997), both low and high college stresses may arouse negative emotions of different intensity, higher or more intense stressor elicited more intense negative emotions in college students. Other studies (e.g. Peacock & Wong, 1996; Peacock et al., 1993) further suggested that the perception of an uncontrollable (high stress) negative life event is expected existential or spiritual coping, because other copings do not help except to make oneself feel better through cognitive and spiritual means. Ganellen and Blaney (1984) concluded that alienation from oneself, a construct closely associated to meaning, moderated the effects of high life stress on psychological well-being. In summary, all of the beliefs, mental imagery, sense of egoless state of being, and meaning in life are closely related to vision in life, the findings that discussed above could refer to vision in life. The fourth hypothesis, therefore, is proposed as following:

Hypothesis_{2.4}: Vision in life is associated with psychological well-being, and the association is more significant when the stresses of negative life events are high than low

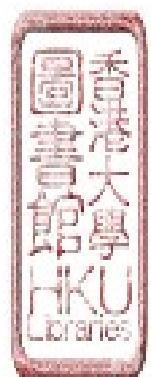
Life Control on Psychological Well-being under College Stress

This hypothesis is indeed exploring whether or how spirit, in our study of life control, uniquely contribute to psychological well-being under stresses. Across a wide variety of situations, perceived control is associated with better emotional well-being, more successful coping with stress, better health and physiological outcomes, success at making behavior changes, and improved performance (Thompson & Spacapan, 1991). Although perceived control is generally considered as personal control, a common secular perspective on religion assumes that belief in spiritual or God as an active agent in one's life requires relinquishing a sense of personal or



internal control (Jackson & Coursey, 1988). According to Thompson (1981), individuals seem to have a need to see the events in their lives as part of an orderly, meaningful world, such as part of the plans of God or flowing from their own plans and goals. Stressors may be less stressful if they are viewed as part of a divine plan for one's life or as logically following from one's own goals and values. Reker and Wong (1984b) proposed a two dimensional view of optimism based on a college student sample: a student's expectation of positive outcomes can be based either on confidence in one's own efficacy or an expectation of good fortune. Both internally based optimism (e.g. perceived self-efficacy) and externally based optimism (e.g. belief in good luck) may contribute to the expectation of positive outcomes (Marshall & Lang, 1990; Scheier & Carver, 1987).

Based on a college student sample, Maton (1989) suggested that there are at least two major pathways through which spiritual support may have an impact upon well-being for high life stress students. The "cognitive mediation" pathway postulates that spiritual support contributes to the adoption of a positive cognitive appraisal of the meaning and implications of negative life events (e.g. positive reframing--Wright, Pratt & Schmall, 1985), attenuates the stress response, and leads to enhanced emotional adjustment. The "emotional support" pathway postulates that perceptions of being valued, loved, and cared for by God lead directly to enhanced self-esteem and reduced negative affect for students who are psychologically vulnerable to high levels of stress. These two pathways together may also infer that students who could perceive their lives being in control by God or by the universe through the cognitive appraisal of themselves are harmonious with the universe, especially under stressful conditions. Cohen and Wills (1985) argued that stress-buffering is the perception that one is "cared about and loved... esteemed and



valued", and the perception that support is readily available when needed. In other words, people perceived that their lives are being in control. Thus, life control is a form of perceived support (life is being in control) which may prove uniquely important for individuals confronted with high stresses over which they have little personal control (Spilka & Schmidt, 1983). Based on these arguments, Maton (1989) examined 68 college students, and found that there were significant relationships between spiritual support and well-being for the high-stress than low-stress students. Based on the above discussions, the fifth hypothesis is proposed as follows:

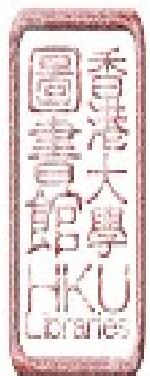
Hypothesis_{2.5}: Life control is associated with psychological well-being, and the association is more significant under higher college stresses than lower college stresses.

The hypothesis above is derived from the findings on academic hassle, personal hassle, and negative life event. The findings of the preceding four hypotheses also imply that the hypotheses based on college stress could be also inferred to each of its components. Given these considerations, the three sub-hypotheses are predicted as below:

Sub-hypothesis₁: Life control is associated with psychological well-being, and the association is more significant under higher academic stresses than lower academic stresses

Sub-hypothesis₂: Life control is associated with psychological well-being, and the association is more significant under higher personal stresses than lower personal stresses

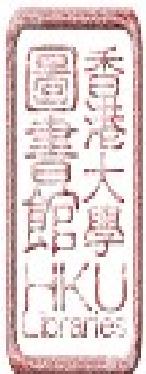
Sub-hypothesis₃: Life control is associated with psychological well-being, and the association is more significant when the stress of



negative life event is perceived as high than low

Meaning in Life on Psychological Well-being under College Stress

Among the most perniciously self-destructive habits of thought and action are the widespread tendency to place one's "ego" on the line (Lazarus, 1976). Inappropriate and overextended ego-involvement is probably responsible for the bulk of anxiety, guilt, and depression-related reactions from which so many people suffer. Conversely, according to oriental philosophy, people could let the unhappiness go when they live in a state of self-detachment. In Frankl's word it may be Dereflection. Dereflection and self-transcendence are the essential mark of humanity shared by Buddhism, and meaning analysis helps a person to accept life. Rubin (1996) indicated that the doctrine of no-self had an important emotional resonance, and relieved emotional pain, and the effects are more significant under higher stresses than lower stresses. Researchers indicated that commitment to Other-Directed Shoulds values could buffer the negative impact of stress on well-being (see Kobasa & Puccetti, 1983; Kobasa, Maddi & Kahn, 1980). The Yin/Yang teaches that within every negative experience is a seed of positivity. More negative may seed more positive. Such awareness and a sense of balance would be more helpful under higher stresses than lower stresses because high stresses enhance people's need to search for the balance (see Chapter 3--Self-transcendence and well-being for the detail). Debats, Drost and Hansen (1995) suggested that a sense of meaningfulness in life is associated with the following phenomena: relatedness, active engagement, well-being, general life satisfaction, happiness, high self-esteem, and a generous attitude towards others, as well as a positive attitude towards life in general. Ganellen and Blaney (1984) have established that meaning in life (self-



transcendence oriented) functions as a moderator of stress (see also Newcomb & Harlow, 1986). Debats (1996) also reported that a significant decrease in psychiatric symptoms is associated with a significant increase in one's sense of meaning in life during treatment. Exline, Yali and Lobel (1999) studied 200 undergraduate students and found that religious belief played as a potential buffer against stress and ill-being. Findings of Fehring et al. (1987) indicated that spiritual buffered stress and well-being of college students further confirmed the contention of Exline et al.. With reference to a few findings directly focused on self-transcendence meaning for college students, the following hypothesis is valid:

Hypothesis_{2,6}: Meaning in life is associated with psychological well-being, and the association is more significant under higher college stresses than lower college stresses

Based on the above hypothesis, three sub-hypotheses are proposed:

Sub-hypothesis₁: Meaning in life is associated with psychological well-being, and the association is more significant under higher academic stresses than lower academic stresses

Sub-hypothesis₂: Meaning in life is associated with psychological well-being, and the association is more significant under higher personal stresses than lower personal stresses

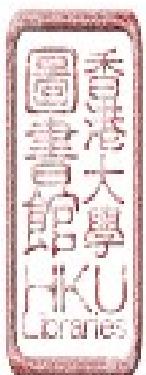
Sub-hypothesis₃: Meaning in life is associated with psychological well-being, and the association is more significant when the stress of negative life event is perceived as high than low



Will to Meaning on Psychological Well-being under College Stress

In contrast to meaning in life, a higher level-order goal is towards oneself, whereas meaning in life is beyond oneself and towards self-transcendence. According to Seligman (1975), stress and loss could lead to depression because they led the individual to perceive an absence of contingency between behavior and outcomes, especially under high stress and significant loss. Thus, the present study assumes that students feel hopeless because they do not realize their ultimate meaning of their life or they do not realize the ultimate purposes of the goals they are pursuing. Once they fail in pursuing their goals, they become hopeless and depressed. According to Frankl (1970), a person seeking happiness is frustrated by the pursuit of happiness itself. The same can be said about goal. Goal for goal's sake, i.e. without meaning, is hollow and self-defeating. Happiness can ensue from living out the self-transcendence of human existence. When the meaning of goal is clear, then the person exercises the will to meaning and goal ensues. The more a person concentrates on goal only, the more such a person misses his or her goal.

According to Fabry (1988), will to meaning is the strongest motivation to living and acting. Humans are beings in search of meaning. Seeing meaning in your life enables you to develop your capacities and endure hardships. The founder of psychotherapy, Sigmund Freud, considered the desire for pleasure to be the highest motivational force. Alfred Adler considered the desire for power to be our strongest incentive. Both are important: you do act to find pleasure and to achieve power. But according to Frankl, pleasure is not a primary goal. It is a by-product of having done something meaningful. Power is not an end in itself, but only a means to an end that is attained by using power in a meaningful way. Meaning is neither a by-



product nor a means to an end. Meaning is the ultimate goal. If your will to meaning is ignored or repressed, you feel empty.

Based on Frankl (1971), stressful condition strengthens one's search for meaning. According to Welter (1987), when people live in poverty, then survival has great meaning, when living in affluence, however, people lack that motivation which covered the emptiness and pursuit of hedonism. It may be that, one's search for meaning is the primary motivation in one's life, especially under stresses. Without stress, the search may be weak. In fact, relativity model (see Battista & Almond, 1973) emphasizes that commitment (to any system of beliefs) per se can serve as a life-framework of positive life regard. In Gartner et al.'s (1991) review on religious commitment and mental health, 47% found a positive relationship between religious commitment and mental health, this may suggest that commitment to some meaning of life benefits psychological well-being. Specifically, according to Maton (1989), because most studies of religiosity and well-being have not isolated high life stress from low stress, the relationships between religious commitment and mental health are mixed. Furthermore, religiosity benefits well-being under high stresses rather than low stresses (Maton, 1989). Considering all these findings, the following hypothesis is proposed:

Hypothesis _{2.7}: Will to meaning is associated with psychological well-being, and the association is more significant under higher college stresses than lower college stresses

Based on the above hypothesis, three sub-hypotheses are formulated as below:



Sub-hypothesis₁: Will to meaning is associated with psychological well-being, and the association is more significant under higher academic stresses than lower academic stresses

Sub-hypothesis₂: Will to meaning is associated with psychological well-being, and the association is more significant under higher personal stresses than lower personal stresses

Sub-hypothesis₃: Will to meaning is associated with psychological well-being, and the association is more significant when the stress of negative life event is perceived as high than low

The conceptual framework presented in this section provides some theoretical evidence to the effects of vision in life on college stress and psychological well-being. The vision in life is a new construct developed by this study, most of its effects on college stress and psychological well-being have been hinted at by indirect evidence. In some ways, however, the construct is only in its infancy. A fair amount of what we said here was speculative. While these speculations were supported by indirect evidence, more direct testing of the ideas is necessary. In this respect, at least, this Chapter represents something of a promissory note. The findings to date constitute a promising beginning. Whether or not future work will be supportive is not clear so far. We have visions, however, that it will.



CHAPTER 6

CONSTRUCTION AND VALIDATION OF MEASURES

This chapter consists of five sections. The first section is an overview of the validation study. The second section sets out the procedures in conducting the validation study. In the third section, a college stress scale is developed. The fourth section describes the development of vision in life scale. In the final section, the psychometric properties of measures for psychological well-being are delineated based on a Chinese college student sample.

OVERVIEW OF VALIDATION STUDY

The validation study bears three major objectives. First, to describe a scale measuring college stress, defined in terms of academic hassle, personal hassle and negative life event which happen on campus. Second, to present the development of a scale measuring vision in life which is defined in terms of life control, meaning in life and will to meaning. Third, to delineate the psychometric properties of measures for psychological well-being.

PROCEDURE

Preliminary Study

A preliminary study was conducted in June 2000 on two university campuses in Beijing. The sample consisted of 153 undergraduate students. The preliminary study, which was administered mainly by means of an open-ended questionnaire as



well as by some focus groups, aimed at the exploration of major sources of college stress. Through using the open-ended questionnaire, we asked the participants to indicate at least five stressors that they had personally experienced in the preceding months or they would anticipate experiencing in subsequent months. The instruction was: "Please write down at least 5 different stressors happened on campus which you felt stressful in several months or you would anticipate experiencing in subsequent months. Please list the stressors in the order of their coming to your mind." In the focus groups, we asked the students to report their major campus stressors and give reasons for their report. A pool of college stress-item was then formulated through this preliminary study.

In-depth Interviews

In-depth interviews were administered from August to September 2000 in Beijing and in Hong Kong. There are two purposes: First, to explore whether the phenomenon of vision existed by observation and based on which the construct was developed. Second, to provide the basis for a reliable and verifiable preliminary operational definition for the construct of vision in life. We interviewed 30 healthy and happy students including some Mainland Ph.D. students in HKU and some undergraduate students in Beijing. The criteria for healthy and happy students are three: 1) Their attitudes of themselves are positive in general; 2) Their attitudes of others are positive in general; 3) Their attitudes of the school and society are positive in general. These students were selected based on their teachers' and other students' recommendations. In HKU, we interviewed the students through talking in restaurants, on the phone, or in parties. In Beijing, we conducted the interviews in different places such as on campus, in dormitories or in restaurants. The



questions were designed in three different respects based on the discussions in Chapter 2 and 3, major of them are presented as below.

Attitude of Self:

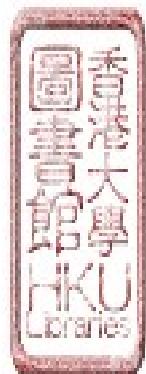
1. Are you more intelligent than most of your classmates or other people who are comparable with you?
2. Are you more intelligent than those who do not possess high degrees such as sale assistants?
3. Can you describe yourself by some positive and negative personality adjectives?
4. How do you deal with your weaknesses?

Attitude of Control:

1. How many happenings to you do you think you have control by yourself?
2. If you cannot control the happenings to you, will you simply give up the efforts of control?
3. Do you feel bad if you cannot control something?
4. Do you believe in fate or in a greater control?
5. Would it make any difference in your feeling if you succeeded by luck or if you succeeded by personal control?

Attitude of Future:

1. What do you think of your future?
2. Is your present better than the past? Do you anticipate your future would even better?



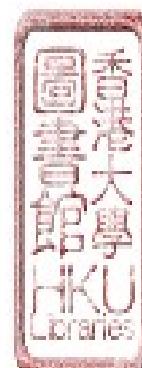
The answers to these questions served to examine our theory and our construct. They also served to provide the basis of a reliable and verifiable preliminary operational definition for the construct of vision in life. Based on the in-depth interviews, a pool of vision in life items was formulated.

Validation Study

A validation study was conducted in December 2000 on one university campus in Beijing, which aimed at the development of scales and examination of psychometric properties of the measures. The validation study included 354 undergraduate students recruiting from a university in Beijing. They were first year to third year students. The students were selected by convenient sampling. We conducted the validation study on students taking two elective courses. Since the elective courses included students from different fields of study and different years to study, the sample was considered to be somewhat representative. Table 6.1 summarizes the profile of respondents in the validation study.

Table 6.1 Profile of Respondents ($N = 354$)

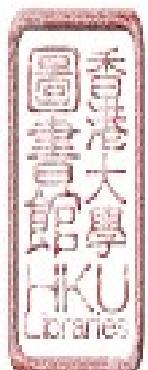
	Frequency	Percentage
Gender		
Female	153	43.2
Male	201	56.8
Age		
18	130	36.7
19	135	38.2
20	89	25.1
Year of Study		
First Year	120	33.9
Second Year	146	41.1
Third Year	88	25.0
Field of Study		
Natural Science	254	71.8
Social Science	100	28.2



Two major steps were conducted to develop the College Stress Scale: 1) Students were asked to complete the pool of college stress items. This step aimed at establishing the structure based on factor analysis on item-pool, as well as to establish reliability for sub-scales of college stress. 2) The students were also requested to complete a number of other scales, including Rosenberg' Self-esteem Scale (Rosenberg, 1965), Negative Affect Scale (Bradbrun, 1969), and GHQ-30 (Goldberg, 1972). These scales were selected because they are not only commonly used, but are also validated on Chinese college student samples. This step aimed at establishing the validity of the College Stress Scale. To develop the Vision in Life Scale, two major steps were taken by the validation study: 1) Students were asked to complete the pool of vision in life items. This step aimed at establishing the structure based on factor analysis on item-pool, as well as to establish reliability for sub-scales of vision in life. 2) The students were also requested to complete a number of other scales, including GHQ-30, PAS, NAS and Self-esteem. The introduction given in the validation study was: "This research aimed to understand the stresses you have been experiencing, the coping resources you have been taking, and your mental health status. We sincerely hope that the research would help college students to enhance their coping capability, fulfilling their study, and successfully going into the society. Hence, please complete this questionnaire as comprehensively as you can." Most students completed the measures within 20 minutes.

COLLEGE STRESS SCALE

In searching the literature, we could find few measures that focused on both hassles and negative life events. Moreover, no measures could be exactly



comparable to our conceptualization of college stress. Thus, we decided to construct our own scale to measure college stress which is treated as the independent variable in our study. In developing of the College Stress Scale, five steps were taken. These steps are described in details in the following sections.

Generating Item-Pool

Following Goldfried and D'Zurilla's (1969) Behavior-Analytic Method, the first step was to compile an item pool that represented the domain of college stress as perceived by college students. For this purpose, a preliminary survey was conducted. This survey identified 15 major campus stressors of Chinese college students based on an open-ended questionnaire format. According to students' reports, the major stressors are shown below (in descending order by frequency of intensity of stress): studying (82.4%), career (53.6%), personal relationship (37.3%), life pressure (20.3%), intimacy (19.6%), financial problems (14.4%), society pressure (11.1%), examination (10.5%), family expectation (9.8%), living and studying environments (9.2%), future (7.2%), self-pressure (growth, appearance, confidence, 7.8%), health (5.2%), capability (4.6%) and competition (4.6%). This finding was similar to those by Western researchers. Based on both the findings by our preliminary survey and the literature review of college stress, a 34-item stressor pool was generated. The pool of items is shown in Table 6.2.

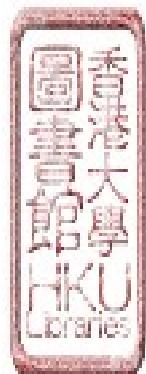
Content Validity

To ensure that the items represent the stressors of college students, several procedures were adopted. First, a pool of items based on students' report on their stressors was generated (see Step 1). Second, four Mainland Ph.D. students in



Table 6.2 Pool of Items of College Stress

Item
1. Academic ranking
2. Low grades on certain subjects
3. Low grades in general
4. Low learning efficiency
5. Unsatisfactory learning environments
6. Too many tests
7. Lagging behind academically
8. Not interested in the major field of study
9. Classmates competition (academic)
10. Examination pressure
11. Too many homework
12. Difficulty in discussing academic problems
13. Failure in an examination
14. Failed in more than two examinations
15. No girl/boy friend
16. Personal problems
17. Not being loved
18. Unsatisfactory family financial situation
19. Dissatisfied with own physical appearance
20. Health problems
21. Felt ignored
22. Unsatisfactory living condition
23. Temptations from social environment
24. Problems related to adulthood/adolescence
25. Low independent capability
26. Comparisons with classmates (non-academic)
27. Noisy dormitories
28. Worries not being taught/educated properly
29. Inadequate social skills
30. Lack of inter-personal communication
31. Losing face in public
32. First time away from home
33. Problems in the relationship to girl/boy friend
34. Being told off in public



relevant fields of study at HKU were asked to go through the definition of college stressor. To ensure their understanding of the definition, they were further asked to give some examples of college stressor. Third, these Ph.D. students were asked to write down their responses on each of the items in the item-pool, and evaluate whether the items could represent college stressor. Based on these three procedures, the content of the instrument was ensured.

The instruction, designed for College Stress Scale, reads: "Please select one answer which was most suitable to your situations in the past several months." A 4-point scale (0 = not at all, 1 = low, 2 = moderate, 3 = high) was used for the rating. The scores on the College Stress Scale ranged from 0-90, with higher scores indicating a greater stress level. We further defined the conceptual mid-point of 45 as the cutoff score of College Stress Scale, i.e., subjects who scored above this score were considered reporting high level of stress which warranted further assessment and evaluation.

Scale Construction

Principle component analysis was performed based on the data of the validation study. The number of sub-scales retained for final rotation was determined by setting the eigenvalue at 1.00. After varimax rotation, three meaningful sub-scales were extracted from the 30 items of stressor, which explained 40.33% of the total variance. The items included in each sub-scale, their factor loading, and the mean scale value of each sub-scale are presented in Table 6.3. It should be noted that items with factor loading lower than .40 were excluded from each scale. Thus, four items: 5, 8, 32, and 33 were ruled out.

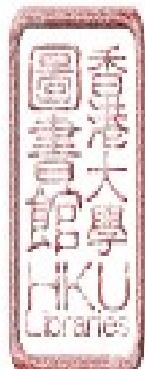
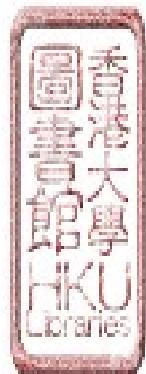


Table 6.3 Factorial Structure of College Stress

Item	Factor Loading		
	I	II	III
Factor I Personal Hassle (17.50%)			
17. Not being loved	.64	.05	.17
24. Problems related to adulthood/adolescence	.60	.23	.07
16. Personal problems	.60	.12	.24
19. Dissatisfied with own physical appearance	.58	.14	.13
20. Health problems	.57	.12	.23
26. Comparisons with classmates (non-academic)	.56	.17	.07
22. Unsatisfactory living condition	.56	.22	-.02
21. Felt ignored	.56	.28	.28
23. Temptations from social environment	.55	.22	-.00
27. Noisy dormitory	.54	.12	.05
15. No girl/boy friend	.54	-.04	.09
30. Lack of inter-personal communication	.52	.31	.02
28. Worries not being taught/educated properly	.49	.37	.21
25. Low independent capability	.48	.21	.12
29. Inadequate social skills	.48	.23	.19
18. Unsatisfactory family financial situation	.44	.14	.15
33. Problems in the relationship to girl/boy friend	.37	.00	.33
8. Not interested in the major field of study	.35	.31	.02
32. First time away from home	.33	.13	-.01
(Eigenvalue = 5.95, MSV = .75, SD = .33)			
Factor II Academic Hassle (13.85%)			
2. Low grades on certain subjects	.05	.73	.26
3. Low grades in general	.01	.68	.30
12. Difficulty discussing academic problems	.18	.64	.06
10. Examination pressure	.18	.62	.08
9. Classmates competition (academic)	.24	.61	.09
4. Low learning efficiency	.22	.60	.14
1. Academic ranking	.03	.59	.06
7. Lagging behind academically	.27	.56	.24
11. Too many homework	.36	.50	.05
6. Too many tests	.25	.46	.13
5. Unsatisfactory learning environments	.28	.37	.08
(Eigenvalue = 4.71, MSV = .98, SD = .49)			
Factor III Negative Life Event (8.98%)			
14. Failed in more than two examinations	.05	.17	.93
13. Failure in an examination	.06	.26	.86
31. Losing face in public	.40	.11	.60
34. Being told off in public	.35	.18	.58
(Eigenvalue = 3.06, MSV = .78, SD = .66)			

Note: Percentage in parentheses was the amount of variance accounted for by the respective factors

MSV = mean scale value



Judged by the content of the items, the three sub-scales can be named as follows:

Sub-scale I - Personal hassle (daily stresses).

Sub-scale II - Academic hassle (learning and examination stresses).

Sub-scale III - Negative life event (both personal and academic events).

In terms of mean scale value (MSV) of the factors (see Table 6.3), academic hassle was most frequently reported as stress by the students, whereas personal hassle was least frequently reported as stressful.

Reliability

Reliability was performed based on the results of three sub-scales of college stress. Internal reliability was performed by Cronbach's alpha. The results are shown in Table 6.4.

Table 6.4 Internal Consistency of College Stress

Scale	Cronbach α
College Stress	.91
Academic Hassle	.84
Personal Hassle	.88
Negative Life Event	.83



As can be seen in Table 6.4, Cronbach's alpha for the entire 30-item of college stress was .91, showing that the College Stress Scale exhibited a very satisfactory internal consistency. Furthermore, all the three sub-scales also exhibited satisfactory internal consistency. These results suggested that all the three sub-scales could act as the measures for different aspects of college stress. For further understanding of the relationships of these measures, the inter-correlations among the different measures were conducted, which are shown in Table 6.5.

Table 6.5 Correlations of Measures

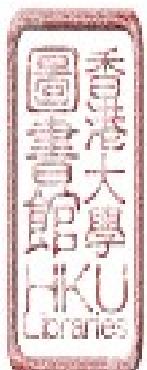
Scale	Academic Hassle	Personal Hassle	Negative Life Event
College Stress	.83**	.90**	.68**
Academic Hassle		.59**	.44**
Personal Hassle			.48**

** $p < .01$ (two-tailed)

As can be seen in Table 6.5, inter-correlations among the three sub-scales ranged from .44 to .59, which showed that the three sub-scales were relatively independent. The correlations between College Stress Scale and the three sub-scales ranged from .68 to .90 showing that the individual factors all contributed to the variable- college stress. Based on all the above analyses, the final version of the College Stress Scale was established (see Appendix I).

Validity

To establish the validity for the College Stress Scale and its sub-scales, the validation study also administered a number of different scales that seemed



reasonable to evaluate the College Stress Scale and the sub-scales. Included among these other scales were Rosenberg's Self-esteem Scale (Rosenberg, 1965), Negative Affect Scale (Bradburn, 1969), and GHQ-30 (Goldberg, 1972).

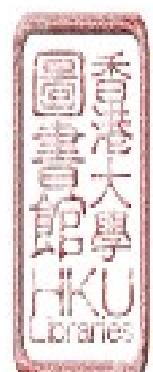
According to Folkman and Lazarus (1984; see also Lazarus & Folkman, 1984), stress lies not in the environmental input but in the person's appraisal of the relationship between that input and its demands and the person's agendas (e.g. beliefs, commitments, goals) and capabilities to meet, mitigate, or alter these demands in the interests of well-being. Therefore, it was expected that those higher in stresses would be negatively correlated with Self-esteem, but positively correlated with Negative Affect and GHQ-30. If the direction of each of these relationships was as expected, this then offered initial support for the validity of the College Stress Scale and the sub-scales. The correlations of College Stress Scale and the sub-scales and criterion measures are shown in Table 6.6.

Table 6.6 Relationships of College Stress Scales with Criterion Measures

Criterion Measure	College Stress	Academic Hassle	Personal Hassle	Negative Life Event
Self-esteem	-.30**	-.22**	-.29**	-.17**
GHQ-30	.43**	.39**	.40**	.20**
Negative Affect	.40**	.38**	.34**	.23**

** $p < .01$ (one-tailed)

As can be seen in Table 6.6, the magnitude of the correlations obtained were such that the College Stress Scale and the sub-scales did not appear to be completely redundant with the other measures that were conducted. The correlations between



the College Stress Scale, the sub-scales and the findings based on other scales administered showed that the College Stress Scale and the sub-scales were mostly as expected, that is, moderately and negatively associated with Self-esteem, whereas moderately and positively associated with GHQ-30 and Negative Affect. These results basically meet the expectations for establishing the validity of the scales.

In summary, a College Stress Scale was developed based on the steps above. This scale consisted of three sub-scales, which were Academic Hassle (10-item), Personal Hassle (16-item), and Negative Life Event (4-item). The College Stress Scale and the sub-scales possess the very satisfactory or satisfactory internal consistency and construct validity to make them suitable to be used for measuring college stresses.

VISION IN LIFE SCALE

Vision in Life is a new construct developed by the present study, as measure to date has attempted to assess this construct. In developing the Vision in Life Scale, five steps were conducted as shown below.

Generating Item-Pool

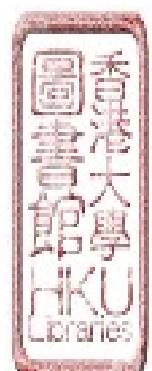
The first step in constructing the Vision in Life Scale was to generate a pool of items aimed at assessing the construct of vision in life established by the present study. In devising items, in-depth interviews were conducted. The interviews aimed to provide a basis for a reliable and verifiable preliminary operational definition of vision in life. An attempt was made to generate an equal number of



positive and negative items. A pool of 42 items of Vision in Life is shown in Table 6.7.

Table 6.7 Pool of Items of Vision in Life

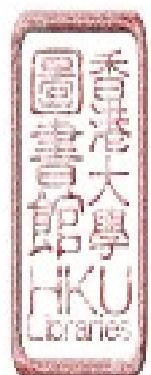
Component	Item
Will to Meaning	1. I try to make my life meaningful 2. I seldom think of meaning in life 3. I hope for a meaningful life 4. It does not make sense considering the meaning in life 5. I set life goals for myself 6. I fail in setting life goals 7. I have a sense of mission for my life 8. I feel life is making do and mend 9. I try to make everyday meaningful 10. Most of my life is boring
Meaning in Life	11. Both success and failure are meaningful 12. Failure brings mainly pain 13. People learn more from loss than gain 14. Loss make me feel that life is meaningless 15. Loss maybe more meaningful than gain in life 16. I am unhappy since I cannot reach my goals 17. I can sense that life is rich in losses 18. I cannot make sense of losses 19. I take things easy 20. Failure in examinations make me lose confidence in life 21. I am not demandingness 22. Loss of love leads me into despair 23. One can face losses peacefully can see the meaning in life 24. Failure only brings me with loss and disappointment 25. I am not so egoistic 26. Failure leads me to doubt about both self and life 27. More experiences rather than gains are the essence of a meaningful life 28. I cannot bear any failure 29. Failure is more meaningful than not trying at all 30. Unhappy life is meaningless 31. More success/failure more experience of life 32. Life would be meaningless if you cannot get what you want
Life Control	33. I can let unhappiness go 34. I am always worrying about the loss 35. I feel life is reliable 36. Life is just like duckweed 37. I can cope with any life 38. I feel that my life is uncontrollable 39. I can make myself happy 40. I feel abandoned by life 41. I can sense the direction of life 42. I feel hopeless and helpless



Content Validity

The pool of 42 items was divided into three components based on the postulated construct that was discussed in Chapter 3. The content of this pool of items was validated through the evaluations of four Mainland Ph.D. students from the Department of Psychology and Department of Education at the University of Hong Kong. The procedures of establishing content validity were as follows. First, these Ph.D. students were asked to read the definition of vision in life (see Chapter 3). To ensure their understanding of the definition, they were asked to give some examples of vision in life based on their understanding. Second, they were asked to read the operational definition of vision in life (see Chapter 3). To ensure the postulated three components could represent the construct of vision in life, some questions were further asked. For example, they were asked if they thought life control, meaning in life and will to meaning were different aspects of one construct or were different things; if they could tell the relationships among these three variables based on their understanding or experience; if they could imagine what the construct would be if one of the three components was not given. Based on their answers to these questions, the three components were validated. Third, these students were asked to write down their responses on each of the items in this item-pool, and evaluate whether the items could represent the construct of vision in life. Based on their suggestions, some items were revised. Also according to their evaluations, the representativeness of the content of the instrument was ensured.

The instruction for Vision in Life Scale reads: "Please select one answer which could most accurately describe your general attitudes towards life." Originally, a 5-point scale was used for rating in the validation study. However,



we found that a 4-point scale (1 = strongly disagreed, 2 = disagreed, 3 = agreed, and 4 = strongly agreed) was easier for participants to make their choices based on the validation study (some participants reported that they felt somewhat difficult to make the decision among the many choices). Thus, a 4-point scale was adopted in the main study. The scores on the Vision in Life Scale ranged from 1-152, with higher scores indicating a greater level of vision in life. The conceptual mid-point of 95 will be treated as the cutoff score, i.e., subjects who scored above this score were considered to have reported high level of vision in life.

Scale Construction

For the purpose of establishing scale construction, the principle component analysis was performed. For conducting the factor analysis on a relatively homogeneous basis, we did item-total correlation before the factor analysis. After the item-total correlation analysis, items 19, 21, and 25 were deleted because the correlations between each of them and the total were lower than .30. Varimax rotational technique was then used to extract sub-scales based on the principle that the number of sub-scales retained for final rotation is determined by setting the eigenvalue at 1.00. After the varimax rotation, those items with loadings lower than .40 on any of the sub-scales were excluded. Finally, four main sub-scales were extracted from the 38 items. These four sub-scales explained 43.27% of the total variance. It is interesting to note that factor analysis divided meaning in life into positive and negative oriented dimensions. According to factor loading, life control shifted to lack of life control, and will to meaning shifted to lack of will to meaning. The items included in each sub-scale, their factor loading, and the mean scale value of each factor are presented in Table 6.8.

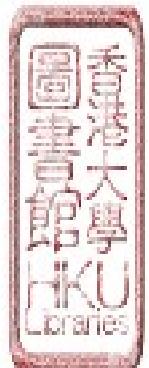
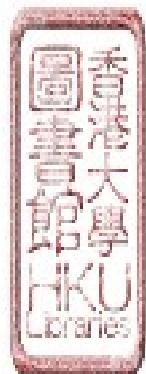


Table 6.8 Factorial Structure of Vision in Life Scale

Item	Factor Loading			
	I	II	III	IV
Factor I Lack of Life Control (24.23%)				
42. I feel hopeless and helpless	.70	-.11	.13	.06
37. I can cope with any life	-.64	.29	.06	.06
41. I can sense the direction of life	-.64	.24	-.25	.06
40. I feel abandoned by life	.62	-.06	.18	.14
36. Life is just like duckweed	.58	-.14	.27	.20
20. Failure in examinations make me lose confidence in life	.58	-.06	.10	.44
26. Failure leads me to doubt about both self and life	.57	-.12	.06	.43
6. I fail in setting life goals	.57	-.13	.34	-.06
38. I feel that my life is uncontrollable	.56	.06	.15	.21
39. I can make myself happy	-.55	.06	.06	-.20
35. I feel life is reliable	-.54	.34	-.14	-.06
28. I cannot bear any failure	.50	-.24	.06	.43
33. I can let unhappiness go	-.47	.15	.21	-.21
10. Most of my life is boring	.39	-.06	.36	.13
(Eigenvalue = 9.45, MSV = 3.51, SD = .54)				
Factor II Positive Meaning in Life (7.60%)				
15. Loss maybe more meaningful than gain in life	-.21	.69	-.12	-.20
13. People learn more from loss than gain	-.18	.66	.06	-.06
17. I can sense that life is rich in losses	.06	.64	-.06	-.21
11. Both success and failure are meaningful	-.14	.62	-.24	-.06
31. More success/failure more experience of life	-.06	.57	-.27	-.12
23. One can face losses peacefully can see the meaning in life	-.06	.56	.13	-.23
27. More experiences rather than gains are the essence of a meaningful life	-.15	.51	.06	-.21
29. Failure is more meaningful than not trying at all	-.13	.42	-.16	.14
(Eigenvalue = 2.96, MSV = 3.85, SD = .61)				
Factor III Lack of Will to Meaning (6.05%)				
8. I feel life is making do and mend	.06	-.06	.66	.14
4. It does not make sense considering the meaning in life	.06	.14	.64	.37
5. I set life goals for myself	-.06	.22	-.61	.06
3. I hope for a meaningful life	-.06	.19	-.60	-.06
1. I try to make my life meaningful	-.06	.14	-.59	.06
9. I try to make everyday meaningful	-.21	.23	-.59	.146
7. I have a sense of mission for my life	-.18	.24	-.57	.06
2. I seldom think of meaning in life	-.16	.16	.57	.33
(Eigenvalue = 2.36, MSV = 4.13, SD = .59)				
Factor IV Negative Meaning in Life (5.39%)				
32. Life would be meaningless if you cannot get what you want	.13	-.28	-.06	.68
18. I cannot make sense of losses	.23	-.32	.06	.56
34. I am always worrying about the loss	.20	-.11	-.12	.55
24. Failure only brings me with loss and disappointment	.37	-.28	.15	.49
22. Loss of love leads me into despair	.06	.06	.32	.48
30. Unhappy life is meaningless	-.06	-.12	.06	.47
14. Loss make me feel that life is meaningless	.33	-.33	.16	.47
16. I am unhappy since I cannot reach my goals	.41	-.06	-.14	.43
12. Failure brings mainly pain	.12	-.26	.13	.43
(Eigenvalue = 2.10, MSV = 3.48, SD = .60)				

Note: % in parentheses is the variance accounted by respective factors

MSV = mean scale value



Judged by the content of the items, these four sub-scales should be named as their negative orientations. However, we still keep their positive orientations. Doing so only to keep the consistency with the theoretical components. The four sub-scales then were named as following.

Sub-scale I - Life Control (a low sense of life not being in control).

Sub-scale II - Positive Meaning in Life (a positive view of meaning in life, and a balance perspective of success and failure).

Sub-scale III - Will to Meaning (lacking of a negative sense of will to meaning).

Sub-scale IV - Negative Meaning in Life (a negative view towards meaning in life, negatively affected by losses in life).

In terms of mean scale value (MSV) of the sub-scales (see Table 6.8), Will to Meaning was most frequently adopted, whereas, Negative Meaning in Life was least reported by the students.

Reliability

Internal reliability was assessed in terms of Cronbach's alpha. The results are shown in Table 6.9 below.

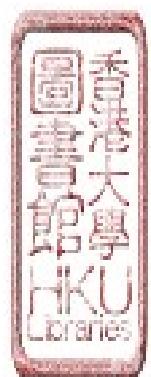


Table 6.9 Internal Consistency of Vision in Life Scale

	Cronbach α
Vision in Life	.91
Life Control	.87
Positive Meaning in Life	.79
Negative Meaning in Life	.77
Will to Meaning	.79

As can be seen in Table 6.9, Cronbach's alpha for the entire 38-item scale was .91, which showed that the Vision in Life Scale exhibited a very satisfactory internal consistency. Furthermore, all the four sub-scales also exhibited satisfactory internal consistency. These results provided that both vision in life and the four sub-scales could act as different measures. For further understanding of the relationships among these measures, the inter-correlations among the different measures were conducted, as shown in Table 6.10 below.

Table 6.10 Inter-Correlations of Vision in Life

Scale	Life Control	Positive Meaning in Life	Negative Meaning in Life	Will to Meaning
Vision in Life	.86**	.72**	-.76**	.62**
Life Control		.47**	-.47**	.38**
Positive Meaning in Life			-.40**	.32**
Negative Meaning in Life				-.22**

** $p < .01$ (one-tailed)

As can be seen in Table 6.10, inter-correlations among the four sub-scales ranged from .22 to .47, which showed that the four sub-scales were independent to each other to some extent. The correlations between total vision in life and the sub-scales ranging from .62 to .86 showed that the individual factors all reached the latent variable—vision in life. To further examine which of the scales of vision in life would predict the dependent variables better, the correlations between Vision in Life Scale and the sub-scales and some criterion variables were conducted. Criterion measures that were adopted to conduct the examination included Self-esteem (Rosenberg, 1965), GHQ-20 (revised version of GHQ-30 in the present study), College Stress (developed in the present study), GHQ-Sense of Adequacy (sub-scale of GHQ-20), GHQ-Depression (sub-scale of GHQ-20) and GHQ-Anxiety (sub-scale of GHQ-20). The results are shown in Table 6.11.

Table 6.11 Relationship between Vision in Life and Criterion Measures

Predictor	Criterion Measures					
	1	2	3	4	5	6
VL	-.53**	.62**	-.32**	.45**	-.43**	-.34**
LC	-.64**	.70**	-.40**	.57**	-.49**	-.43**
PML	-.23**	.37**	-.12*	.24**	-.22**	-.08
NML	.43**	-.37**	.34**	-.36**	.29**	.36**
WM	-.15**	.29**	-.03	.15**	-.17**	-.04

* $p < .05$ ** $p < .01$ (one-tailed)

1: GHQ-20 2: Self-esteem 3: College Stress 4: GHQ-Sense of Adequacy

5: GHQ-Depression 6: GHQ-Anxiety

VL: Vision in Life LC: Life Control PML: Positive Meaning in Life

NML: Negative Meaning in Life WM: Will to Meaning



As can be seen in Table 6.11, Life Control was the best predictor. Positive Meaning in Life, Negative Meaning in Life and Will to Meaning were also predictive of the various measures of psychological well-being. These results suggested that the validity of the Vision in Life Scale is satisfactory. The final version of Vision in Life Scale is presented in Appendix II.

Validity

To further establish the validity for the Vision in Life Scale, the validation study also administered a number of other scales that seemed appropriate to evaluate the Vision in Life Scale and the sub-scales. The other scales were Internal State Awareness Scale (Fenigstein et al., 1975), Negative Affect Scale (Bradburn, 1969), Positive Affect Scale (Bradburn, 1969) and GHQ-30 (Goldberg, 1972). These scales were selected since they were assumed to be conceptually correlated with Vision in Life Scale and the sub-scales. It was assumed that the Vision in Life Scale and the sub-scales were moderately and negatively associated with GHQ-30 and Negative Affect. However, they were moderately and positively associated with Internal State Awareness and Positive Affect. If the direction of each of these relationships was as expected, then these would become initial support for the validity of the Vision in Life Scale and the sub-scales. That is, although it was important for the Vision in Life Scale and the sub-scales to correlate in the appropriate direction with conceptually related scales, it was equally important that the strength of these relationships should not be too strong. The relationships of Vision in Life Scale and the sub-scales and the criterion measures are shown in Table 6.12.

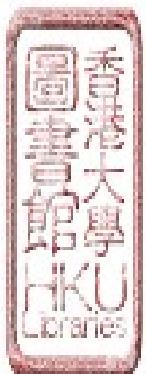


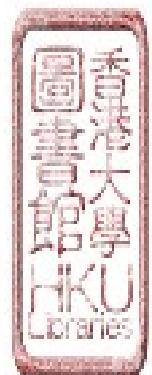
Table 6.12 Relationships of Vision in Life Scales with Criterion Measures

Criterion Measures	Vision in Life	Life Control	Positive Meaning in Life	Negative Meaning in Life	Will to Meaning
Internal State Awareness	.12*	.13*	.09	-.26**	.07
GHQ-30	-.51**	-.62**	-.24**	-.42**	-.12*
Negative Affect Scale	-.42**	-.53**	-.15**	.42**	.03
Positive Affect Scale	.20*	.24**	.18**	.07	-.09

* $p < .05$ ** $p < .01$ (one-tailed)

As can be seen in Table 6.12, the correlations between the Vision in Life Scale and the sub-scales and the other scales administered showed that Vision in Life Scale and Life Control Scale were moderately positively associated with Internal State Awareness and Positive Affect. They were also moderately associated with GHQ-30 and Negative Affect. These results basically meet the expectations for establishing construct validity of the Vision in Life Scale and Life Control Scale. As regards Positive Meaning in Life Scale and Negative Meaning in Life Scale, they mostly meet the expectations for establishing construct validity of them. However, Will to Meaning Scale partially meets the expectations for establishing construct validity of it.

In summary, a Vision in Life Scale was developed based on the above steps. This scale consisted of four sub-scales, which were Life Control (13-item), Will to Meaning (8-item), Positive Meaning in Life (8-item) and Negative Meaning in Life (9-item). The Vision in Life Scale and the sub-scales possess very satisfactory or satisfactory internal consistency and construct validity making them suitable for use to measure vision in life. The construct validity of Will to Meaning is not



satisfactory. Cautions should be taken when interpreting results based on this subscale.

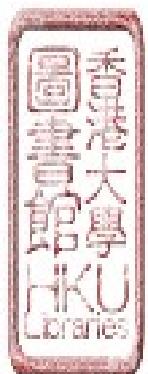
MEASURES OF PSYCHOLOGICAL WELL-BEING

To measure the dependent variable—Psychological Well-being, the present study adopted four standardized scales which were GHQ-30 (Goldberg, 1972), Negative Affect Scale, Positive Affect Scale (Bradburn, 1969) and Self-esteem Scale (Rosenberg, 1965). The descriptions of these four measures are set out below.

GHQ-30

The General Health Questionnaire was originally developed by Goldberg (Goldberg, 1972; Goldberg & Blackwell, 1970) to detect nonpsychotic disturbances in patients attending general practice clinics. It is a self-administered instrument that consists of 60 items that measure the respondent's psychological distress symptoms and maladaptive behavior that might be of clinical significance. In its later development, a 30-item version and other shortened versions (e.g. 20-item and 12-item versions) have been developed to exclude items related to physical illness. Apart from its original objective of detecting psychiatric cases in the general practice setting, the GHQ also has been employed as a first-stage screening instrument in epidemiological studies and community surveys (e.g. Cleary, Goldberg, Kessler & Nycz, 1982). The GHQ-30 was the most commonly validated version (Siddique & D'Arch, 1984), and therefore it is adopted by the present study.

According to Shek (1988), there are studies that report data on the psychometric properties of the GHQ, and such data are roughly along three lines. The first line of



data is related to the reliability status of the GHQ. For example, Vieweg and Hedlund (1983) reported that the internal consistency measures of GHQ total scores ranged from .78 to .95, whereas test-retest measures ranged from .51 to .90. The second line of data concerns the validity of the GHQ. Chan and Chan (1983), for example, after a review of six studies on the validity status of the GHQ, concluded that the GHQ had reasonable sensitivity and specificity and an acceptable misclassification rate. The final line of data is associated with the factorial structure of the GHQ. There has been evidence to suggest that several factors could be extracted from the GHQ. For the factorial structure of the GHQ extracted from Chinese students, Chan and Chan concluded that it measured five aspects of psychopathology, including anxiety, inadequate coping, depression, insomnia and social dysfunctioning. Shek (1988) suggested that five factors could reliably be extracted from the data of GHQ-30 including anxiety, depression, inadequate coping, social dysfunctioning and sleep disturbances. The responses of GHQ were generally scored by the Likert and GHQ (0-0-1-1) scoring method. The present study adopted the yes-no response format (0 = no, 1 = yes). The scores on the GHQ-30 ranged from 0-30 and the response was scored as its negative orientation. Therefore, the higher score indicates lower mental health status, whereas lower score indicates higher mental health status. Respondents were asked to indicate their health status in recent weeks on the yes-no score scale. The instruction is: "We want to understand your feelings, whether you have experienced the following feelings in several weeks?" The following are two items from the GHQ-30:

	No	Yes
Lost most sleep over worry	0	1
Been losing confidence in yourself	0	1



a. Scale construction

Although GHQ-30 was generally used as a multi-dimensional measure by the researchers, the different versions of it were also shown such as GHQ-12, 20 and 28. Thus, before conducting factor analysis on GHQ-30, item-total correlation was performed firstly to ensure the number of items that would be extracted from GHQ-30. Based on the item-total correlation, four items—5, 9, 11 and 18 with the low item-total correlations ($r < .30$) were deleted because their contributions to the total were less than 10%.

Principle component analysis was performed based on the data of the validation study. Varimax rotational technique was used to extract sub-scales based on the principle that number of sub-scales to be retained for final rotation would be determined by setting the eigenvalue at 1.00. After varimax rotation, those items loading lower than .40 on any of the sub-scales were omitted. Then, six items- 7, 13, 15, 19, 20 and 21 were ruled out, and therefore, three meaningful sub-scales were extracted from the 20 items of GHQ, which explained 34.41% of the total variance. The items included in each sub-scale, their factor loading, and the mean scale value of each factor are presented in Table 6.13. Judged by the content of the items, these three sub-scales can be named as follows:

Sub-scale I - GHQ-Sense of Adequacy.

Sub-scale II - GHQ-Depression.

Sub-scale III - GHQ-Anxiety.



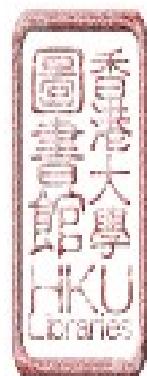
In terms of mean scale value (MSV) of the factors, GHQ-Sense of Adequacy was most frequently reported as mental health problem by the students, whereas GHQ-Depression was rarely reported as mental health problem.

Table 6.13 Factorial Structure of GHQ-20

	Item	Factor Loading		
		I	II	III
Factor I GHQ-Sense of Adequacy (20.78%)				
G27	Been feeling reasonably happy, all things considered	.59	-.13	-.06
G1	Been able to concentrate on whatever you're doing	.55	.06	-.16
G8	Been satisfied with the way you've carried out your task	.55	-.18	-.06
G4	Been managing to keep yourself busy and occupied	.52	-.06	.06
G6	Been managing as well as most people would in your shoes	.51	-.27	-.11
G12	Felt that you were playing a useful part in things	.49	-.26	.06
G22	Been feeling unhappy and depressed	-.45	.40	.40
G17	Been able to enjoy your normal day-to-day activities	.43	-.36	-.31
G10	Been feeling it easy to get on with other people	.42	-.23	-.06
G13	Felt capable of making decisions about things	.38	.06	-.13
G20	Been able to face up to your problems	.37	.18	.12
G7	Been feeling on the whole you were doing things well	.35	-.06	.11
(Eigenvalue = 5.40, MSV = .26, SD = .20)				
Factor II GHQ-Depression (7.39%)				
G26	Been feeling hopeful about your own future	-.13	-.71	.12
G29	Felt that life wasn't worth living	-.06	.64	.11
G23	Been losing confidence in yourself	-.21	.62	.22
G25	Felt that life was entirely hopeless	.21	.57	-.06
G24	Been thinking of yourself as a worthless person	-.34	.49	.06
G16	Been finding life a struggle all the time	-.06	.47	.16
G19	Been getting scared or panicky for no good reason	-.23	.39	.17
G15	Felt that you couldn't overcome your difficulties	.19	.28	.06
(Eigenvalue = 1.92, MSV = .1, SD = .14)				
Factor III GHQ-Anxiety (6.24%)				
G2	Lost most sleep over worry	.11	.06	.78
G3	Been having restless, disturbed nights	.06	.06	.76
G28	Been feeling nervous and strung-up all the time	-.31	.33	.46
G14	Felt constantly under strain	-.16	.23	.43
G30	Found at times you couldn't do anything because your nerves were too bad	-.39	.37	.41
G21	Found everything getting on top of you	-.31	.06	.36
(Eigenvalue = 1.62, MSV = .24, SD = .24)				

Note: % in parentheses was the amount of variance accounted for by the respective factors

MSV = mean scale value



b. Reliability

Reliability was conducted in terms of the three factors of GHQ-20 extracted by this study. Table 6.14 shows the results.

Table 6.14 Internal Consistency of GHQ-20

Scale	Cronbach α
GHQ-20	.82
GHQ-Sense of Adequacy	.75
GHQ-Depression	.63
GHQ-Anxiety	.64

As can be seen in Table 6.14, Cronbach's alpha for the entire 20-item of GHQ was .82, which showed that the GHQ-20 exhibited a satisfactory internal consistency. The reliability of GHQ-Sense of Adequacy also exhibited a satisfactory internal consistency. For both GHQ-Depression and GHQ-Anxiety, the internal consistency only reached the acceptable level. These results suggested that although all the scales of GHQ-20 could be used in further studies, more care may be needed when using GHQ-Depression and GHQ-Anxiety. For further understanding the relationships of the three measures, the inter-correlations among the different measures were conducted, which is shown in Table 6.15.

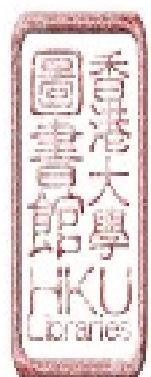


Table 6.15 Correlations of Measures

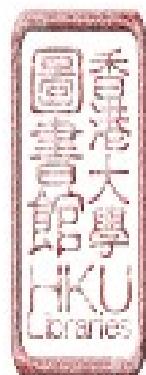
Scale	GHQ-Sense of Adequacy	GHQ-Depression	GHQ-Anxiety
GHQ-20	.89**	.67**	.74**
GHQ-Sense of Adequacy		.42**	.44**
GHQ-Depression			.39**

** $p < .01$ (two-tailed)

As can be seen in Table 6.15, inter-correlations among the three sub-scales ranged from .39 to .44, which showed that the three sub-scales were independent on each other to some extent. The correlations between GHQ-20 and the three sub-scales ranged from .67 to .89 which showed that the individual factors highly correlated with the total scale. Thus, providing more evidences of the factors could play as measures individually or all together depending on what mental health problems are under the consideration. Taken all the analyses above together, the final version of GHQ-20 was formulated (see Appendix VI). The scores on the GHQ-20 ranged from 0-20, with higher scores indicating a greater level of mental health problem. Moreover, the conceptual mid-point of 10 was considered as the cutoff score, i.e. subjects who scored above this score were considered reporting high level of mental health problem.

PAS and NAS

Norman Bradburn first studied of avowed happiness (Bradburn & Caplovitz, 1965), and then developed his "affect balance" scale (Bradburn, 1969). Bradburn was specifically concerned with "the subjective feeling states that individuals



experience in their daily lives," and he undertook to assess these states by enumerating particular positive and negative episodes that had occurred in his respondents' lives in the recent past. This procedure identified two measures of affect, positive and negative, that were, somewhat surprisingly, unrelated to each other. Bradburn proposed that happiness was composed of two separable components. In support of this, it has been found that although the positive and negative affect scales were virtually uncorrelated with each other, they each showed independent incremental correlations with a global well-being item (Bradburn, 1969). Bradburn hypothesized that happiness is really a global judgment people make by comparing their negative affect with their positive affect. Thus, his Affect Balance Scale (ABS) score is derived by subtracting the sum of negative items from the sum of positive ones. Bradburn's positive affect scale asks whether the respondents, during the preceding few weeks, have felt, for example, proud because someone complimented them on something they had done and pleased about having accomplished something. The negative affect scale asks, for example, if the respondents have felt upset because someone criticized them and depressed or very unhappy. The present study adopted a simple response of yes-no score for the rating. The scores on the PAS and NAS ranged from 0-5, and response of PAS was scored as its positive orientation, whereas response of NAS was scored as its negative orientation. Thus, higher score of PAS indicates higher well-being, whereas higher score of NAS indicates lower well-being. Respondents were asked to indicate their feelings in recent weeks on the yes-no response format scale. The instruction is: "We want to understand your feelings, whether you have experienced the following feelings in several weeks?" For example:



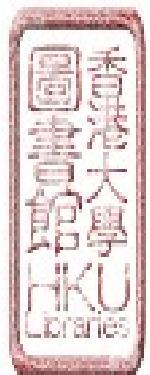
	Yes	No
Pleased about having accomplished	1	0
Upset because someone criticized you	1	0

The conceptual mid-point of 2.5 was treated as the cutoff score. Subjects who scored above this score on PAS were considered reporting high level of psychological well-being, whereas scored above this score on NAS were considered reporting low level of psychological well-being. The original scales of PAS and NAS is at Appendix V. In the following analysis, we focus on psychometric properties of the measures that are necessary before adopting them in our main study.

Cronbach's alpha for PAS was .55, and for NAS was .60. Both PAS and NAS reach the marginally acceptable internal consistent level. They are examined future in the main study. If the result were still not satisfactory, findings based on them would not be taken into account in respect of psychological well-being.

Self-esteem Scale

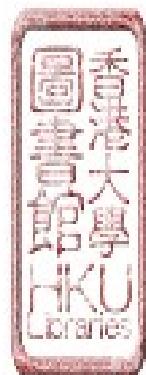
Self-esteem Scale was developed by Rosenberg (1965), which is the most widely used measure among measures for the same purpose so far. Rosenberg (1965, 1979) originally designed the Self-esteem Scale as a self-report measure to assess global self-esteem--an overall evaluative attitude towards the self. Since the Self-esteem Scale was devised, two major positions appeared regarding the nature of global or general self-esteem. One position views global self-esteem as a unidimensional phenomenon reflected most clearly by incorporating positive and negative self-evaluations in a summary measure (e.g. Rosenberg et al., 1995;



Rosenberg, 1965, 1979). The other position describes positive and negative self-evaluative components within global self-esteem (e.g. Owens, 1992, 1993; Goldsmith, 1986) which actually comprises general self-denigrating and general self-affirming subscales, or critical self-deprecation and positive self-confidence components. Self-esteem Scale possesses much evidence of the satisfactory or very satisfactory psychometric properties (e.g. Rosenberg et al., 1995). Reports by Diener and Diener (1995) and Rosenberg et al. (1995) suggested that Self-esteem Scale exhibited strong associations with other measures of psychological well-being. The present study used Self-esteem Scale as a unidimensional measure. A 4-point scale (1 = strongly disagreed, 2 = disagreed, 3 = agreed, and 4 = strongly agreed) was used for rating in the present study. The scores on the Self-esteem Scale ranged from 1-40 and the response was scored as its positive orientation. Thus, higher score indicates higher self-esteem, whereas lower score indicates lower self-esteem. Respondents were asked to select the most suitable answer on a four-point Likert type scale. The instruction reads: "Please select one answer, which is most suitable to your situations or thinking." For example:

	Strongly Agreed	Agreed	Disagreed	Strongly Disagreed
I feel that I am a person of worth	4	3	2	1
I feel that I have a number of good qualities	4	3	2	1

The conceptual mid-point of 25 was considered the cutoff score of Self-esteem Scale, i.e. subjects who scored above this score were considered reporting high levels of self-esteem. The original scale of Self-esteem is at Appendix IV.



Although Self-esteem Scale sometimes considered as indeed two-dimensional, it is generally used as a uni-dimensional measure. This study also treated it as uni-dimensional, and we did not conduct factor analysis on it. We only examined the internal consistency of Self-esteem Scale. Cronbach's alpha for the entire 10-item of Self-esteem Scale was .86 which showed that the Self-esteem Scale possessed a satisfactory internal consistency based on the sample of college students.

Validity of Psychological Well-being Measures

To establish the validity of measures of psychological well-being, we examined the correlations among these measures. We do so because all these measures were validated measures in Western samples and some in Chinese samples. It was expected that the positive oriented measures such as Self-esteem and Positive Affect were moderately and negatively associated with the negative oriented measures such as GHQ-20 and Negative Affect. However, the positive oriented measures were moderately and positively associated with each other, and likewise were the negative oriented measures. If the direction of each of these relationships was as expected, it then offered initial support for the validity of the measures for psychological well-being. That is, although it was important for the measures to correlate in the appropriate direction with conceptually related scales, it was equally important that the strength of these relationships not be too strong. The correlations of these measures are shown in Table 6.16.

As can be seen in Table 6.16, the correlations among the different measures showed that Self-esteem, GHQ-Sense of Adequacy and PAS were moderately and positively associated with each other. Likewise, GHQ-20, GHQ-Depression,

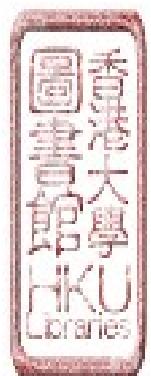


Table 6.16 Correlations among Measures of Psychological Well-being

Scale	GHQ-SA	GHQ-D	GHQ-A	Self-esteem	PAS	NAS
GHQ-20	.89**	.67**	.74**	-.57**	-.27**	.67**
GHQ-SA		-.42**	-.44**	.54**	.37**	-.57**
GHQ-D			.39**	-.45**	-.14**	.41**
GHQ-A				-.32**	-.02	.58**
Self-esteem					.35**	-.41**
PAS						-.13*

* $p < .05$ ** $p < .01$ (one-tailed) GHQ-SA: GHQ-Sense of Adequacy

GHQ-D: GHQ-Depression GHQ-A: GHQ-Anxiety PAS: Positive Affect Scale

NAS: Negative Affect Scale

GHQ-Anxiety, and NAS were also moderately and positively associated with each other. However, the positive oriented measures except PAS were moderately and negatively associated with the negative oriented ones. These results basically meet the expectations for establishing construct validity of measures of psychological well-being. Moreover, none of them except PAS was redundant in the checklist of measures based on our findings. As for PAS, its correlation with GHQ-Anxiety was not significant and the direction was not as expected. Moreover, its correlation with NAS and GHQ-Depression was also very low, our validation study thus did not suggest PAS as a validated scale.

So far, all the instruments for measuring the independent variable, buffering variable and dependent variable were ascertained as possessing well established psychometric properties except PAS and NAS. Thus, they can be safely used in the main study except PAS and NAS. However, we would further examine both PAS and NAS in the main study.



CHAPTER 7

METHODOLOGY

This chapter shows the methods used in different stages of this study, which includes the plan, the structure and the strategy of the study. The first section, also the central portion of this chapter, is about research design which is the starting point based on which the study is planned and structured. In the second section, sampling is delineated, and the third section describes the data collection procedures. The final section presents data analyses. The last three sections refer to research strategies.

RESEARCH DESIGN

Research design includes four steps: to overview the design, to assess research variable, to control extraneous variable, and to design questionnaire.

Design

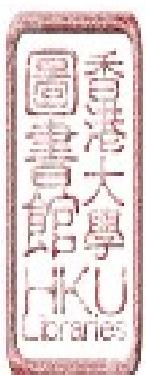
Research design is to control variances. That is, to maximize systematic variance, control extraneous systematic variance, and to minimize error variance. According to the research question, this study was designed by explanatory, cross-sectional and correlational principles. We select explanatory or retrospective/ ex post facto design because the independent variables have already occurred before we conduct the study. That is, in such design, we started with observation of the dependent variable and retrospectively studied the possible effects of independent



variables on the dependent variable. According to the research question of the present study, the effects of stress and vision in life on psychological well-being already occurred, rather than to be manipulated then occurred. Moreover, since the dependent variable on the interaction between two independent variables was observed, Factorial Explanatory Design principle was adopted. We chose correlational study because we preferred exploring the relationships among the variables. Cross-sectional design was used for measuring all the variables simultaneously or as close in time as possible.

Assessing Research Variable

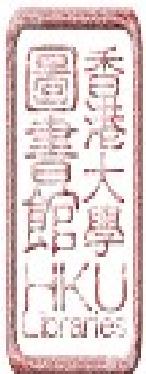
Assessment of research variables is based on both the conceptual and the operational definitions of the variables which were presented in Chapter 3 and 4. To assess the independent variable—college stress, a College Stress Scale and the sub-scales were developed specially for this study. In Chapter 6, their psychometric properties were examined and confirmed, after having ensured that they were suitable to be used to measure college stresses. To assess the dependent variable—psychological well-being, four measures were examined beforehand in a validation study. The psychometric properties of GHQ-20 and the sub-scales, as well as Self-esteem Scale were confirmed. However, the psychometric properties of both PAS and NAS were not ensured. Thus, the former two were used safely to measure psychological well-being, whereas the later two were carefully used. To measure the buffering variable—vision in life, a Vision in Life Scale and the sub-scales were specially developed for this study. Their psychometric properties were all confirmed in the validation study, and thus all were used in the main study.



Controlling Extraneous Variables

Controlling extraneous variables generally consists of two steps—recognizing extraneous variables and controlling extraneous variables. Extraneous variables are recognized by the criterion that all the variables might affect the relationship between independent and dependent variables. There may be five possible sources of extraneous variables based on the circumstances of the present study:

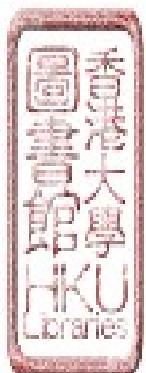
- 1) Unclear definition of variables. There are three major variables to be tested in this study. The extraneous variables may be caused by unclear definition either conceptually or operationally or both of these three research variables.
- 2) Use of retrospective information. The extraneous variables may be caused by use of retrospective information because of the erroneous memory or failure to recall.
- 3) Variations in the process of collecting data. A number of extraneous variables may be caused in the process of collecting data. For example, the time of collecting data, environment of collecting data, introduction, and so forth. Sometimes, extraneous variables maybe just caused by the addressed words in the reading of introduction.
- 4) Structure of the instruments. Structure of instruments may cause a number of extraneous variables. For example, if a questionnaire is scored by Yes-No answers, some subjects may always choose “Yes”, whereas, others may always choose “No”.
- 5) Subjects. There are a number of extraneous variables caused by subjects. For example, age, gender, sampling method, whether subjects are familiar with the tests or understand the purpose of the tests and so forth. All of these possible extraneous variables need to be controlled since they may affect the relationship between independent and dependent variables.



Controlling extraneous variables is very important in the study. Since this study recognized five possible sources of extraneous variables, controlling extraneous variables focused on such sources. To ensure accurate definition of variables, a set of psychometric properties such as reliability, validity and the structure was examined through a validation study which was reported in Chapter 6. Such a set of psychometric properties also served to minimize distorted data by retrospective information and the suitable structure of the instruments. To eliminate extraneous variables came from the administrating conditions, standardized instruction was used and all the administrating procedures were done in school environments. To eliminate the probable extraneous variables coming from subjects, a set of standardized sampling was adopted which is described in the later section. Moreover, to control the extraneous variance caused by tiredness of the subjects, the questionnaire was designed for completion within 40 minutes.

Questionnaire Design

Questionnaire design is divided into three parts. The first part is designed for introduction and demographic information. The second part is designed for listing the research measures. The third part is designed for showing other measures aimed at comparing with research variables. The covering page of the questionnaire briefly explained the purpose of the study. This introduction aims to help students to understand the significance of the research in their own lives. The introduction is: "We design this research aiming at understanding the stresses you have been experiencing, the coping resources you have been using, and the mental health status you now have. We sincerely hope that the research could help you enhancing your coping capability, completing your studies successfully, and



confidently integrating with the society."

a. Demographic information

The demographic information includes sex, age, year of study, and field of study. We think such information is basic and necessary for our study. We also put the demographic information on the covering page of the questionnaire.

b. Research measures

The research measure for the main study was composed of six different scales. They were College Stress Scale (Present study, 2001), Vision in Life Scale (Present study, 2001), Self-esteem Scale (Rosenberg, 1965), GHQ-20 (revised version of Goldberg's GHQ-30, 1972), Positive Affect and Negative Affect Scales (Bradburn, 1969). College Stress Scale and Vision in Life Scale are developed specially for this study, and the processes for developing them were presented in Chapter 6. The major characteristics of these measures were also described in Chapter 6.

c. Other measures

The questionnaire also included other measures for comparing the research variables and which composed of three different scales. The first is Life Orientation Test (Scheier & Carver, 1985), a measure for optimism. We adopted it for comparison between optimism--a kind of illusion and vision in life, which is hypothesized in the discussion chapter. The second is Private Self-conscious Scale (Fenigstein et al., 1975). This scale was used for comparison between self-centeredness and self-transcendence, which is also shown in the discussion chapter. The third is Locus of Control (simplified version of Rotter's scale, 1966). We used this measure for providing data on the comparison between Internal Locus of Control



and Life Control. The result is reported in the discussion chapter.

SAMPLING

Sampling Frame

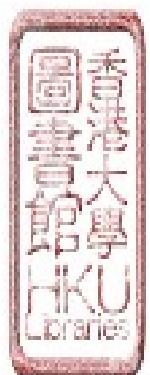
A sampling frame is the actual listing of sampling elements or cases from which a sample is drawn. In this study, we are interested in the direct and the buffering effects of vision in life on the relationship between college stress and psychological well-being of Chinese college students in Beijing. Thus, the collection of college students in Beijing is our especially interested population. Furthermore, this population is defined as all first year to third year students currently attending universities in Beijing. The year of study includes first to third year of study. The fourth year was excluded because literature showed that stresses faced by fourth year students are different from those faced by the other three years (Fan et al., 2000; Solway, 1985). This definition of sampling composes of four sampling units at two stages. The sampling unit at the first stage is university, and the sampling units at the second stage are first year, second year and third year college students. Sampling is conducted based on the sampling frame.

Sampling Method

Although we defined the population as all students from first year to third year currently attending universities in Beijing, the population cannot be easily listed for sampling purposes. Theoretically, sampling method should be based on the two principles of ensuring the representativeness and the homogeneity of the samples as much as possible. However, this is not as simple as it might seem. For example,



if a sample is to provide useful descriptions of the total population, it must contain essentially the same variations that exist in the population. Depending on the research questions and aims, we finally used purposive sampling for selecting universities. In this first stage of sampling units—selecting universities, university types and homogeneity were both taken into account for which two top universities and one ordinary university in Beijing were selected. Four universities are generally considered the top universities in Beijing, among which Tsinghua University and Peking University should be more homogeneous in terms of the quality of students. In general opinion, Tsinghua university is generally possessing the best students in natural science, and Peking university possesses the best students in social science. Therefore, Tsinghua University and Peking University were selected as the representative of the top universities. There are almost a hundred ordinary universities in Beijing, among them the Chinese Politics and Law University is selected mainly based on the homogeneous principle of students. Although Chinese Politics and Law University is an ordinary university, it has the most attractive majors and therefore the quality of students for some majors is the same as that of the students in Peking University. They are also the best students in social science. Chinese Politics and Law University was then selected as representative of ordinary university. Thus, the purposive sampling we used ensure not only the homogeneity of the sample, but also the representativeness of both the top-rated and some ordinary universities students. It is expected that we can generalize our research findings to the other top-rated and some ordinary universities at least in Beijing.



To conduct the second stage of sampling units—selecting the cases in each university, we adopted convenient sampling. Although convenient sampling has its limited utility for most researches, it is extremely useful for putting together a sample that is both representative and sufficiently large based on the circumstances of the present study. The situation is that some elective courses are set for each grade of the above three universities. Students who take the courses come from different field of study and one course generally enrolls over 100 students. Moreover, such elective courses sometimes include students from different grades. Convenient sampling is accomplished by selecting several such courses in each university. For sampling purpose at this stage, we directly contacted some elective course teachers in the three selected universities and invited them to administer the survey in classes.

Characteristics of the Students

Students in Tsinghua University mostly majored in natural science, whereas in Chinese Politics and Law University most students majored in social science. About half of the students in Peking University majored in social science and the other half majored in natural science. Moreover, most students in Tsinghua University are male, and the ratio of male and female is 6:1. The ratio of male and female in the other two universities is nearly 1:1. Since Chinese Politics and Law University is the only ordinary university to be selected, nearly half of the number of subjects were selected from this university, and the other half were selected from Tsinghua University and Peking University. Thus, the top universities and the ordinary university contributed to similar size of the sample. Years of studies were selected based on the sampling frame and majors were selected mainly based on the



homogeneous principle among three universities. The scheduled distribution of the subjects is shown in Table 7.1.

Table 7.1 Distribution of the Subjects $N = 900$

Peking University	Tsinghua University	Chinese Politics and Law University
200 (2% of the total students in Peking University)	300 (2.5 % of the total students in Tsinghua University)	400 (6% of the total students in Chinese Politics and Law University)

PROCEDURES

The main study was conducted from February to March 2001. Approximately 900 undergraduate students from the three selected universities participated in the study with the help of about 10 university staff. Before conducting the survey, we trained the administrators (class teachers) to interpret the instructions, so that they could help the students understand the instructions. We trained the administrators to read the introduction and instructions slowly and clearly. The administrators are required to ask the students whether they understood the instructions after having read them. The survey was only started when it was sure that all the participants understood how to complete the questionnaires.

In the Chinese Politics and Law University, the survey was conducted in four classes and at four different times. All the four classes were elective classes opened to the first to third year students of various fields of study. One class had 180 first year students, and the other three had 120, 70 and 30 first, second and third year



students respectively. In all these four classes, the survey was given at the beginning of each class. At the beginning of the class, the teacher of the class distributed the questionnaires to the students and made sure each of them got a copy. Teacher read the introduction and instructions, as well as asked the students to write down year of study, field of study and sex. When it was sure that all the participants understood how to do it, the teacher asked them to complete the questionnaire. We finally received a total of 392 questionnaires in this university and almost all of them were completed. Response rate for the sample in this university is 98%. Most students completed the whole questionnaire within 35 minutes, and a few of them used more than 40 minutes.

In Tsinghua University, the survey was conducted in one class and several seminar groups. The class was an elective class of 100 first to second year students of different fields of study. In the class, the survey was given during the last 30 minutes. After distributing the questionnaires to the students, the teacher asked the students to read the introduction and instructions carefully. Students were asked to write down year of study, field of study and sex, then to complete the questionnaire. In the seminar groups, the same procedures were used but at the beginning of the seminar session. Of the 300 questionnaires returned, 253 were completed and within 40 minutes. Response rate for the sample in Tsinghua University is 84%.

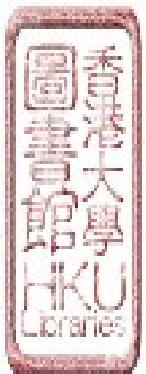
The situation in Peking University was that all the 200 questionnaires were given to a single department. Half of the students in this department major in social science, and the other half major in natural science. The survey was conducted in several seminar groups and according to the same procedures as those above. The survey was conducted at the beginning of the seminar sessions and completed within



40 minutes. Among the 200 returned questionnaires, 149 of them were completed. Response rate for the sample in Peking University is 75%.

ANALYSES

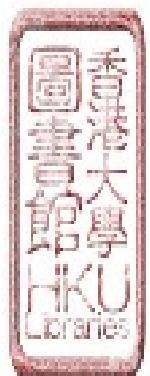
Results were analyzed through three different steps: univariate analysis, bivariate analysis and multivariate analysis. Univariate analysis including frequency distribution and percentage was performed to describe variables individually such as college stress, vision in life and psychological well-being of Chinese college students. Bivariate analysis was performed to explore the relationships between college stress and psychological well-being. Zero-order correlation was mainly used to conduct bivariate analysis. Multivariate analysis--multiple regression and difference of correlations was performed to explore the direct and the buffering effects of vision in life in the relationship between college stress and psychological well-being.



CHAPTER 8

RESULTS OF ANALYSES

This chapter presents analytical results in seven sections. The first section shows the demographic characteristics of the respondents. The second section presents re-evaluation of reliability of measures for college stress, vision in life, and psychological well-being. The third section delineates stresses experienced by Chinese college students. In this section, academic hassle, personal hassle, and negative life event of Chinese students are discussed. The fourth section examines the psychological well-being of Chinese college students. In this section, mental health status, positive and negative affect, and self-esteem are explored. The fifth section attempts to describe Chinese college students' vision of life, including life control, meaning in life, and will to meaning. Students' characteristics and relationships of measures were also discussed. The sixth section examines the possible relationship between stress and psychological well-being of Chinese college students by bivariate analysis. In this section, the relationships of academic hassle, personal hassle, negative life event, and psychological well-being are further analyzed. The final section highlights the multivariate analysis of direct effect of vision in life on psychological well-being under college stress and the buffering effect of vision in life on the relationship between college stress and psychological well-being of Chinese college students.



PROFILE OF RESPONDENTS

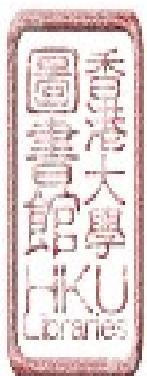
The subjects of this study were recruited from three universities in Beijing, which are Tsinghua University (32.1%), Peking University (18.9%), and Chinese Politics and Law University (49.0%). Of approximately 900 participants, 112 (12%) students did not complete the questionnaires. Thus, the valid sample size of this study was 788. The ages of the 788 participants ranged from 17 to 22 ($M = 19.6$, $SD=1.2$). Among the participants, 440 (55.8%) were male students, 348 (44.2%) were female students. Over half (52.2%) of the participants was first year students, and the other half consisted of second year students (23.1%) and the third year students (24.7%). Of the participants, 329 (41.7%) were natural science students and 459 (58.3%) were social science students. Because data were missing from the profiles of some subjects, the N for the findings reported below varies slightly from one analysis to another. This accounts for the slightly different degrees of freedom that were reported. Table 8.1 set out the profile of respondents.

Table 8.1. Profile of Respondents

($N=788$)

	Frequency	Percentage
Gender		
Female	348	44.2
Male	440	55.8
Age		
18 or below	139	17.6
19	245	31.1
20	218	27.7
21 or above	186	23.6
University		
Tsinghua University	253	32.1
Peking University	149	18.9
Chinese Politics and Law University	386	49.0
Year of Study		
First Year	411	52.2
Second Year	182	23.1
Third Year	195	24.7
Field of Study		
Natural Science	329	41.7
Social Science	459	58.3

Note: Mean age: 19.6 $SD: 1.2$



RE-EVALUATION OF RELIABILITY OF MEASURES

The questionnaire battery included one measure of college stress, one measure of vision in life, and four measures of psychological well-being. Two measures were constructed specially for this study—College Stress Scale and Vision in Life Scale which were validated in a Chinese college student sample ($N=354$) before conducting this study. The reliabilities of all the measures were re-evaluated based on the sample of the present study as tabulated in Table 8.2 below.

Table 8.2 Reliability of Measures

Measure	Cronbach α
College Stress Scale	.89
Academic Hassle	.86
Personal Hassle	.78
Negative Life Event	.76
Vision in Life Scale	.92
Life Control	.89
Positive Meaning in Life	.77
Negative Meaning in Life	.84
Will to Meaning	.78
GHQ-20	.77
GHQ-Sense of Adequacy	.66
GHQ-Depression	.60
GHQ-Anxiety	.70
Positive Affect Scale (PAS)	.35
Negative Affect Scale (NAS)	.57
Self-esteem Scale	.83



As shown in Table 8.2, both the College Stress Scale for the entire 30-item and the sub-scales, including Academic Hassle, Personal Hassle and Negative Life Event, showed good internal consistency and reliability. Reliability of the Vision in Life Scale for the entire 38-item was very satisfactory (Cronbach $\alpha = .92$) in terms of internal consistency, and the results indicated that the reliability of sub-scales, including Life Control, Positive Meaning in Life, Negative Meaning in Life and Will to Meaning was satisfactory. Reliability of GHQ-20 and GHQ-Anxiety was satisfactory in terms of internal consistency within the present sample. The reliability of GHQ-Sense of Adequacy and GHQ-Depression was satisfactory with Cronbach $\alpha = .66$ and $.60$, respectively. Reliability of Self-esteem was found to be satisfactory (Cronbach $\alpha = .83$). The reliability of Negative Affect Scale was marginally acceptable, whereas Positive Affect Scale was not satisfactory. The results reported by Positive Affect Scale (PAS) and Negative Affect Scale (NAS) would be analyzed together with the results by other measures.

COLLEGE STRESS

The purpose of this section is to present a general picture of the stresses experienced by Chinese college students covering college stress, academic hassle, personal hassle, negative life event, and effects of student characteristics on stress.

Table 8.3 presents the descriptive statistics of the measures of college stress. The mean score, conceptual mid-point, observed range, and theoretical range were all used as references for the evaluation of college stress, academic hassle, personal hassle, and negative life event for the present study.



Table 8.3 Descriptive Statistics of Measures of College Stress

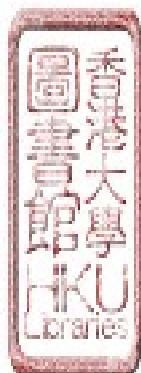
Measure	No. of Items	Mean	SD	Conceptual Mid-point	Observed Range	Theoretical Range
College Stress	30	28.25	11.81	45	1-72	0-90
Academic Hassle	10	10.83	5.43	15	0-30	0-30
Personal Hassle	16	14.30	6.29	24	1-38	0-48
Negative Life Event	4	3.14	2.63	6	0-12	0-12

College Stress

As shown in Table 8.3 above, most of the reported college stress was lower than moderate intensity level. Taking the conceptual mid-point of 45 as a reference point for evaluation, the mean score of 28.25 with a $SD = 11.81$ was much lower than the conceptual mid-point. Based on frequency distribution, less than ten percent (8.3%) of the respondents were considered to exhibit high college stress as shown in Table 8.4.

Table 8.4 Frequency Distribution of College Stress ($N = 773$)

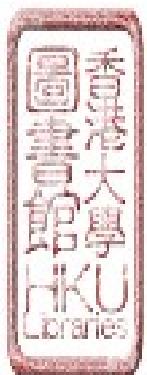
Raw Score	c%						
1	.1	18	19.9	34	73.4	50	95.1
3	.3	19	22.9	35	75.5	51	95.9
4	.4	20	25.9	36	78.1	52	96.5
5	.6	21	30.0	37	79.7	53	97.3
6	1.3	22	33.1	38	81.4	54	97.5
7	1.7	23	37.4	39	83.4	55	97.7
8	2.8	24	41.0	40	84.5	56	98.2
9	3.8	25	44.2	41	86.4	57	98.3
10	5.2	26	47.2	42	87.8	58	98.4
11	7.1	27	51.6	43	88.9	59	98.6
12	8.0	28	55.6	44	90.6	60	99.1
13	9.6	29	58.6	45	91.7	61	99.4
14	10.9	30	62.2	46	92.1	63	99.6
15	13.1	31	66.0	47	92.4	65	99.7
16	14.6	32	69.1	48	93.0	67	99.9
17	17.1	33	71.0	49	94.4	72	100.0



For further exploration of college stress, Table 8.5 summarizes the frequency distribution and the mean scale values of college stress (0 = not at all, 1 = low, 2 = moderate, 3 = high). The stress items were presented in the order of mean scale values. In the following descriptions of academic hassle, personal hassle, and negative life event, the stress items would also be presented in the order of the mean scale values.

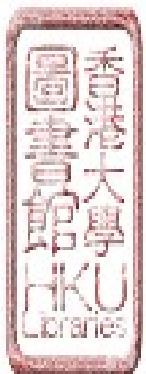
Table 8.5 Frequency and Intensity of College Stress ($N = 788$)

Rank	Stress	Not at all to Low	Moderate to High	Scale Value	
		%	%	Mean	SD
1	Worries not being taught/educated properly	45.7	54.3	1.63	.84
2	Low learning efficiency	56.9	43.1	1.43	.85
3	Classmates competition (academic)	57.2	42.8	1.42	.79
4	Examination pressure	57.2	42.8	1.41	.83
5	Academic ranking	65.6	34.4	1.23	.85
6	Low grades in general	67.8	32.2	1.20	.84
7	Low grades on certain subjects	73.1	26.9	1.11	.89
8	Inadequate social skills	71.8	28.2	1.11	.82
9	Temptations from social environment	78.7	21.3	1.02	.81
10	Difficulty in discussing academic problems	75.3	24.7	1.02	.76
11	Losing face in public	77.4	22.6	.98	.86
12	Lack of inter-personal communication	76.9	23.1	.96	.88
13	Noisy dormitories	77.8	22.2	.95	.87
14	Being told off in public	76.9	23.1	.94	.90
15	Not being loved	76.1	23.9	.94	.86
16	Felt ignored	82.9	17.1	.90	.76
17	Dissatisfied with own physical appearance	85.9	14.1	.83	.70
18	Unsatisfactory family financial situation	82.5	17.5	.81	.83
19	Problems related to adulthood/adolescence	85.3	14.7	.80	.75
20	Lagging behind academically	84.8	15.2	.80	.77
21	Health problems	84.0	16.0	.79	.78
22	Low independent capability	83.1	16.9	.76	.78
23	Unsatisfactory living condition	84.5	15.5	.76	.85
24	Personal problems	87.9	12.1	.74	.71
25	Too much homework	85.4	14.6	.72	.78
26	No girl/boy friend	87.8	12.2	.66	.84
27	Failed in an examination	85.3	14.7	.66	.81
28	Comparisons with classmates (non-academic)	90.6	9.4	.63	.68
29	Failed in more than two examinations	84.4	15.6	.57	.88
30	Too many tests	90.9	9.1	.52	.72



As shown in Table 8.5, the stress items most frequently reported by respondents were “worries not being taught/educated properly”, “low learning efficiency”, “classmates competition (academic)” and “examination pressure”. In contrast, the least common stress items were “too many tests”, “comparison with classmates (non-academic)”, “personal problems”, and “not being loved”.

Table 8.5 also presents the ranks of stress intensity based on mean scale values. The four major stress groups are described below. The first group, the most intense stress level of 1-3 group, was labeled as ‘without solid knowledge’. Included in this group were “worries not being taught/educated properly”, “low learning efficiency”, and “classmates competition (academic)”. All of them related to real capabilities. The second group, with a stress level of 4-7, was labeled as academic pressures. Included in this group were “examination pressure”, “academic ranking”, “low grades in general”, and “low grades on certain subjects”. The third group, with a stress level of 8-12, was labeled as social pressure. Included in this group were “inadequate social skills”, “difficulty in discussing academic problems”, “temptations from social environment”, “losing face in public”, and “lack of inter-personal communication”. The fourth group, the least stress level group, was labeled as personal hassles. Included in this group were “comparison with classmates (non-academic)”, “personal problems” and “not being loved”. Some other items were at the bottom of list, because they have seldom happened such as “failure in more than two examinations”, “too many homework” and “too many tests”.



Academic Hassle

Based on Table 8.3, most reported academic hassles were not high intensity stress. As shown in Table 8.3, taking conceptual mid-point of 15 as a reference point for evaluation, then the mean scale value of 10.83 with a $SD = 5.43$ was much lower than the conceptual mid-point. Based on frequency distribution, 18.2% of the respondents were considered to exhibit high academic stress (see Table 8.6).

Table 8.6 Frequency Distribution of Academic Hassle ($N = 785$)

Raw Score	C%	Raw Score	c%
0	.8	16	86.4
1	1.9	17	89.0
2	3.4	18	91.1
3	7.5	19	92.0
4	12.6	20	93.5
5	17.7	21	95.0
6	20.8	22	97.1
7	25.9	23	97.8
8	33.9	24	98.2
9	43.7	25	98.9
10	52.2	26	99.4
11	60.6	27	99.5
12	65.6	28	99.6
13	72.4	29	99.9
14	78.5	30	100.0
15	81.8		

Table 8.7 summarizes the frequency and the intensity of academic hassles. As shown in Table 8.7, the academic hassle items reported most frequently by the respondents were “low learning efficiency”, “classmates competition (academic)”,



Table 8.7 Frequency and Intensity of Academic Hassle *(N = 788)*

Rank	Academic Hassle	Not at all to Low		Moderate to High	Scale Value	
		%	%	Mean	SD	
1	Low learning efficiency	56.9	43.1	1.43	.85	
2	Classmates competition (academic)	57.2	42.8	1.42	.79	
3	Examination pressure	57.2	42.8	1.41	.83	
4	Academic ranking	65.6	34.4	1.23	.85	
5	Low grades in general	67.8	32.2	1.20	.84	
6	Low grades on certain subjects	73.1	26.9	1.11	.89	
7	Difficulty in discussing academic problems	75.3	24.7	1.02	.81	
8	Lagging behind academically	84.8	15.2	.80	.77	
9	Too much homework	85.4	14.6	.72	.78	
10	Too many tests	90.9	9.1	.52	.72	

and "examination pressure". In contrast, the least common academic hassle items were "lagging behind academically", "too much homework", and "too many tests". With regard to the intensity of each of the academic hassles, the conceptual mid-point of 1.5 was used as a reference point for evaluation, then none of the item has a mean score reaching the conceptual mid-point. Thus, all of the academic hassles were not high intensity stress.

Personal Hassle

As shown in Table 8.3, taking the conceptual mid-point of 24 as a reference point for evaluation, the mean score of 14.3 was much lower than the conceptual mid-point. It was suggested that most reported personal hassles were not high intensity stress. Based on frequency distribution, less than ten percent (7.1%) of the respondents were considered to exhibit high personal stress (see Table 8.8).



Table 8.8 Frequency Distribution of Personal Hassle (N = 779)

Raw Score	C%	Raw Score	c%
1	.4	19	81.9
2	.9	20	84.1
3	1.7	21	87.8
4	3.0	22	90.1
5	6.4	23	92.0
6	10.3	24	92.9
7	13.5	25	94.0
8	16.7	26	94.7
9	22.2	27	95.5
10	27.2	28	96.8
11	34.3	29	97.9
12	41.3	30	98.2
13	50.1	31	98.8
14	55.7	32	99.4
15	62.9	34	99.5
16	69.2	35	99.6
17	73.7	36	99.9
18	77.8	38	100.0

Table 8.9 shows the frequency and intensity of personal hassle. As shown in Table 8.9, the personal hassle items reported most frequently by the students were “worries not being taught/educated properly”, “inadequate social skills”, “not being loved”, and “lack of inter-personal communication”. In comparison, the least common personal hassles were “comparisons with classmates (non-academic)”, “personal problems”, and “no girl/boy friend”. With regard to the intensity of each of the personal hassles, if the conceptual mid-point of 1.5 was used as a reference point for evaluation, then only one item reached the mid-point. It was thus suggested that most of the reported personal hassles were not high intensity stress.



Table 8.9 Frequency and Intensity of Personal Hassle (N = 788)

Rank	Personal Hassle	Not at all to Low	Moderate to High	Scale Value	
		%	%	Mean	SD
1	Worries not being taught/educated properly	45.7	54.3	1.63	.84
2	Inadequate social skills	71.8	28.2	1.11	.82
3	Temptations from social environment	78.7	21.3	1.02	.76
4	Lack of inter-personal communication	76.9	23.1	.96	.88
5	Noisy dormitory	77.8	22.2	.95	.87
6	Not being loved	76.1	23.9	.94	.90
7	Felt ignored	82.9	17.1	.90	.76
8	Dissatisfied with own physical appearance	85.9	14.1	.83	.70
9	Unsatisfactory family financial situation	82.5	17.5	.81	.83
10	Problems related to adulthood/adolescence	85.3	14.7	.80	.75
11	Health problems	84.0	16.0	.79	.78
12	Low independent capability	83.1	16.9	.76	.78
13	Unsatisfactory living condition	84.5	15.5	.76	.85
14	Personal problems	87.9	12.1	.74	.71
15	No girl/boy friend	87.8	12.2	.66	.81
16	Comparisons with classmates (non-academic)	90.6	9.4	.63	.68

Negative Life Event

Compared with the measures of academic hassle and personal hassle, the measure of negative life event contains the least items—4 items only. According to the descriptive statistics showed in Table 8.3, the conceptual mid-point was 6 and the mean scale value was 3.14, which suggested that most reported negative life event was not high intensity stress. Based on frequency distribution, slightly more than ten percent (11.1%) of the respondents reported high stress in respect of negative life event (see Table 8.10). Table 8.11 shows the frequency and intensity of negative life event.

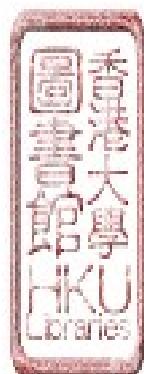


Table 8.10 Frequency Distribution of Negative Life Event ($N = 784$)

Raw Score	c%	Raw Score	c%
0	19.1	7	92.2
1	30.6	8	95.4
2	47.8	9	97.6
3	57.0	10	98.7
4	76.7	11	99.5
5	82.5	12	100.0
6	88.9		

Table 8.11 Frequency and Intensity of Negative Life Event ($N = 788$)

Rank	Negative Life Event	Not at all to Low	Moderate to High	Scale Value	
		%	%	Mean	SD
1	Losing face in public	77.4	22.6	.98	.86
2	Being told off in public	76.9	23.1	.94	.86
3	Failed in an examination	85.3	14.7	.66	.84
4	Failed in more than two examinations	84.4	15.6	.57	.88

As shown in Table 8.11, “losing face in public” and “being told off in public” were both more frequent and more intense than failure in examinations. However, when the conceptual mid-point of 1.5 was taken into account, all the four events were considered low stress.

Student Characteristics and Stress

This section focuses on gender and stress, field of study and stress, and year of study and stress. One-way ANOVA test was adopted for conducting the analyses.



Moreover, Post Hoc Comparison was specially used in this analysis. Because of missing data, the N for the findings reported below vary slightly from analysis to analysis.

a. Gender

Table 8.12 shows the gender difference of college stress. One important finding was that gender difference was very significant on all the measures of college stress, and male students reported more stresses on all the measures of college stress than female students. A further analysis of gender difference in concrete stress items was shown in Appendix VII.

Table 8.12 Gender Difference in College Stress

Stress	<i>Male</i> ^a	<i>Female</i> ^b	<i>F</i>
	<i>M (SD)</i>	<i>M (SD)</i>	
College Stress	29.98 (11.68)	26.05 (11.61)	21.67***
Academic Hassle	11.44 (5.36)	10.07 (5.43)	12.61***
Personal Hassle	15.16 (6.18)	13.21 (6.27)	18.97***
Negative Life Event	3.41 (2.59)	2.80 (2.65)	10.53**

** $p < .01$ *** $p < .001$ (two-tailed)

^a $N = 432-440$

^b $N = 341-348$

b. Field of Study

Table 8.13 shows the field of study difference of college stress. One important finding was that the difference of field of study was very significant on all the measures of college stress except on negative life event. Natural science students reported more stresses on all the measures of college stress except on negative life event than social science students. A further analysis of field of study difference on concrete stress items was shown in Appendix VIII.

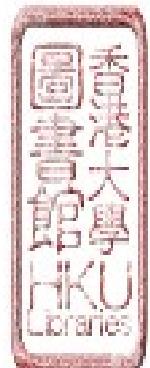


Table 8.13 Difference of Field of Study in College Stress

Stress	Natural Science ^a	Social Science ^b	<i>F</i>
	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)	
College Stress	30.86 (10.77)	26.36 (12.16)	28.36***
Academic Hassle	12.29 (5.24)	9.80 (5.32)	42.27***
Personal Hassle	15.32 (5.73)	13.57 (6.58)	14.82***
Negative Life Event	3.32 (2.32)	3.01 (2.83)	2.59

****p* <.001 (two-tailed) ^a*N* = 324-328 ^b*N* = 449-458

c. Year of Study

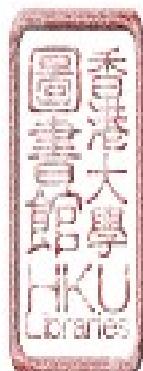
Table 8.14 shows the year of study difference of college stress. Two important findings were shown. First, the difference of year of study was very significant on all the measures of college stress except on negative life event, and the difference only existed between first year and second year, as well as between first year and third year. Second, second year students reported the highest stress on all the measures except on negative life event. A further analysis of the difference of year of study in concrete stress items was shown in Appendix IX.

Table 8.14 Difference of Year of Study in College Stress

Stress	First Year ^b	Second Year ^c	Third Year ^d	<i>F</i>
	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)	
College Stress	26.42 (12.09)	30.98 (11.76)	29.55 (10.57)	11.07 ^a
Academic Hassle	10.07 (5.33)	12.04 (5.57)	11.32 (5.26)	9.58 ^a
Personal Hassle	13.31 (6.45)	15.72 (6.49)	15.07 (5.38)	11.30 ^a
Negative Life Event	3.08 (2.79)	3.25 (2.50)	3.15 (2.41)	.25

^a *p* <.05 between 1st year and 2nd year, also between 1st year and 3rd year (two-tailed)

^b *N* = 403-410 ^c *N* = 178-182 ^d *N* = 192-194



Relationship among Measures of College Stress

Table 8.15 shows the inter-correlations among measures of college stress based on the sample of the current study. This was a further examination of the relationship among measures of college stress after the one based on another sample (the validation sample of 354 college student, see Chapter 6).

Table 8.15 Inter-Correlations among Measures of College Stress

Measure	Academic Hassle	Personal Hassle	Negative Life Event
College Stress	.86**	.88**	.60**
Academic Hassle		.58**	.40**
Personal Hassle			.36**

** $p < .01$ (two-tailed)

As shown in Table 8.15, the inter-correlations among sub-scales of college stress ranged from $r = .36$ to $r = .58$. The inter-correlations among sub-scales of college stress ranged from $r = .43$ to $r = .57$ for the validation sample (354 college students, see Chapter 6). These findings together showed that the different components of stress are independent of each other to some extent. The correlations between total College Stress Scale and the sub-scales ranged from $r = .60$ to $.88$. It suggested that the sub-scales have moderate to high correlations with the total scale. The correlations between measures of college stress and measures of psychological well-being are shown in Table 8.16.

As shown in Table 8.16, both college stress and its components were moderately associated with the three dependent variables (except PAS), though the correlation scores were different to some extent. This finding was similar to that

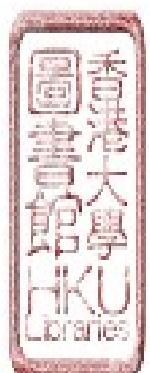


Table 8.16 Relationship of College Stress and Criterion Measures

Predictor	Dependent Measure			
	GHQ-20	PAS	NAS	Self-esteem
College Stress	.42**	-.07*	.35**	-.37**
Academic Hassle	.38**	-.03	.25**	-.36**
Personal Hassle	.39**	-.11**	.35**	-.31**
Negative Life Event	.17**	-.01	.21**	-.17**

* $p < .05$ ** $p < .01$ (one-tailed)

based on our validation sample ($N=354$). In that study, it was shown that all the predictors were moderately or strongly related to the dependent variables (see Chapter 6). Thus, these predictors could be adopted either individually or collectively depending on different situations. For the present study, in order to understand the impacts of college stress as well as its individual components on psychological well-being, all predictors were adopted.

PSYCHOLOGICAL WELL-BEING

The purpose of this section was to delineate psychological well-being status of Chinese college students. Psychological well-being was analyzed in terms of mental health status, positive and negative affect, and self-esteem. Student characteristics and psychological well-being were also taken into account.

Before conducting the analyses of different aspects of psychological well-being, the descriptive statistics of measures of psychological well-being were presented, and they would be used as references for the evaluation of psychological well-being of college students. Moreover, conceptual mid-point was used as a cutoff score



between low and high psychological well-being. The descriptive statistics are shown in Table 8.17. Because of missing data, the N for the findings reported below vary slightly from analysis to analysis.

Table 8.17 Descriptive Statistics of Measures of Psychological Well-being

Measure	No. of Items	<i>Mean</i>	<i>SD</i>	Conceptual Mid-point	Observed Range	Theoretical Range
GHQ-20	20	6.17	3.87	10	0-19	0-20
GHQ-Sense of Adequacy	9	3.91	2.35	4.5	0-9	0-9
GHQ-Depression	6	0.83	1.14	3	0-6	0-6
GHQ-Anxiety	5	1.44	1.50	2.5	0-5	0-5
Positive Affect Scale	5	2.57	1.11	2.5	0-5	0-5
Negative Affect Scale	5	1.52	1.35	2.5	0-5	0-5
Self-esteem	10	28.73	4.48	25	10-40	1-40

Mental Health Status

Mental health status of college students was delineated in terms of general mental health, sense of adequacy, depression, and anxiety, and the comparison measures were GHQ-20, GHQ-Sense of Adequacy, GHQ-Depression, and GHQ-Anxiety.

a. General Mental Health Status

As shown in Table 8.17, the mean score of the GHQ-20 was 6.17 with a $SD = 3.87$, which was lower than the conceptual mid-point of 10. It suggested that most reported general mental health problems were low rather than high. Based on frequency distribution of mental health status, slightly more than 15% of the respondents were considered to have greater incidents of general mental health problems (see Table 8.18).

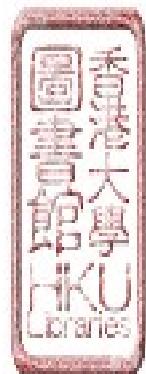


Table 8.18 Frequency Distribution of Mental Health Status (N = 785)

Raw Score	c%	Raw Score	c%
0	2.4	10	84.6
1	9.3	11	89.3
2	19.2	12	92.6
3	28.8	13	95.3
4	37.1	14	97.2
5	49.2	15	98.3
6	59.5	16	99.1
7	66.4	17	99.4
8	75.0	18	99.6
9	80.5	19	100.0

b. Sense of Adequacy

As shown in Table 8.17, the mean score of GHQ-Sense of Adequacy was 3.91 and the conceptual mid-point was 4.5. This finding suggested that most reported GHQ-Sense of Adequacy was low rather than high. Based on frequency distribution, approximately 70% of the respondents were considered to show low sense of adequacy (see Table 8.19).

Table 8.19 Frequency Distribution of GHQ-Sense of Adequacy (N = 787)

Raw Score	c%	Raw Score	c%
0	5.6	5	75.6
1	17.5	6	85.9
2	30.5	7	92.0
3	45.2	8	97.1
4	60.9	9	100.0



c. Depression

The mean score of depression (0.83) was much lower than the conceptual mid-point of 3 as shown in Table 8.17. Based on the frequency distribution of depression, slightly more than 5% of the respondents were considered to exhibit high depression. Table 8.20 shows the depression in details.

Table 8.20 Frequency Distribution of GHQ-Depression ($N = 786$)

Raw Score	C%
0	47.6
1	84.4
2	92.4
3	95.5
4	98.6
5	100.0

d. Anxiety

As shown in Table 8.17, the mean score of anxiety was 1.44 with a $SD = 1.50$. When the conceptual mid-point of 2.5 was taken into account, it was found that approximately 20% of the respondents were considered to exhibit high anxiety. Table 8.21 shows the more detailed description of anxiety.

Table 8.21 Cumulative Percentage of GHQ-Anxiety ($N = 788$)

Raw Score	C%
0	37.6
1	58.8
2	76.5
3	88.3
4	94.8
5	100.0



Positive and Negative Affect

As shown in Table 8.17, the mean score of positive affect was 2.57 with a $SD = 1.11$. Taking the conceptual mid-point of 2.5 as a reference point for evaluation, approximately 40% of the respondents were considered to present low positive affect, whereas, about 20% to show high positive affect. Approximately 40% were considered to have exhibited mid level of positive affect. Regarding the negative affect, the mean score was 1.52 and the $SD = 1.35$. Using the conceptual mid-point of 2.5 as an evaluation point, more than 75% of the respondents showed low negative affect, whereas more than 10% of the respondents showed high negative affect. Approximately 15% showed mid level of negative affect. Table 8.22 shows a more detailed description of both positive and negative affects.

Table 8.22 Frequency Distribution of Positive and Negative Affect ($N = 787$)

Raw Score	Positive Affect		Negative Affect	
	c %	c%	c %	c%
0	4.8		27.5	
1	17.0		55.2	
2	41.4		77.2	
3	80.8		90.4	
4	98.2		97.2	
5	100.0		100.0	

Self-esteem

The mean score of self-esteem was 28.73 with a $SD = 4.48$, and the conceptual mid-point was 25 (Table 8.17). Based on the frequency distribution, approximately 20% of the respondents were considered to have exhibited low self-esteem, whereas



80% of the respondents exhibited high self-esteem. The detailed description is shown in Table 8.23.

Table 8.23 Frequency Distribution of Self-esteem (N = 781)

Raw Score	c%	Raw Score	c%
10	.1	27	37.8
12	.3	28	48.3
13	.4	29	60.2
15	.5	30	68.9
16	.9	31	76.3
17	1.0	32	80.9
18	1.5	33	85.7
19	1.8	34	88.9
20	3.6	35	92.1
21	4.6	36	94.5
22	7.0	37	97.2
23	10.5	38	98.5
24	15.7	39	99.5
25	21.3	40	100.0
26	28.7		

Student Characteristics and Psychological Well-being

Analyses of student characteristics and psychological well-being included gender and psychological well-being, field of study and psychological well-being, and year of study and psychological well-being. One-way ANOVA test was adopted for conducting these analyses. Because of missing data, the N for the findings reported below vary slightly from analysis to analysis.

a. Gender

Table 8.24 shows the gender difference on psychological well-being. The results suggested that there was no significant gender difference on all the measures of psychological well-being.

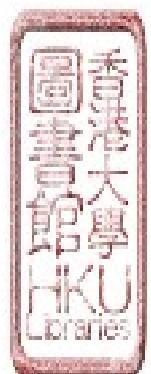


Table 8.24 Gender Difference in Psychological Well-being

Psychological Well-being	Male ^a	Female ^b	<i>F</i>
	<i>M</i> (<i>S D</i>)	<i>M</i> (<i>S D</i>)	
GHQ-20	6.33 (3.92)	5.98 (3.80)	1.58
GHQ-Sense of Adequacy	3.95 (2.42)	3.86 (2.25)	.29
GHQ-Depression	.89 (1.23)	.75 (1.02)	2.85
GHQ-Anxiety	1.50 (1.50)	1.37 (1.50)	1.46
Positive Affect Scale	2.59 (1.08)	2.56 (1.14)	.12
Negative Affect Scale	1.57 (1.40)	1.47 (1.28)	1.07
Self-esteem	28.74 (4.56)	28.72 (4.38)	.00

^a N = 435-440

^b N = 346-348

b. Field of Study

Table 8.25 shows the field of study difference of psychological well-being, and two important findings were reported.

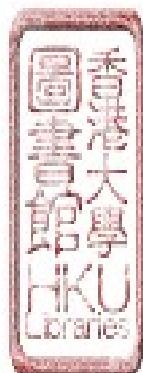
Table 8.25 Difference of Field of Study in Psychological Well-being

Psychological Well-being	Natural Science ^a	Social Science ^b	<i>F</i>
	<i>M</i> (<i>S D</i>)	<i>M</i> (<i>S D</i>)	
GHQ-20	6.41 (4.12)	6.00 (3.67)	2.12
GHQ-Sense of Adequacy	3.89 (2.46)	3.93 (2.26)	.06
GHQ-Depression	1.01 (1.34)	.70 (.95)	14.14***
GHQ-Anxiety	1.53 (1.56)	1.37 (1.37)	2.11
Positive Affect Scale	2.59 (1.13)	2.57 (1.10)	.03
Negative Affect Scale	1.54 (1.43)	1.51 (1.29)	.12
Self-esteem	28.08 (4.46)	29.73 (4.44)	12.00***

*** *p* < .001 (two-tailed)

^a N = 325-329

^b N = 456-459



First, the difference of field of study was very significant on depression, and depression score of students in natural sciences field was significantly higher than that of students in social sciences. Second, difference of study field was very significant on self-esteem, and self-esteem score of student in social science was significantly higher than that of students in natural science. Difference of study field was not significant on other measures.

c. Year of Study

Table 8.26 shows the difference of year of study in psychological well-being. One important finding was that the second year students reported as more depressed than the first year students. The difference of year of study was insignificant on other aspects of psychological well-being.

Table 8.26 Difference of Year of Study in Psychological Well-being

Psychological Well-being	First Year ^b	Second Year ^c	Third Year ^d	F
				M (SD)
GHQ-20	6.06 (3.67)	6.31 (4.07)	6.29 (4.09)	.39
GHQ-Sense of Adequacy	4.02 (2.23)	3.75 (2.28)	3.84 (2.63)	.95
GHQ-Depression	.70 (.94)	1.05 (1.14)	.91(1.18)	6.75 ^a
GHQ-Anxiety	1.35 (1.46)	1.51 (1.50)	1.58 (1.57)	1.84
Positive Affect Scale	2.56 (1.08)	2.68 (1.10)	2.51 (1.18)	1.19
Negative Affect Scale	1.53 (1.29)	1.58 (1.36)	1.47 (1.45)	.29
Self-esteem	28.97 (4.32)	28.45 (4.69)	28.48 (4.70)	1.26

^a $p < .05$ between first and second year (two-tailed)

^b $N = 404-410$ ^c $N = 178-182$ ^d $N = 185-195$



Relationships among Measures of Psychological Well-being

In conclusion, the correlations among the different measures of psychological well-being are presented in Table 8.27. These results would be useful to further understand the different results reported by different measures.

Table 8.27 Correlations among Measures of Psychological Well-being

Psychological Well-being	GHQ-Sense of Adequacy	GHQ-Depression	GHQ-Anxiety	Positive Affect Scale	Negative Affect Scale	Self-esteem
GHQ-20	.86**	.65**	.75**	-.29**	.66**	-.54**
GHQ-Sense of Adequacy		-.32**	-.39**	.32**	-.52**	.46**
GHQ-Depression			.41**	-.18**	.43**	-.40**
GHQ-Anxiety				-.10**	.55**	-.37**
Positive Affect Scale					-.15**	.26**
Negative Affect Scale						-.42**

** $p < .01$ (one-tailed)

VISION IN LIFE

The purpose of this section is to describe vision in life of Chinese college students, including vision in life, life control, meaning in life and will to meaning. Student characteristics and relationships among different measures were also taken into account. The descriptive statistics of different measures of vision in life are shown in Table 8.28, and these results were used as references for the evaluation of vision in life. Because of missing data, the N for the findings reported below vary slightly from analysis to analysis.



Table 8.28 Descriptive Statistics of Measures of Vision in Life

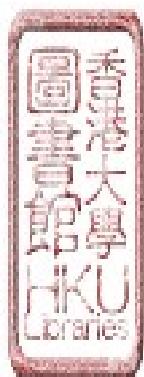
Measure	No. of Items	Mean	SD	Conceptual Mid-point	Observed Range	Theoretical Range
Vision in Life	38	112.81	14.21	95	45-152	1-152
Life Control	13	38.09	6.46	32.5	13-52	1-52
Positive Meaning in Life	8	24.22	4.14	20	8-32	1-32
Negative Meaning in Life	9	19.49	4.07	22.5	9-36	1-36
Will to Meaning	8	25.07	3.82	20	8-32	1-32

Vision in Life

According to Table 8.28, the mean score of vision in life was 112.81 and the $SD = 14.21$. If the conceptual mid-point of 95 was treated as a reference point for evaluation, slightly less than ten percent (9.5%) of the respondents were considered to exhibit low vision in life, whereas slightly more than 90% of the respondents exhibited high vision in life (see Table 8.29).

Table 8.29 Frequency Distribution of Vision in Life ($N = 767$)

Raw Score	c%	Raw Score	C%	Raw Score	c%	Raw Score	c%
45	.1	93	7.2	112	47.1	131	91.3
50	.3	94	8.6	113	51.8	132	92.0
52	.4	95	9.5	114	55.8	133	93.1
53	.5	96	10.7	115	59.1	134	93.9
67	.7	97	11.3	116	61.7	135	94.5
71	.9	98	13.0	117	64.5	136	95.7
73	1.2	99	14.7	119	67.5	137	96.1
75	1.3	100	16.8	119	69.8	138	96.6
76	1.4	101	19.3	120	71.6	139	97.0
77	1.6	102	20.9	121	74.2	140	97.7
84	2.2	103	23.9	122	75.6	141	98.4
85	2.6	104	26.2	123	78.4	142	98.7
86	3.0	105	28.4	124	80.1	143	99.0
87	3.4	106	31.3	125	82.0	145	99.2
88	3.7	107	33.5	126	84.4	147	99.3
89	4.4	108	36.6	127	85.8	149	99.6
90	5.2	109	39.0	128	88.0	150	99.7
91	6.1	110	41.6	129	88.9	151	99.9
92	6.4	111	44.9	130	89.8	152	100.0



In the following evaluations of life control, positive meaning in life, negative meaning in life and will to meaning, the conceptual mid-point was adopted as the reference point.

Life Control

According to Table 8.28, the mean score of life control was 38.09, and the $SD = 6.46$, which was higher than the conceptual mid-point of 32.5. Based on Table 8.30, approximately 20% of the respondents were considered to have exhibited low sense of life control, whereas approximately 80% of the respondents exhibited high sense of life control.

Table 8.30 Frequency Distribution of Life Control ($N = 780$)

Raw Score	c%	Raw Score	c%	Raw Score	c%	Raw Score	c%
18	.6	28	6.5	37	42.7	46	90.6
19	.8	29	8.5	38	48.8	47	93.7
20	1.0	30	11.4	39	56.7	48	95.8
21	1.5	31	14.2	40	64.1	49	97.3
23	2.1	32	17.6	41	70.1	50	98.1
24	2.7	33	23.5	42	76.4	51	98.6
25	3.3	34	27.7	43	80.5	52	100.0
26	4.4	35	32.9	44	83.8		
27	5.5	36	38.1	45	87.6		

Meaning in Life

a. Positive meaning in life

The mean score of positive meaning in life was 24.22 with a $SD = 4.14$, which was higher than the conceptual mid-point of 20. Based on Table 8.31, approximate 15% of the respondents were considered to exhibit low positive meaning in life, whereas approximate 85% of the respondents showed high positive meaning in life.

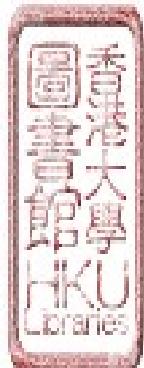


Table 8.31 Frequency Distribution of Positive Meaning in Life ($N = 786$)

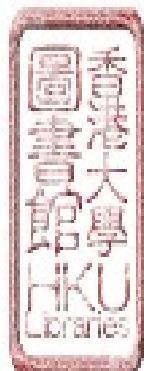
Raw Score	c%	Raw Score	c%
13	1.7	23	40.1
14	1.9	24	56.2
15	2.5	25	65.6
16	3.6	26	72.6
17	5.3	27	78.2
18	7.4	28	83.2
19	9.5	29	88.5
20	15.4	30	92.6
21	22.5	31	95.9
22	31.7	32	100.0

b. Negative meaning in life

The mean score of negative meaning in life was 19.49 with a $SD = 4.07$ as shown in Table 8.28, which was lower than the conceptual mid-point of 22.5. Based on Table 8.32, approximately 20% of the respondents were considered to show high negative meaning in life, whereas 80% showed low negative meaning in life.

Table 8.32 Frequency Distribution of Negative Meaning in Life ($N = 781$)

Raw Score	c%	Raw Score	c%
9	1.0	22	81.2
10	1.5	23	87.5
11	2.3	24	91.4
12	3.6	25	94.1
13	7.3	26	96.0
14	10.2	27	96.8
15	15.4	28	97.6
16	20.5	29	98.3
17	28.6	30	99.1
18	38.3	33	99.2
19	51.5	34	99.4
20	62.1	36	100.0
21	72.6		



Will to Meaning

The mean score of will to meaning was 25.07 with a $SD = 3.82$, which was higher than the conceptual mid-point of 20. Based on Table 8.33, slightly more than ten percent (10.7%) of the respondents were exhibiting low will to meaning, whereas slightly less than 90% of the respondents were exhibiting high will to meaning.

Table 8.33 Frequency Distribution of Will to Meaning ($N = 784$)

Raw Score	c%	Raw Score	c%
13	.5	24	45.0
14	.9	25	54.3
15	1.4	26	65.9
16	2.2	27	73.7
17	2.9	28	81.0
18	3.7	29	86.6
19	5.9	30	91.8
20	10.7	31	95.9
21	16.2	32	99.7
22	22.4	34	99.9
23	32.1	43	100.0

Student Characteristics and Vision in Life

Student characteristics were described based on gender, field of study, and year of study, the analyses of student characteristics and vision in life were in line with such characteristics. One-way ANOVA test was performed to conduct these analyses. Moreover, Post Hoc Comparison was specially used in this analysis. Because of missing data, the N for the findings reported below vary slightly from analysis to analysis.



a. Gender

Table 8.34 summarizes the gender difference of vision in life. Two significant findings were shown in the table. First, male students reported stronger sense of negative meaning in life. Table 8.34 shows that mean score of male was higher than that of female, and the difference between them was very significant. It suggested that male student' sense of negative meaning in life was stronger than that of female students. Second, female students had stronger will to meaning in life than had male students. As shown in Table 8.34, gender difference was very significant on will to meaning, and the mean score of female was higher than that of male.

Table 8.34 Gender Difference in Vision in Life

Vision in Life	Male ^a	Female ^b	F
	<i>M (SD)</i>	<i>M (SD)</i>	
Vision in Life	112.23 (14.78)	113.54 (13.46)	1.07
Life Control	38.30 (6.71)	37.82 (6.14)	1.62
Positive Meaning in Life	24.07 (4.21)	24.41 (4.09)	1.29
Negative Meaning in Life	19.85 (4.23)	18.99 (3.81)	8.58**
Will to Meaning	24.82 (4.18)	25.39 (3.59)	4.37**

** $p < .01$ (two-tailed)

^a $N = 426-438$

^b $N = 341-348$

b. Field of Study

Table 8.35 shows the difference of field of study, and three significant findings were reported. First, social science students showed stronger vision in life than natural science students. Second, natural science students reported stronger sense of negative meaning in life than social science students, and the difference between

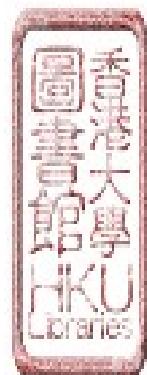


Table 8.35 Difference of Field of Study in Vision in Life

Vision in Life	Natural Science ^a	Social Science ^b	<i>F</i>
	<i>M (SD)</i>	<i>M (SD)</i>	
Vision in Life	111.00 (14.75)	114.10 (13.69)	8.96**
Life Control	38.03 (6.74)	38.13 (6.26)	.05
Positive Meaning in Life	23.89 (4.26)	24.46 (4.04)	3.60
Negative Meaning in Life	20.12 (4.18)	19.06 (3.94)	12.93***
Will to Meaning	24.36 (4.02)	25.94 (3.94)	20.31***

** $p < .01$ *** $p < .001$ (two-tailed) ^a $N = 319-329$ ^b $N = 448-458$

them was very significant. Third, social science students presented stronger sense of will to meaning than natural science students.

c. Year of Study

Table 8.36 shows the difference of year of study in vision in life, and three significant findings were presented. First, first year students' vision in life was significantly higher than that of second year. Second, first year students had stronger sense of will to meaning than that of both the second and the third year students. Third, both the second and the third year students possessed stronger sense of negative meaning in life than that of the first year. It means that first year students possessed weaker sense of negative meaning in life than the other students.



Table 8.36 Difference of Year of Study in Vision in Life

Vision in Life	First Year ^c	Second Year ^d	Third Year ^e	<i>F</i>
	<i>M</i> (<i>S D</i>)	<i>M</i> (<i>S D</i>)	<i>M</i> (<i>S D</i>)	
Vision in Life	113.79(13.04)	110.84(15.40)	112.57(15.32)	2.70 ^a
Life Control	38.14 (5.93)	37.51(7.02)	38.54 (6.97)	.1.21
Positive Meaning in Life	24.29 (3.99)	24.06 (4.33)	24.22 (4.28)	.21
Negative Meaning in Life	19.10 (3.79)	20.19 (4.19)	19.58 (4.44)	3.05 ^a
Will to Meaning	25.51 (3.52)	24.54 (3.95)	24.65 (4.19)	5.67 ^b

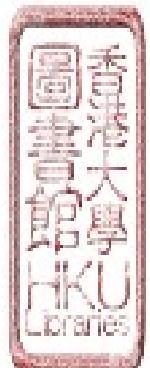
^a $p < .05$ between 1st and 2nd year ^b $p < .05$ between 1st year and 2nd year, also between1st year and 3rd year (two-tailed) ^c $N = 404-410$ ^d $N = 178-182$ ^e $N = 192-194$

Relationship among Measures of Vision in Life

The inter-correlations among different components of vision in life on the sample of 354 college students ranged from $r = .22$ to $r = .47$. This range of correlation revealed that the different components of vision in life independent to each other to some extent. Table 8.37 shows the results of the relationships among the measures of vision in life based on the present sample.

Table 8.37 Correlations among Different Measures of Vision in Life

	Life Control	Positive Meaning in Life	Negative Meaning in Life	Will to Meaning
Vision in Life	.85**	.72**	-.76**	.69**
Life Control		.41**	-.51**	.44**
Positive Meaning in Life			-.43**	.44**
Negative Meaning in Life				-.32**

** $p < .01$ (one-tailed)

As shown in Table 8.37, the inter-correlations among different components of vision in life ranged from $r = .32$ to $r = .51$. This result further supported that the different components were independent to each other to some extent. The correlations between sub-scales and total vision in life ranged from $r = .69$ to $r = .85$, indicating that the sub-scales have mid to high correlations with the total scale. Each of the components contributes to the latent variable—vision in life.

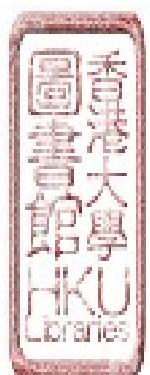
To further examine whether the total vision in life scale or different components were more predictive of psychological well-being, the correlations between vision in life and the sub-scales and psychological well-being were computed. The results are shown in Table 8.38.

Table 8.38 Relationship of Vision in Life and Criterion Measures

Predictor	Criterion Measure			
	GHQ-20	PAS	NAS	Self-esteem
Vision in Life	-.58**	.21**	-.47**	.56**
Life Control	-.63**	.20**	-.52**	.60**
Positive Meaning in Life	-.31**	.16**	-.20**	.28**
Negative Meaning in Life	.42**	-.07	.41**	-.37**
Will to Meaning	-.29**	.21**	-.20**	.37**

* $p < .05$ ** $p < .01$ (one-tailed)

Both the total vision in life and its components were moderately associated with the four criterion variables, though the correlation scores were different to some extent. Furthermore, life control seems to be more predictive than the total vision



in life and the other three components. These findings were very similar to those based on a college student sample of 354 in the validation study, in which all the predictors were moderately or strongly related to the dependent variables, and life control was more predictive than the others (see Chapter 6).

COLLEGE STRESS AND PSYCHOLOGICAL WELL-BEING

This section analyzes the relationships between college stress and psychological well-being. Bivariate analyses of in the relationship between college stress and psychological well-being were performed. This section consists of the first set of hypotheses testing. Zero-order correlation was mainly adopted to test this set of hypotheses.

College Stress and Psychological Well-being

Psychological well-being was examined at three different aspects: mental health status, positive and negative affect, and self-esteem. It was expected that measures of mental health status and negative affect were more sensitive than self-esteem and positive affect to the impact of college stress on psychological well-being. Results are shown in Table 8.39.



Table 8.39 Correlations of College Stress and Psychological Well-being

	<i>r</i> ^a
Mental Health Status	
GHQ-20	.42**
GHQ-Sense of Adequacy	.30**
GHQ-Depression	.30**
GHQ-Anxiety	.39**
Positive Affect Scale	-.07
Negative Affect Scale	.35**
Self-esteem	-.37**

** *p* <.01 (one-tailed) ^a*N* = 767-773

As can be seen in Table 8.39, college stress was positively associated with all measures of ill-being, and negatively related to all measures of well-being. Moreover, mental health status was most affected, whereas, positive affect was least affected by college stress. Hypothesis_{1.1}, which states that college stress exerts a negative impact on psychological well-being was fully supported.

Academic Hassle and Psychological Well-being

Table 8.40 presents the relationships between academic hassle and mental health status, positive affect, negative affect, and self-esteem respectively. Academic hassle was positively associated with all the measures of ill-being, but negatively related to self-esteem. No significant correlation was shown between academic hassle and positive affect. Hypothesis regarding the negative impact of academic hassle on psychological well-being was partially supported.



Table 8.40 Correlations of Academic Hassle and Psychological Well-being

	<i>r</i> ^a
Mental Health Status	
GHQ-20	.38**
GHQ-Sense of Adequacy	.26**
GHQ-Depression	.26**
GHQ-Anxiety	.36**
Positive Affect Scale	-.03
Negative Affect Scale	.25**
Self-esteem	-.36**

** $p < .01$ (one-tailed) ^a $N = 778-785$

Personal Hassle and Psychological Well-being

Table 8.41 shows the results of the relationships between personal hassle and mental health status, positive affect, negative affect, and self-esteem respectively.

Table 8.41 Correlations of Personal Hassle and Psychological Well-being

	<i>r</i> ^a
Mental Health Status	
GHQ-20	.40**
GHQ-Sense of Adequacy	.30**
GHQ-Depression	.29**
GHQ-Anxiety	.35**
Positive Affect Scale	-.11**
Negative Affect Scale	.35**
Self-esteem	-.32**

** $p < .01$ (one-tailed) ^a $N = 772-779$



We expected that personal hassle to be positively associated with all measures of ill-being, and negatively correlated with all measures of well-being. The findings were consistent with our expectations. Moreover, we have also found that personal hassle was significantly related to mental health status, but, least to positive affect. Thus, the hypothesis that personal hassle exerts a negative impact on psychological well-being was fully confirmed.

Negative Life Event and Psychological Well-being

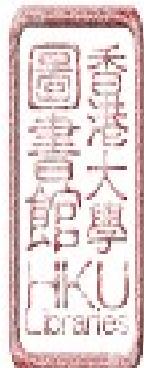
Table 8.42 shows that negative life event was positively associated with all measures of ill-being, and negatively correlated with self-esteem. No significant correlation was shown between negative life event and positive affect. Therefore, the hypothesis regarding the negative impact of negative life event on psychological well-being was partially supported.

Table 8.42 Correlations of Negative Life Event and Psychological Well-being

	<i>r</i> ^a
Mental Health Status	
GHQ-20	.17**
GHQ-Sense of Adequacy	.12**
GHQ-Depression	.09**
GHQ-Anxiety	.17**
Positive Affect Scale	-.01
Negative Affect Scale	.21**
Self-esteem	-.17**

** $p < .01$ (one-tailed)

^a $N = 778-784$



Hassles and Negative Life Event and Psychological Well-being

Difference of correlations was performed in this analysis. The correlations between academic hassle, negative life event and psychological well-being are shown in Table 8.43, and the correlations between personal hassle, negative life event and psychological well-being are shown in Table 8.44.

Table 8.43 Correlations of Academic Hassle, Negative Life Event and Psychological Well-being

	Academic Hassle ^a	Negative Life Event ^b	Difference z
GHQ-20	.38**	.17**	3.29**
GHQ-Sense of Adequacy	-.26**	-.12**	2.14*
GHQ-Depression	.26**	.09**	2.57*
GHQ-Anxiety	.36**	.17**	3.00**
Positive Affect Scale	-.03	-.01	.29
Negative Affect Scale	.25**	.21**	.71
Self-esteem	-.36**	-.17**	3.00**

* p <.05

** p < .01

(one-tailed)

^a N = 778-785

^b N = 778-784

Table 8.44 Correlations of Personal Hassle, Negative Life Event and Psychological Well-being

	Personal Hassle ^a	Negative Life Event ^b	Difference z
GHQ-20	.40**	.17**	3.57**
GHQ-Sense of Adequacy	-.30**	-.12**	2.71**
GHQ-Depression	.29**	.09**	3.00**
GHQ-Anxiety	.35**	.17**	2.86**
Positive Affect Scale	-.11**	-.01	1.43
Negative Affect Scale	.35**	.21**	2.29*
Self-esteem	-.32**	-.17**	2.29*

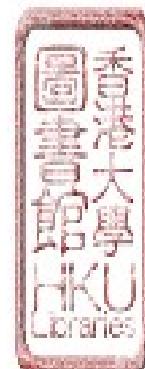
* p <.05

** p < .01

(one-tailed)

^a N = 772-779

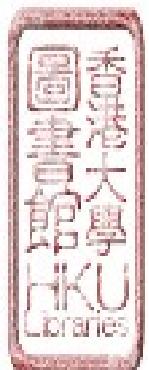
^b N = 778-784



As can be seen in Table 8.43, academic hassle exerted more significant impact on mental health status and self-esteem than did negative life event. However, there was no significant difference between the impacts of academic hassle and negative life event on both positive and negative affects. Table 8.44 shows that personal hassle exerted more significant impact on all aspects of psychological well-being than did negative life event, except on positive affect. In view of these results, the hypothesis that academic and personal hassles exert more significant negative impact on psychological well-being than did negative life event was partially supported.

EFFECTS OF VISION IN LIFE ON PSYCHOLOGICAL WELL-BEING

This section was devoted to analyze the direct and the buffering effects of vision in life on psychological well-being under stressful conditions. The explorations were guided by the second set of hypotheses of the study. In order to test this set of hypotheses, two methods were adopted. Difference between correlations was analyzed to examine the buffering effects, hierarchical multiple regression analyses used to examine both the direct and the buffering effects. The raw scores were converted to standard z-scores for computing the interaction terms. In all the analyses of hierarchical multiple regression, college stress terms were entered in Step 1, vision in life terms were entered in Step 2, and the interaction terms were entered in the final step. The “high” versus “low” groups were defined by the conceptual mid-point of the respective measures.



Vision in Life on Psychological Well-being under College Stress

Analyses of the effects of vision in life on psychological well-being were based on four different stressful conditions: college stress, academic hassle, personal hassle, and negative life event. For all of the hypotheses testing, psychological well-being was examined in terms of mental health status, positive and negative affects, and self-esteem.

H_{2.1}: Vision in life is associated with psychological well-being, and the association is more significant under higher than lower college stresses

This hypothesis refers to both the direct and the buffering effects of vision in life on psychological well-being under college stress. Therefore, the analyses were focused on whether vision in life serves to maintain and enhance psychological well-being , and to buffer the negative impact of college stress. Table 8.45 summarizes the results of correlations between vision in life and psychological well-being under low and high college stresses.

One significant finding is shown in Table 8.45, which is vision in life buffered the negative impact of college stress on general mental health status, as well as on depression and anxiety. No significant buffering effect of vision in life was found on other aspects of psychological well-being. Thus, in regard to college stress, the buffering effect was partially supported.

Table 8.46 shows that vision in life did exert a direct effect on all the aspects of psychological well-being. Significant buffering effect of vision in life was observed in the relationship between college stress and mental health status, as well

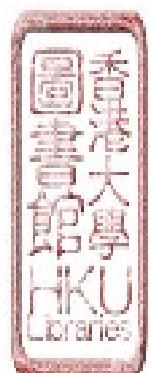


Table 8.45 Correlations of Vision in Life and Psychological Well-being under Low and High College Stresses

	Low Stress ^a	High Stress ^b	Difference <i>z</i>
Vision in Life			
GHQ-20	-.45**	-.59**	2.86**
GHQ-Sense of Adequacy	-.43**	-.47**	.71
GHQ-Depression	-.26**	-.56**	5.14**
GHQ-Anxiety	-.23**	-.35**	2.00*
Positive Affect Scale	.24**	.16**	-1.14
Negative Affect Scale	-.37**	-.47**	1.71
Self-esteem	.49**	.55**	1.14

* $p < .05$ ** $p < .01$ (one-tailed) ^a $N = 384-388$ ^b $N = 362-364$

as between college stress and depression. No significant buffering effect of vision in life was found with respect to the other aspects of psychological well-being. Figure 8.1 shows the buffering effect of vision in life on psychological well-being under college stress.

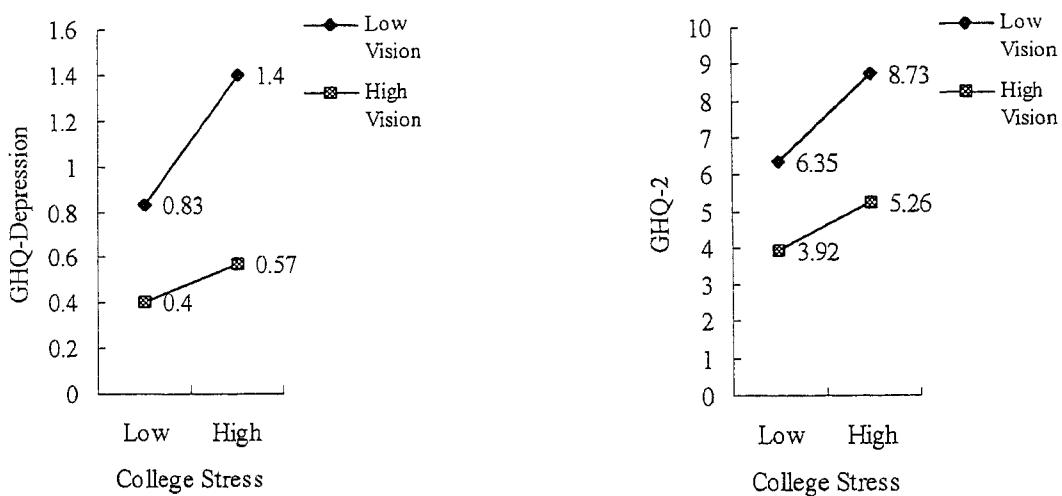


Figure 8.1 Effects of Vision in Life and College Stress on Psychological Well-being

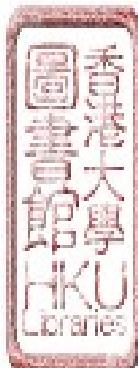


Table 8.46 Hierarchical Multiple Regression of Psychological Well-being on Vision in Life and College Stress

Psychological Well-being	Beta	R ²	ΔR ²	ΔF	Df
GHQ-20					
Direct Effect					
College Stress (CS)	.43	.18	.18	167.32 ***	1/748
Vision in Life (VIL)	.61	.37	.19	230.43 ***	1/747
Buffering Effect					
CS × VIL	.62	.38	.01	9.14 **	1/746
GHQ-Sense of Adequacy					
Direct Effect					
College Stress (CS)	.31	.09	.09	77.34 ***	1/749
Vision in Life (VIL)	.50	.25	.16	158.79 ***	1/748
Buffering Effect					
CS × VIL	.50	.25	.00	.23	1/747
GHQ-Depression					
Direct Effect					
College Stress (CS)	.29	.09	.09	71.10 ***	1/749
Vision in Life (VIL)	.48	.23	.14	141.01 ***	1/748
Buffering Effect					
CS × VIL	.52	.27	.04	39.42 ***	1/747
GHQ-Anxiety					
Direct Effect					
College Stress (CS)	.40	.16	.16	140.03 ***	1/750
Vision in Life (VIL)	.45	.21	.05	45.10 ***	1/749
Buffering Effect					
CS × VIL	.46	.21	.00	2.41	1/748
PAS					
Direct Effect					
College Stress (CS)	.08	.01	.01	4.61 *	1/750
Vision in Life (VIL)	.21	.04	.03	28.01 ***	1/749
Buffering Effect					
CS × VIL	.21	.05	.01	2.64	1/748
NAS					
Direct Effect					
College Stress (CS)	.36	.13	.13	110.78 ***	1/750
Vision in Life (VIL)	.51	.25	.12	127.61 ***	1/749
Buffering Effect					
CS × VIL	.51	.26	.01	2.36	1/748
Self-esteem					
Direct Effect					
College Stress (CS)	.38	.14	.14	122.38 ***	1/750
Vision in Life (VIL)	.59	.34	.20	226.17 ***	1/749
Buffering Effect					
CS × VIL	.59	.34	.00	.75	1/742

* p<.05 ** p <.01 ***p<0.001 Δ : Change

In conclusion, the direct effect of vision in life on psychological well-being under college stress was fully supported. However, the buffering effect of vision in



life was only partially supported. The buffering effect of vision in life on anxiety was inconsistent with difference of correlations and hierarchical multiple regression. Therefore, hypothesis_{2,1} was partially supported.

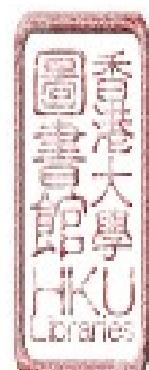
H_{2,2}: Vision in life is associated with psychological well-being, and the association is more significant under higher than lower academic stresses

We hypothesize the direct and the buffering effects of vision in life on psychological well-being in terms of mental health status, positive and negative affects, and self-esteem. Table 8.47 shows the differences between correlations of vision in life and psychological well-being under high and low academic hassles.

Table 8.47 Correlations of Vision in Life and Psychological Well-being under Low and High Academic Stresses

	Low Stress ^a	High Stress ^b	Difference <i>z</i>
Vision in Life			
GHQ-20	-.47**	-.60**	2.57*
GHQ-Sense of Adequacy	-.44**	-.48**	.71
GHQ-Depression	-.27**	-.58**	5.43**
GHQ-Anxiety	-.26**	-.35**	1.43
Positive Affect Scale	.24**	.18**	-1.29
Negative Affect Scale	-.40**	-.47**	.86
Self-esteem	.51**	.55**	.86

* *p* < .05 ** *p* < .01 (one-tailed) ^a *N* = 370-395 ^b *N* = 370-398



As can be seen in Table 8.47, significant buffering effect of vision in life was shown in the relationship between academic stress and depression, as well as in the relationship between academic stress and mental health status. Unexpectedly, vision in life did not buffer the negative impact of academic stress with respect to the other aspects of psychological well-being. Thus, in regard to academic stress, the buffering effect of vision in life was partially supported.

In Table 8.48, vision in life directly affected all the aspects of psychological well-being under academic hassle. Vision in life buffered the negative impact of academic hassle on depression and mental health status. However, no significant buffering effect was shown with respect to the other aspects of psychological well-being. Figure 8.2 presents the effects of vision in life and academic hassle on psychological well-being.

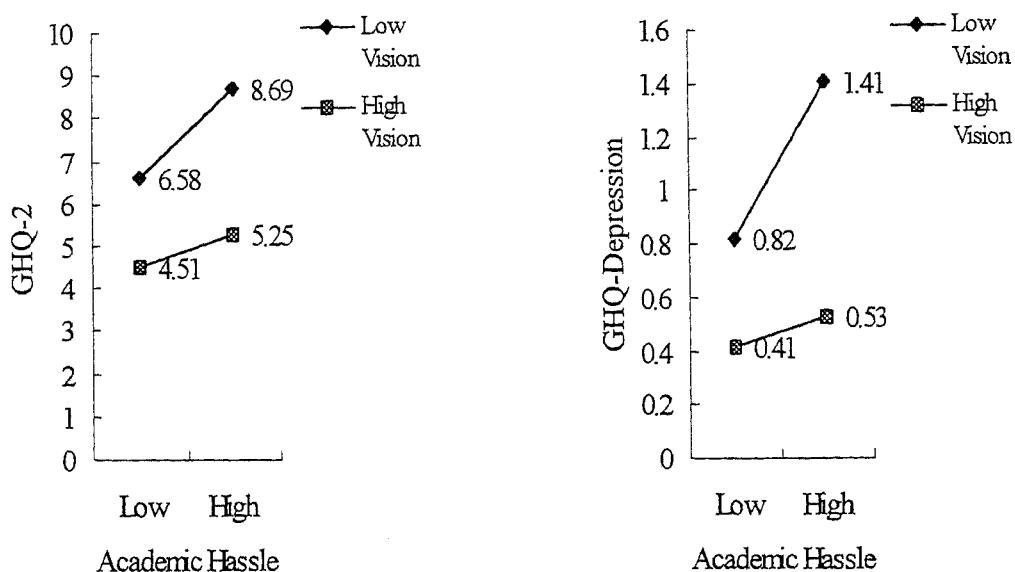


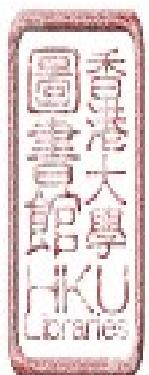
Figure 8.2 Effects of Vision in Life and Academic Stress on Psychological Well-being



Table 8.48 Hierarchical Multiple Regression of Psychological Well-being on Vision in Life and Academic Stress

Psychological Well-being	Beta	R ²	Δ R ²	Δ F	Df
GHQ-20					
Direct Effect					
Academic Hassle (AH)	.38	.15	.15	130.44 ***	1/760
Vision in Life (VIL)	.61	.37	.22	266.96 ***	1/759
Buffering Effect					
AH × VIL	.62	.38	.01	4.57 *	1/758
GHQ-Sense of Adequacy					
Direct Effect					
Academic Hassle (AH)	.27	.07	.07	59.22 ***	1/761
Vision in Life (VIL)	.50	.25	.18	180.20 ***	1/760
Buffering Effect					
AH × VIL	.50	.25	.00	.12	1/759
GHQ-Depression					
Direct Effect					
Academic Hassle (AH)	.27	.07	.07	57.77 ***	1/762
Vision in Life (VIL)	.48	.23	.16	158.85 ***	1/761
Buffering Effect					
AH × VIL	.51	.26	.03	28.10 ***	1/760
GHQ-Anxiety					
Direct Effect					
Academic Hassle (AH)	.36	.13	.13	115.93 ***	1/762
Vision in Life (VIL)	.41	.19	.06	58.86 ***	1/761
Buffering Effect					
AH × VIL	.44	.20	.01	2.25	1/760
PAS					
Direct Effect					
Academic Hassle (AH)	.04	.00	.00	.00	1/762
Vision in Life (VIL)	.21	.05	.05	18.05 ***	1/761
Buffering Effect					
AH × VIL	.22	.05	.00	2.01	1/760
NAS					
Direct Effect					
Academic Hassle (AH)	.26	.07	.07	55.84 ***	1/762
Vision in Life (VIL)	.48	.23	.16	159.26 ***	1/761
Buffering Effect					
AH × VIL	.48	.23	.00	1.33	1/760
Self-esteem					
Direct Effect					
Academic Hassle (AH)	.37	.14	.14	117.77 ***	1/755
Vision in Life (VIL)	.59	.35	.21	248.99 ***	1/754
Buffering Effect					
AH × VIL	.59	.35	.00	.05	1/753

* p<.05 ***p<.001 Δ: Change



In conclusion, the direct effect of vision in life on psychological well-being was fully supported regardless of the stress level associated with academic hassle. However, the buffering effect of vision in life on psychological well-being was partially supported under academic hassle.

H_{2.3}: Vision in life is associated with psychological well-being, and the association is more significant under higher than lower personal stresses

This hypothesis suggests both the direct and the buffering effects of vision in life on psychological well-being. Table 8.49 shows the correlations between vision in life and psychological well-being obtained under high and low personal hassles.

Table 8.49 Correlations of Vision in Life and Psychological Well-being under Low and High Personal Stresses

	Low Stress ^a	High Stress ^b	Difference <i>z</i>
Vision in Life			
GHQ-20	-.41**	-.61**	3.86**
GHQ-Sense of Adequacy	-.38**	-.52**	2.57*
GHQ-Depression	-.26**	-.54**	4.71**
GHQ-Anxiety	-.22**	-.36**	2.29*
Positive Affect Scale	.20**	.16**	-.57
Negative Affect Scale	-.39**	-.45**	1.00
Self-esteem	.46**	.57**	2.14*

* *p* < .05 ** *p* < .01 (one-tailed)

^a *N* = 381-389

^b *N* = 377

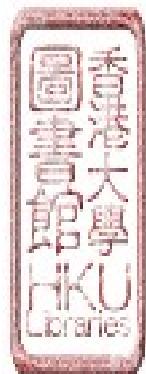


Table 8.49 presents that vision in life buffered the negative impacts of personal hassle on GHQ-20, GHQ-Sense of Adequacy, GHQ-Depression and GHQ-Anxiety. The data also indicated that vision in life buffered the negative impact of personal hassle on self-esteem. However, it failed to buffer the negative impacts of personal hassle on both PAS and NAS. Thus, in regard to personal hassle, the buffering effect of vision in life was partially supported.

Hierarchical multiple regression analysis indicated that the direct effect of vision in life was confirmed in terms of all aspects of psychological well-being under personal hassle. Vision in life was found to buffer the negative impact of personal hassle on mental health status as well as on depression. No significant buffering effect of vision in life was shown on the other aspects of psychological well-being (see Table 8.50).

In conclusion, the direct effect of vision in life on psychological well-being under both high and low personal hassles was fully supported. However, the buffering effect was only partially supported. Moreover, results on the buffering effect as analyzed by difference of correlations and by hierarchical multiple regression were inconsistent in terms of GHQ-Sense of Adequacy, GHQ-Anxiety, and Self-esteem. Thus, hypothesis _{2,3} was not fully supported. The effects of vision in life and personal hassle on psychological well-being is shown in Figure 8.3.

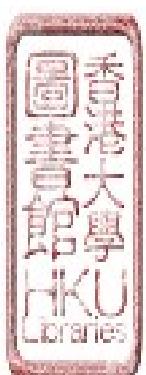
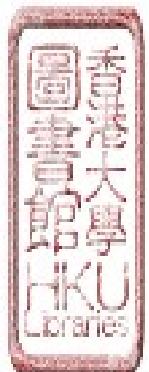


Table 8.50 Hierarchical Multiple Regression of Psychological Well-being on Vision in Life and Personal Stress

Psychological Well-being	Beta	R ²	ΔR ²	ΔF	Df
GHQ-20					
Direct Effect					
Personal Hassle (PH)	.40	.16	.16	143.13 ***	1/754
Vision in Life (VIL)	.61	.37	.21	249.00 ***	1/753
Buffering Effect					
PH × VIL	.62	.38	.01	8.89 **	1/752
GHQ-Sense of Adequacy					
Direct Effect					
Personal Hassle (PH)	.29	.09	.09	70.70 ***	1/755
Vision in Life (VIL)	.50	.25	.17	169.27 ***	1/754
Buffering Effect					
PH × VIL	.50	.25	.00	1.04	1/753
GHQ-Depression					
Direct Effect					
Personal Hassle (PH)	.29	.08	.08	68.37 ***	1/755
Vision in Life (VIL)	.48	.23	.15	146.19 ***	1/754
Buffering Effect					
PH × VIL	.52	.27	.04	35.10 ***	1/753
GHQ-Anxiety					
Direct Effect					
Personal Hassle (PH)	.35	.12	.12	105.49 ***	1/756
Vision in Life (VIL)	.43	.18	.06	55.51 ***	1/755
Buffering Effect					
PH × VIL	.43	.18	.00	.85	1/754
PAS					
Direct Effect					
Personal Hassle (PH)	.11	.01	.01	9.35 **	1/756
Vision in Life (VIL)	.21	.04	.03	25.06 ***	1/755
Buffering Effect					
PH × VIL	.22	.05	.01	3.10	1/754
NAS					
Direct Effect					
Personal Hassle (PH)	.36	.13	.13	109.73 ***	1/756
Vision in Life (VIL)	.51	.26	.13	130.37 ***	1/755
Buffering Effect					
PH × VIL	.51	.26	.00	1.87	1/754
Self-esteem					
Direct Effect					
Personal Hassle (PH)	.31	.10	.10	82.17 ***	1/749
Vision in Life (VIL)	.57	.33	.23	252.62 ***	1/748
Buffering Effect					
PH × VIL	.57	.33	.00	.63	1/747

p<0.01 *p<0.001 Δ: Change



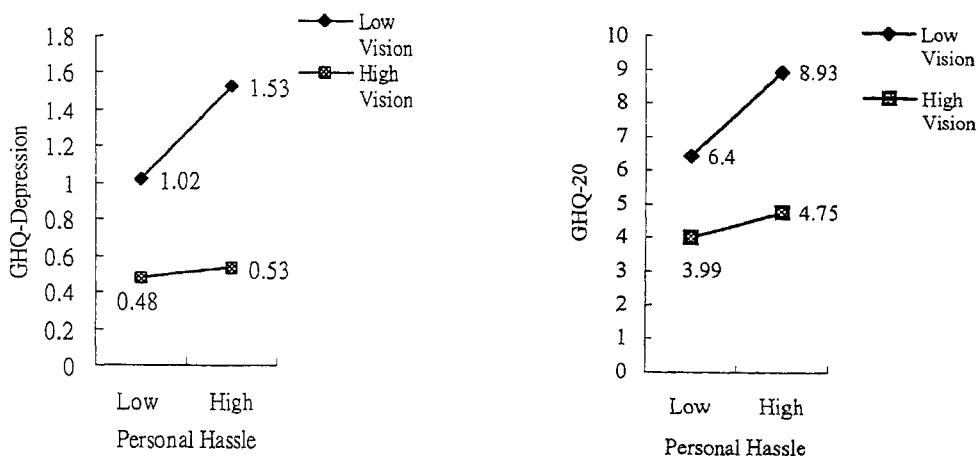


Figure 8.3 Effects of Vision in Life and Personal Stress on Psychological Well-being

H_{2.4}: Vision in life is associated with psychological well-being, and the association is more significant when the stresses of negative life event are high than low

We hypothesized a direct effect of vision in life on psychological well-being in terms of mental health status, positive and negative affects, self-esteem, and a buffering effect of vision in life in the relationship between negative life event and psychological well-being.

Table 8.51 shows that vision in life buffered the negative impacts of negative life event on mental health status, depression and self-esteem. Vision in life did not buffer the negative impact of negative life event on the other aspects of psychological well-being. Thus, in regard to negative life event, the buffering effect of vision in life was partially supported.

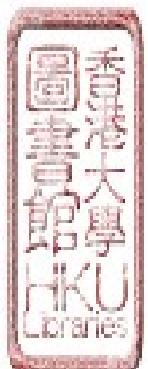


Table 8.51 Correlations of Vision in Life and Psychological Well-being under High and Low Stresses of Negative Life Event

	Low Stress of Negative Life Event ^a	High Stress of Negative Life Event ^b	Difference <i>z</i>
Vision in Life			
GHQ-20	-.51**	-.63**	2.57*
GHQ-Sense of Adequacy	-.46**	-.52**	1.14
GHQ-Depression	-.34**	-.59**	4.71**
GHQ-Anxiety	-.31**	-.39**	1.29
Positive Affect Scale	.21**	.21**	-
Negative Affect Scale	-.44**	-.49**	1.00
Self-esteem	.51**	.61**	2.14*

* $p < .05$ ** $p < .01$ (one-tailed) ^a $N = 327-335$ ^b $N = 435-447$

As can be seen in Table 8.52, hierarchical multiple regression indicated that the direct effect of vision in life was shown in terms of all aspects of psychological well-being. However, the buffering effect of vision in life only was shown in terms of depression. It failed to show the buffering effect on the other aspects of psychological well-being. Figure 8.4 presents the effects of vision in life and negative life event on depression.

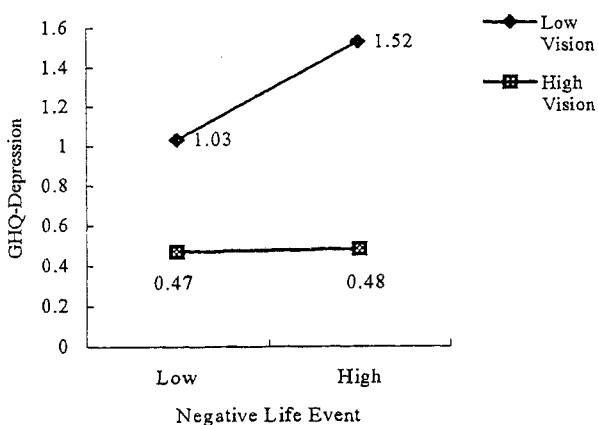


Figure 8.4 Effects of Vision in Life and Negative Life Event on Psychological Well-being

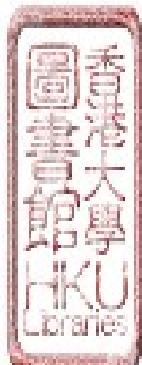
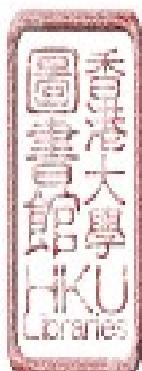


Table 8.52 Hierarchical Multiple Regression of Psychological Well-being on Vision in Life and Negative Life Event

Psychological Well-being	Beta	R ²	ΔR ²	ΔF	Df
GHQ-20					
Direct Effect					
Negative Life Event (NLE)	.16	.03	.03	21.07 ***	1/759
Vision in Life (VIL)	.58	.33	.32	345.90 ***	1/758
Buffering Effect					
NLE × VIL	.58	.33	.00	1.64	1/757
GHQ-Sense of Adequacy					
Direct Effect					
Negative Life Event (NLE)	.12	.01	.01	10.68 **	1/760
Vision in Life (VIL)	.49	.24	.23	223.87 ***	1/759
Buffering Effect					
NLE × VIL	.49	.24	.00	.02	1/758
GHQ-Depression					
Direct Effect					
Negative Life Event (NLE)	.08	.01	.01	5.39 *	1/760
Vision in Life (VIL)	.46	.22	.21	201.56 ***	1/759
Buffering Effect					
NLE × VIL	.47	.23	.01	9.35 **	1/758
GHQ-Anxiety					
Direct Effect					
Negative Life Event (NLE)	.17	.03	.03	23.78 ***	1/761
Vision in Life (VIL)	.38	.14	.11	97.81 ***	1/760
Buffering Effect					
NLE × VIL	.38	.14	.00	.83	1/759
PAS					
Direct Effect					
Negative Life Event (NLE)	.01	.00	.00	.06	1/761
Vision in Life (VIL)	.21	.04	.04	35.31 ***	1/760
Buffering Effect					
NLE × VIL	.21	.04	.00	.17	1/759
NAS					
Direct Effect					
Negative Life Event (NLE)	.20	.04	.04	33.09 ***	1/761
Vision in Life (VIL)	.49	.24	.20	194.01 ***	1/760
Buffering Effect					
NLE × VIL	.49	.24	.00	.50	1/759
Self-esteem					
Direct Effect					
Negative Life Event (NLE)	.17	.03	.03	21.28 ***	1/755
Vision in Life (VIL)	.57	.32	.29	324.69 ***	1/754
Buffering Effect					
NLE × VIL	.57	.32	.00	.62	1/753

* p<.05 **p<.01 ***p<.001 Δ: Change



In conclusion, the direct effect of vision in life on psychological well-being under both high and low stresses of negative life event was fully supported. The buffering effect in regard to negative life event was partially supported. Thus, hypothesis _{2,4} was partially supported.

Life Control on Psychological Well-being under College Stress

Analysis of the effects of life control on psychological well-being was guided by one hypothesis and three sub-hypotheses in terms of college stress, as well as academic hassle, personal hassle and negative life event.

H_{2,5}: Life control is associated with psychological well-being, and the association is more significant under higher than lower college stresses

This hypothesis and the sub-hypotheses all refer to the direct and the buffering effects of life control on psychological well-being under college stresses. Table 8.53 summarizes the results of differences of correlations between life control and psychological well-being under low and high college stresses. Table 8.54, 8.55, and 8.56 show the results of differences of correlations between life control and psychological well-being under low and high stresses of academic hassle, personal hassle and negative life event, respectively.

As can be seen in Table 8.53, 8.54, 8.55 and 8.56, the buffering effect was observed in the relationship between college stress, academic hassle, personal hassle, negative life event and mental health status and depression. The buffering effect was also shown in the relationship between college stress, academic hassle, personal



hassle and anxiety. Life control was also found to buffer the negative impact of negative life event on sense of adequacy. No significant buffering effect of life control was found on the other aspects of psychological well-being. Thus, the buffering effect of life control was partially supported.

Table 8.53 Correlations of Life Control and Psychological Well-being under Low and High College Stresses

	Low Stress ^a	High Stress ^b	Difference z
Life Control			
GHQ-20	-.50**	-.63**	2.71**
GHQ-Sense of Adequacy	-.49**	-.50**	.14
GHQ-Depression	-.23**	-.53**	5.14**
GHQ-Anxiety	-.29**	-.43**	2.29*
Positive Affect Scale	.21**	.17**	-.57
Negative Affect Scale	-.45**	-.49**	.86
Self-esteem	.54**	.57**	.71

* p <.05 ** p < .01 (one-tailed) ^a N = 370-395 ^b N = 370-390

Table 8.54 Correlations of Life Control and Psychological Well-being under Low and High Academic Stresses

	Low Stress ^a	High Stress ^b	Difference z
Life Control			
GHQ-20	-.52**	-.65**	2.86**
GHQ-Sense of Adequacy	-.51**	-.51**	0
GHQ-Depression	-.24**	-.56**	5.57**
GHQ-Anxiety	-.32**	-.44**	2.00*
Positive Affect Scale	.22**	.19**	-.43
Negative Affect Scale	-.46**	-.51**	.86
Self-esteem	.55**	.58**	.57

* p <.05 ** p < .01 (one-tailed) ^a N = 402- 405 ^b N = 368-372



Table 8.55 Correlations of Life Control and Psychological Well-being under Low and High Personal Stresses

	Low Stress ^a	High Stress ^b	Difference <i>z</i>
Life Control			
GHQ-20	-.47**	-.65**	3.86**
GHQ-Sense of Adequacy	-.44**	-.55**	2.14*
GHQ-Depression	-.24**	-.50**	4.43**
GHQ-Anxiety	-.28**	-.44**	2.71*
Positive Affect Scale	.18**	.16**	-.29
Negative Affect Scale	-.43**	-.50**	1.29
Self-esteem	.52**	.59**	1.43

* $p < .05$ ** $p < .01$ (one-tailed) ^a $N = 400-403$ ^b $N = 379-383$

Table 8.56 Correlations of Life Control and Psychological Well-being under Low and High Stresses of Negative Life Event

	Low Stress ^a	High Stress ^b	Difference <i>z</i>
Life Control			
GHQ-20	-.58**	-.67**	2.14**
GHQ-Sense of Adequacy	-.52**	-.55**	.57
GHQ-Depression	-.33**	-.55**	4.00**
GHQ-Anxiety	-.40**	-.47**	1.29
Positive Affect Scale	.24**	.18**	-.86
Negative Affect Scale	-.50**	-.53**	.57
Self-esteem	.59**	.60**	.14

* $p < .05$ ** $p < .01$ (one-tailed) ^a $N = 370-395$ ^b $N = 370-390$

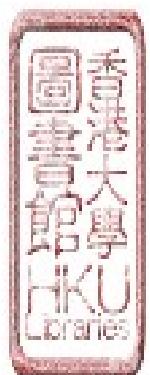
In Table 8.57, the direct effect of life control was confirmed in terms of all aspects of psychological well-being. Life control buffered the negative impact of college stress on mental health status, as well as on depression and anxiety. No



Table 8.57 Hierarchical Multiple Regression of Psychological Well-being on Life Control and College Stress

Psychological Well-being	Beta	R ²	ΔR ²	ΔF	Df
GHQ-20					
Direct Effect					
College Stress (CS)	.43	.18	.18	168.26 ***	1/761
Life Control (LC)	.65	.42	.23	304.85 ***	1/760
Buffering Effect					
CS × LC	.66	.43	.01	8.41 **	1/759
GHQ-Sense of Adequacy					
Direct Effect					
College Stress (CS)	.31	.09	.09	78.02 ***	1/762
Life Control (LC)	.54	.29	.20	211.69 ***	1/761
Buffering Effect					
CS × LC	.54	.29	.00	.00	1/760
GHQ-Depression					
Direct Effect					
College Stress (CS)	.30	.09	.09	72.80 ***	1/762
Life Control (LC)	.45	.21	.12	114.30 ***	1/761
Buffering Effect					
CS × LC	.49	.24	.03	34.34 ***	1/760
GHQ-Anxiety					
Direct Effect					
College Stress (CS)	.39	.16	.16	139.58 ***	1/763
Life Control (LC)	.49	.24	.08	85.51 ***	1/762
Buffering Effect					
CS × LC	.49	.24	.01	3.67 *	1/761
PAS					
Direct Effect					
College Stress (CS)	.08	.01	.01	4.87 *	1/763
Life Control (LC)	.20	.04	.03	26.15 ***	1/762
Buffering Effect					
CS × LC	.20	.04	.00	1.85	1/761
NAS					
Direct Effect					
College Stress (CS)	.36	.13	.13	110.23 ***	1/762
Life Control (LC)	.54	.29	.16	174.18 ***	1/761
Buffering Effect					
CS × LC	.54	.29	.00	2.05	1/760
Self-esteem					
Direct Effect					
College Stress (CS)	.36	.14	.14	123.76 ***	1/757
Life Control (LC)	.61	.37	.23	281.49 ***	1/756
Buffering Effect					
CS × LC	.61	.37	.00	.02	1/755

^ap<.10 * p<.05 ** p <.01 ***p<.001 Δ: Change



significant buffering effect of life control was found on the other aspects of psychological well-being. The same tendency was shown based on academic hassle, personal hassle and negative life event.

In conclusion, the direct effect of life control on psychological well-being under all college stresses were fully supported, but the buffering effect was only partially supported. Therefore, hypothesis _{2,5} was considered partially supported. Figure 8.5 shows the results of buffering effect of life control in terms of college stress.

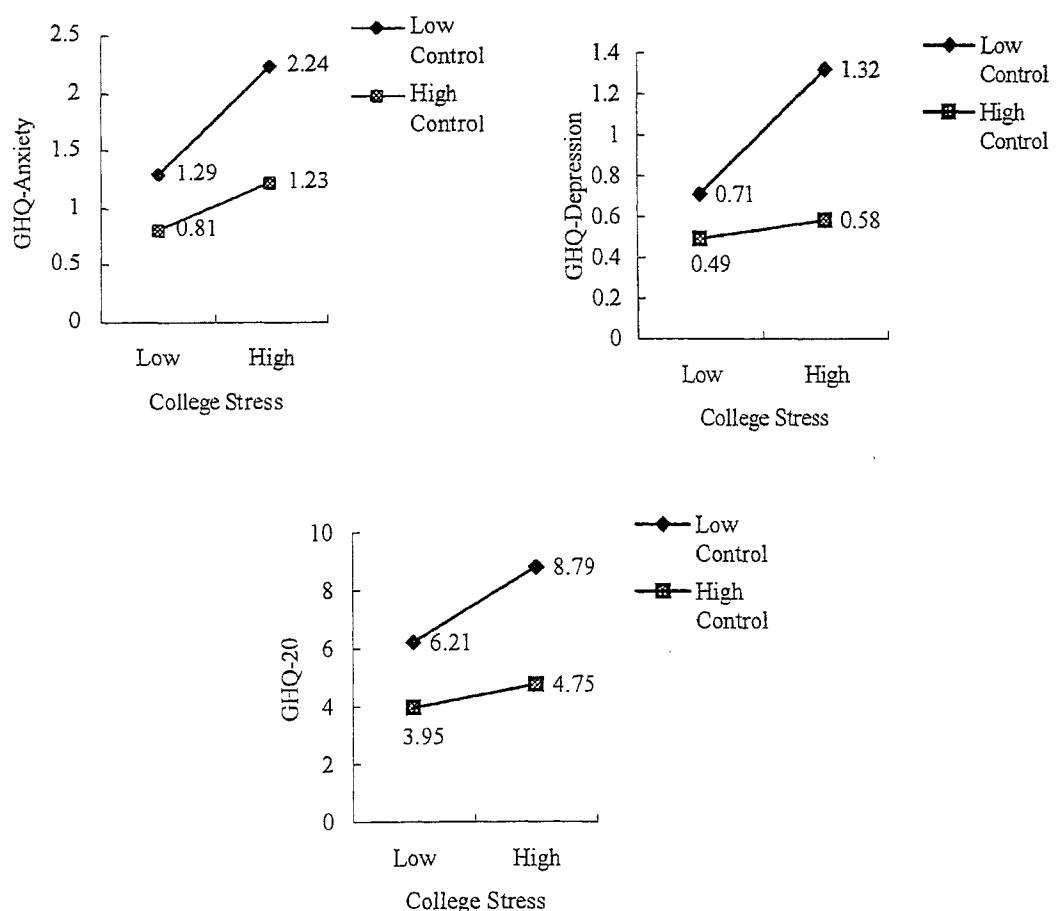
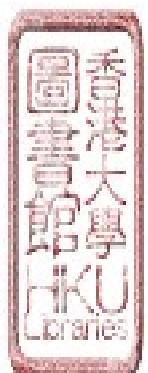


Figure 8.5 Effects of Life Control and College Stress on Psychological Well-being



Meaning in Life on Psychological Well-being under College Stress

This analysis includes not only positive meaning in life, but also negative meaning in life, which was based on the hypothesis below.

H2.6: Meaning in life is associated with psychological well-being, and the association is more significant under higher than lower college stresses

a. Positive meaning in life

With reference to the above hypothesis, both the direct and the buffering effects of meaning in life were analyzed. Table 8.58, 8.59, 8.60 and 8.61 show the correlations between positive meaning in life and psychological well-being under high and low college stresses.

Table 8.58 Correlations of Positive Meaning in Life and Psychological Well-being under Low and High College Stresses

	Low Stress ^a	High Stress ^b	Difference <i>z</i>
Positive Meaning in Life			
GHQ-20	-.23**	-.36**	2.14*
GHQ-Sense of Adequacy	-.23**	-.31**	1.29
GHQ-Depression	-.15**	-.38**	3.57**
GHQ-Anxiety	-.08	-.14**	.86
Positive Affect Scale	.14**	.16**	.29
Negative Affect Scale	-.09	-.27**	2.71**
Self-esteem	.21**	.32**	1.71

* $p < .05$ ** $p < .01$ (one-tailed) ^a $N = 380-387$ ^b $N = 371-373$

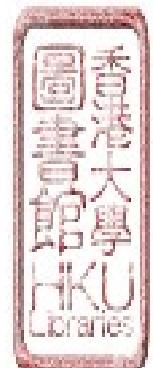


Table 8.59 Correlations of Positive Meaning in Life and Psychological Well-being under Low and High Academic Stresses

	Low Stress ^a	High Stress ^b	Difference <i>z</i>
Positive Meaning in Life			
GHQ-20	-.20**	-.38**	2.86**
GHQ-Sense of Adequacy	-.21**	-.33**	1.86
GHQ-Depression	-.15**	-.40**	3.86**
GHQ-Anxiety	-.05	-.17**	1.71
Positive Affect Scale	.13**	.19**	.86
Negative Affect Scale	-.11	-.26**	2.14*
Self-esteem	.22**	.33**	1.71

* $p < .05$ ** $p < .01$ (one-tailed) ^a $N = 406-409$ ^b $N = 370-374$

Table 8.60 Correlations of Positive Meaning in life and Psychological Well-being under Low and High Personal Stresses

	Low Stress ^a	High Stress ^b	Difference <i>z</i>
Positive Meaning in Life			
GHQ-20	-.18**	-.38**	3.14**
GHQ- Sense of Adequacy	-.18**	-.34**	2.43*
GHQ-Depression	-.13*	-.38**	3.86**
GHQ-Anxiety	-.06	-.14**	1.14
Positive Affect Scale	.10	.18**	1.14
Negative Affect Scale	-.11*	-.24**	1.96*
Self-esteem	.16**	.35**	3.00**

* $p < .05$ ** $p < .01$ (one-tailed) ^a $N = 402-404$ ^b $N = 384-388$

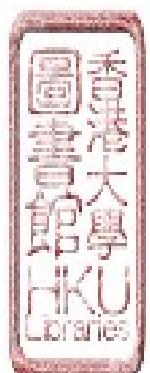


Table 8.61 Correlations of Positive Meaning in Life and Psychological Well-being under Low and High Stresses of Negative Life Event

	Low Stress ^a	High Stress ^b	Difference z
Positive Meaning in Life			
GHQ-20	-.25**	-.35**	1.57
GHQ- Sense of Adequacy	-.24**	-.31**	1.14
GHQ-Depression	-.21**	-.36**	2.43*
GHQ-Anxiety	-.09	-.16**	1.00
Positive Affect Scale	.14**	.18**	.57
Negative Affect Scale	-.18	-.22**	.57
Self-esteem	.21**	.34**	2.00*

* $p < .05$ ** $p < .01$ (one-tailed) ^a $N = 380-387$ ^b $N = 371-373$

As can be seen in Table 8.58, 8.59, 8.60 and 8.61, positive meaning in life significantly buffered the negative impact of college stress and academic hassle on mental health status, depression and negative affect. Significant buffering effect was also observed in the relationship between personal hassle and mental health status, sense of adequacy, depression, negative affect and self-esteem. Moreover, positive meaning in life buffered the negative impact of negative life event on depression and self-esteem. No significant buffering effect of positive meaning in life was found on other aspects of psychological well-being. Thus, the buffering effect of positive meaning in life was partially confirmed.

Table 8.62 shows that positive meaning in life directly affected all aspects of psychological well-being. The buffering effect of positive meaning in life was found in the relationship between college stress and mental health status, depression, negative affect and self-esteem. The hierarchical multiple regression reported similar

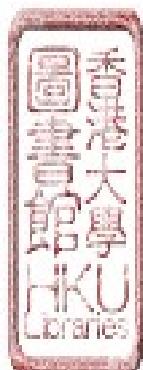
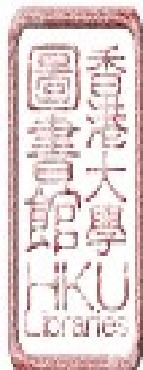


Table 8.62 Hierarchical Multiple Regression of Psychological Well-being on Positive Meaning in Life and College Stress

Psychological Well-being	Beta	R ²	Δ R ²	Δ F	Df
GHQ-20					
Direct Effect					
College Stress (CS)	.42	.18	.18	165.98 ***	1/766
Positive Meaning in Life (PML)	.49	.24	.06	63.72 ***	1/765
Buffering Effect					
CS × PML	.50	.25	.01	10.16 ***	1/764
GHQ-Sense of Adequacy					
Direct Effect					
College Stress (CS)	.30	.09	.09	76.83 ***	1/768
Positive Meaning in Life (PML)	.39	.15	.06	52.82 ***	1/767
Buffering Effect					
CS × PML	.39	.15	.00	2.31	1/766
GHQ-Depression					
Direct Effect					
College Stress (CS)	.29	.09	.09	72.55 ***	1/767
Positive Meaning in Life (PML)	.39	.15	.06	55.76 ***	1/766
Buffering Effect					
CS × PML	.43	.18	.03	31.80 ***	1/765
GHQ-Anxiety					
Direct Effect					
College Stress (CS)	.39	.15	.15	136.78 ***	1/769
Positive Meaning in Life (PML)	.40	.16	.01	5.28 *	1/768
Buffering Effect					
CS × PML	.40	.16	.00	1.45	1/767
PAS					
Direct Effect					
College Stress (CS)	.07	.01	.01	4.26 *	1/768
Positive Meaning in Life (PML)	.16	.03	.02	16.00 ***	1/767
Buffering Effect					
CS × PML	.16	.03	.00	.02	1/766
NAS					
Direct Effect					
College Stress (CS)	.35	.12	.12	106.85 ***	1/763
Positive Meaning in Life (PML)	.38	.15	.02	21.99 ***	1/762
Buffering Effect					
CS × PML	.39	.16	.01	6.16 *	1/761
Self-esteem					
Direct Effect					
College Stress (CS)	.37	.14	.14	123.22 ***	1/761
Positive Meaning in Life (PML)	.44	.19	.05	48.89 ***	1/760
Buffering Effect					
CS × PML	.45	.20	.01	7.48 **	1/759

* p<.05 ** p <.01 *** p <0.001 Δ : Change



results based on academic hassle, personal hassle and negative life event as those on college stress.

In conclusion, the direct effect of positive meaning in life on psychological well-being under college stresses was fully supported, whereas the buffering effect of positive meaning in life was partially supported. Thus, hypothesis 2.6 was partially supported. Figure 8.6 shows the buffering effect of positive meaning in life on psychological well-being.

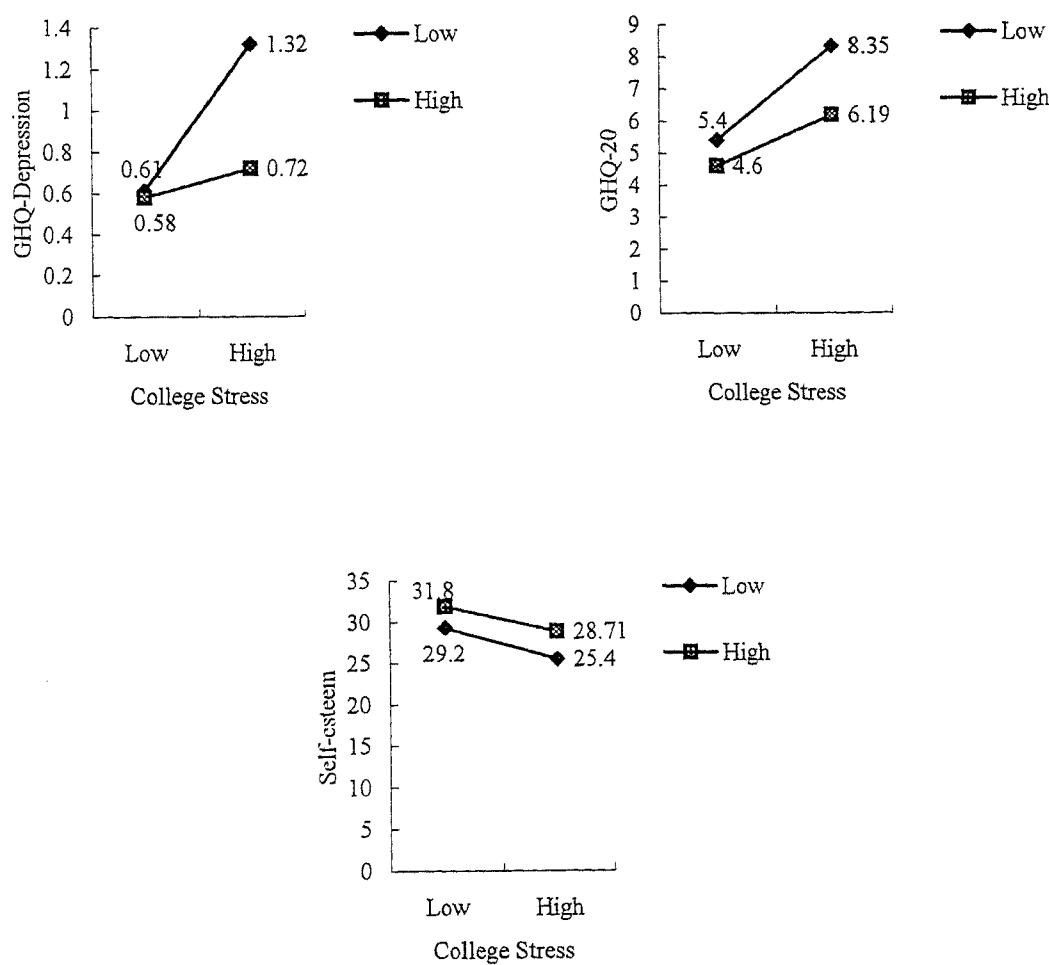


Figure 8.6 Effects of Positive Meaning in Life and College Stress on Psychological Well-being



b. Negative Meaning in Life

If negative meaning in life were negatively associated with positive oriented measures, but positively associated with negative oriented measures of psychological well-being, then it would negatively support the hypothesis of positive meaning in life.

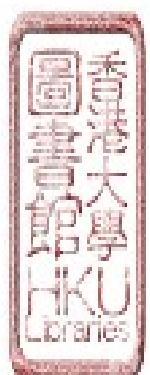
Table 8.63, 8.64, 8.65 and 8.66 show the correlations between negative meaning in life and psychological well-being under low and high college stresses, academic hassles, personal hassles and negative life events.

Table 8.63 Correlations of Negative Meaning in Life and Psychological Well-being under Low and High College Stresses

	Low Stress ^a	High Stress ^b	Difference <i>z</i>
Negative Meaning in Life			
GHQ-20	-.31**	-.50**	2.71**
GHQ-Sense of Adequacy	-.23**	-.33**	1.43
GHQ-Depression	-.19**	-.45**	3.71**
GHQ-Anxiety	-.23**	-.35**	1.71
Positive Affect Scale	.05	.07	.29
Negative Affect Scale	-.37**	-.44**	1.00
Self-esteem	.32**	.37**	.71

** $p < .01$ (one-tailed) ^a $N = 394$ ^b $N = 370$

Findings of Table 8.63, 8.64, 8.65 and 8.66 show that negative meaning in life exacerbate the negative impact of college stress and negative life event on mental health status and depression. Significant interactive effect was also observed in the



relationship between academic hassle and depression, between personal hassle and mental health status, depression and self-esteem, as well as between negative life event and mental health status and depression.

Table 8.64 Correlations of Negative Meaning in Life and Psychological Well-being under Low and High Academic Stresses

	Low Stress ^a	High Stress ^b	Difference <i>z</i>
Negative Meaning in Life			
GHQ-20	-.32**	-.43**	1.86
GHQ-Sense of Adequacy	-.24**	-.32**	1.29
GHQ-Depression	-.21**	-.40**	3.00**
GHQ-Anxiety	-.27**	-.30**	.57
Positive Affect Scale	.06	.08	.29
Negative Affect Scale	-.37**	-.40**	.43
Self-esteem	.34**	.32**	-.29

** *p* < .01 (one-tailed)

^a *N* = 404-407

^b *N* = 367-372

Table 8.65 Correlations of Negative Meaning in Life and Psychological Well-being under Low and High Personal Stresses

	Low Stress ^a	High Stress ^b	Difference <i>z</i>
Negative Meaning in Life			
GHQ-20	-.32**	-.45**	2.14*
GHQ- Sense of Adequacy	-.22**	-.34**	1.86
GHQ-Depression	-.23**	-.39**	2.57**
GHQ-Anxiety	-.25**	-.34**	1.43
Positive Affect Scale	.04	.05	.14
Negative Affect Scale	-.37**	-.40**	.43
Self-esteem	.27**	.40**	2.14*

* *p* < .05 ** *p* < .01 (one-tailed)

^a *N* = 384-387

^b *N* = 381-385

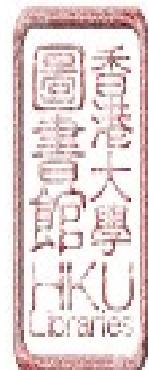


Table 8.66 Correlations of Negative Meaning in Life and Psychological Well-being under Low and High Stresses of Negative Life Event

	Low Stress ^a	High Stress ^b	Difference <i>z</i>
Negative Meaning in Life			
GHQ-20	-.37**	-.49**	2.14*
GHQ-Sense of Adequacy	-.27**	-.37**	1.57
GHQ-Depression	-.25**	-.48**	3.71**
GHQ-Anxiety	-.33**	-.34**	.14
Positive Affect Scale	.03	.13*	1.43
Negative Affect Scale	-.38**	-.45**	1.14
Self-esteem	.35**	.40**	.71

* $P < .05$ ** $p < .01$ (one-tailed) ^a $N = 394-408$ ^b $N = 333-335$

Hierarchical multiple regression analysis indicated that the direct effect of negative meaning in life was confirmed in terms of all aspects of psychological well-being except positive affect. Negative meaning in life was found to exacerbate the negative impact of college stress on mental health status, as well as on depression. No significant exacerbation effect of negative meaning in life was observed on other aspects of psychological well-being.

In conclusion, the direct effect of negative meaning in life on psychological well-being was partially supported. The exacerbation effect of negative meaning in life on psychological well-being was also partially supported. Figure 8.7 shows the interactive effect of negative meaning in life on psychological well-being.

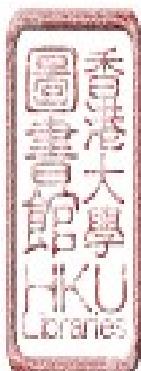
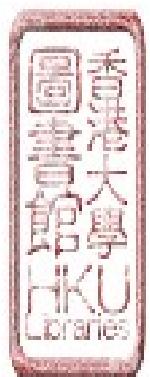


Table 8.67 Hierarchical Multiple Regression of Psychological Well-being on Negative Meaning in Life and College Stress

Psychological Well-being	Beta	R ²	ΔR ²	ΔF	Df
GHQ-20					
Direct Effect					
College Stress (CS)	.43	.18	.18	169.34 ***	1/761
Negative Meaning in Life (NML)	.52	.27	.09	94.13 ***	1/760
Buffering Effect					
CS × NML	.53	.28	.01	7.33 **	1/759
GHQ-Sense of Adequacy					
Direct Effect					
College Stress (CS)	.30	.09	.09	77.70 ***	1/763
Negative Meaning in Life (NML)	.38	.14	.05	45.31 ***	1/762
Buffering Effect					
CS × NML	.38	.14	.00	1.30	1/761
GHQ-Depression					
Direct Effect					
College Stress (CS)	.30	.09	.09	73.26 ***	1/762
Negative Meaning in Life (NML)	.40	.16	.07	65.45 ***	1/761
Buffering Effect					
CS × NML	.43	.19	.03	25.10 ***	1/760
GHQ-Anxiety					
Direct Effect					
College Stress (CS)	.40	.16	.16	140.89 ***	1/764
Negative Meaning in Life (NML)	.45	.20	.04	45.76 ***	1/763
Buffering Effect					
CS × NML	.45	.20	.00	.78	1/762
PAS					
Direct Effect					
College Stress (CS)	.07	.005	.005	3.87 *	1/768
Negative Meaning in Life (NML)	.09	.008	.003	1.93	1/767
Buffering Effect					
CS × NML	.09	.008	.000	.00	1/766
NAS					
Direct Effect					
College Stress (CS)	.36	.13	.13	110.88 ***	1/763
Negative Meaning in Life (NML)	.48	.23	.10	97.30 ***	1/762
Buffering Effect					
CS × NML	.48	.23	.00	1.22	1/761
Self-esteem					
Direct Effect					
College Stress (CS)	.37	.14	.14	123.07 ***	1/768
Negative Meaning in Life (NML)	.46	.21	.07	65.53 ***	1/767
Buffering Effect					
CS × NML	.46	.21	.00	1.00	1/766

* p<.05 ** p <.01 *** p <.001 Δ : Change



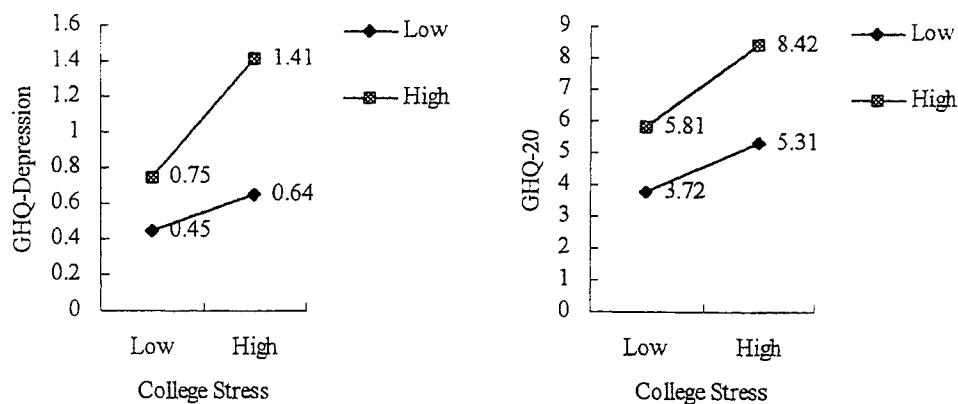


Figure 8.7 Effects of Negative Meaning in Life and College Stress on Psychological Well-being

Will to Meaning on Psychological Well-being under College Stress

Effects of will to meaning on psychological well-being were analyzed with reference to the following hypothesis and its three sub-hypotheses.

H_{2.7}: Will to meaning is associated with psychological well-being, and the association is more significant under higher than lower college stresses

This hypothesis and the sub-hypotheses refer to both the direct and the buffering effects of will to meaning on psychological well-being under college stresses. Table 8.68, 8.69, 8.70 and 8.71 show the correlations between will to meaning and psychological well-being under two levels of (low and high) college stresses, academic hassles, personal hassles and negative life event respectively.

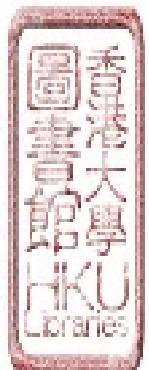


Table 8.68 Correlations of Will to Meaning and Psychological Well-being under Low and High College Stresses

	Low Stress ^a	High Stress ^b	Difference z
Will to Meaning			
GHQ-20	-.23**	-.29**	1.00
GHQ-Sense of Adequacy	-.25**	-.25**	-
GHQ-Depression	-.18**	-.36**	2.86**
GHQ-Anxiety	-.03	-.07	-
Positive Affect Scale	.30**	.09	-3.14**
Negative Affect Scale	-.15**	-.19**	.57
Self-esteem	.34**	.37**	.57

** $p < .01$ (one-tailed)

^a $N = 373-374$

^b $N = 370-374$

Table 8.69 Correlations of Will to Meaning and Psychological Well-being under Low and High Academic Stresses

	Low Stress ^a	High Stress ^b	Difference Z
Will to Meaning			
GHQ-20	-.26**	-.28**	.29
GHQ-Sense of Adequacy	-.27**	-.24**	.57
GHQ-Depression	-.20**	-.39**	3.00**
GHQ-Anxiety	-.07	-.06	-.14
Positive Affect Scale	-.18**	-.18**	-
Negative Affect Scale	.29**	.10	-2.86**
Self-esteem	.36**	.36**	-

** $p < .01$ (one-tailed)

^a $N = 406-409$

^b $N = 368-374$



Table 8.70 Correlations of Will to Meaning and Psychological Well-being under Low and High Personal Stresses

	Low Stress ^a	High Stress ^b	Difference <i>z</i>
Will to Meaning			
GHQ-20	-.20**	-.28**	1.29
GHQ-Sense of Adequacy	-.24**	-.24**	-
GHQ-Depression	-.16**	-.35**	3.00**
GHQ-Anxiety	-.01	-.08	-1.29
Positive Affect Scale	.26**	.12*	-2.14*
Negative Affect Scale	-.18**	-.14**	-.57
Self-esteem	.37**	.32**	-.86

**p* < .05 ** *p* < .01 (one-tailed)

^a *N* = 384-388

^b *N* = 370-374

Table 8.71 Correlations of Will to Meaning and Psychological Well-being under Low and High Stresses of Negative Life Event

	Low Stress ^a	High Stress ^b	Difference <i>z</i>
Will to Meaning			
GHQ-20	-.26**	-.29**	.43
GHQ-Sense of Adequacy	-.28**	-.24**	-.71
GHQ-Depression	-.23**	-.35**	2.00*
GHQ-Anxiety	-.03	-.12*	1.29
Positive Affect Scale	.25**	.16**	-1.42
Negative Affect Scale	-.19**	-.18**	-.14
Self-esteem	.29**	.44**	2.43*

**p* < .05 ** *p* < .01 (one-tailed)

^a *N* = 373-374

^b *N* = 370-374



Results of Table 8.68, 8.69, 8.70 and 8.71 suggested that will to meaning served as a buffer in the relationship between college stress and depression, academic hassle and depression, personal hassle and depression, as well as between negative life event and depression. Will to meaning also buffered the negative impact of negative life event on self-esteem. The data indicated that will to meaning buffered in the relationship between college stress and positive affect, academic hassle and positive affect, as well as personal hassle and positive affect. Thus, the buffering effect of will to meaning was partially supported in terms of college stress, academic hassle, personal hassle and negative life event.

As can be seen in Table 8.72, will to meaning did exert a direct effect on all aspects of psychological well-being except on anxiety. Significant buffering effect of will to meaning was observed in the relationship between college stress and depression, as well as between college stress and positive affect. No significant buffering effect of will to meaning was found on other aspects of psychological well-being. Since the hierarchical multiple regression reported similar results based on academic hassle, personal hassle and negative life event as those on college stress, they were not be repeated here.

In conclusion, the direct and the buffering effects of will to meaning on psychological well-being under college stresses were partially supported, and Figure 8.8 shows the buffering effect of will to meaning on psychological well-being under college stress.

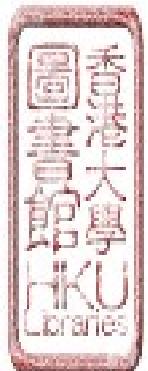
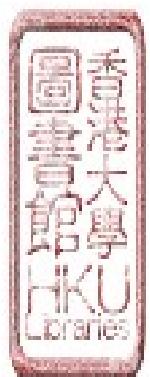


Table 8.72 Hierarchical Multiple Regression of Psychological Well-being on Will to Meaning and College Stress

Psychological Well-being	Beta	R ²	ΔR ²	ΔF	Df
GHQ-20					
Direct Effect					
College Stress (CS)	.42	.18	.18	164.87 ***	1/761
Will to Meaning (WTM)	.47	.22	.04	39.66 ***	1/760
Buffering Effect					
CS × WTM	.47	.22	.00	2.01	1/759
GHQ-Sense of Adequacy					
Direct Effect					
College Stress (CS)	.30	.09	.09	75.77 ***	1/762
Will to Meaning (WTM)	.37	.14	.05	40.07 ***	1/761
Buffering Effect					
CS × WTM	.37	.14	.00	.01	1/760
GHQ-Depression					
Direct Effect					
College Stress (CS)	.29	.09	.09	71.93 ***	1/762
Will to Meaning (WTM)	.38	.14	.05	52.26 ***	1/761
Buffering Effect					
CS × WTM	.41	.17	.03	24.20 ***	1/760
GHQ-Anxiety					
Direct Effect					
College Stress (CS)	.39	.15	.15	137.16 ***	1/763
Will to Meaning (WTM)	.39	.15	.00	.09	1/762
Buffering Effect					
CS × WTM	.39	.15	.00	1.81	1/761
PAS					
Direct Effect					
College Stress (CS)	.08	.01	.01	4.42 *	1/767
Will to Meaning (WTM)	.21	.04	.03	29.96 ***	1/766
Buffering Effect					
CS × WTM	.23	.05	.01	7.61 **	1/765
NAS					
Direct Effect					
College Stress (CS)	.35	.12	.12	105.10 ***	1/767
Will to Meaning (WTM)	.37	.14	.02	14.08 ***	1/766
Buffering Effect					
CS × WTM	.37	.14	.00	.62	1/765
Self-esteem					
Direct Effect					
College Stress (CS)	.37	.14	.14	120.57 ***	1/761
Will to Meaning (WTM)	.48	.23	.09	89.35 ***	1/760
Buffering Effect					
CS × WTM	.48	.23	.00	1.23	1/759

* p<.05 ** p <.01 ***p<.001 Δ: Change



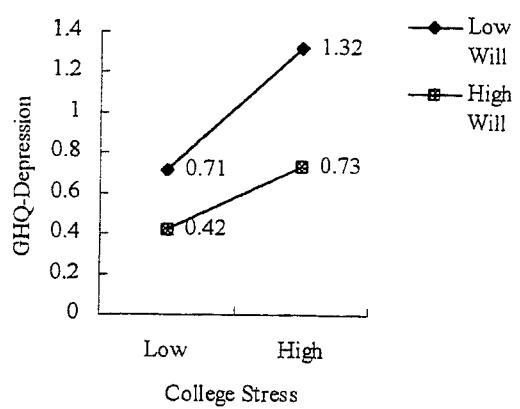


Figure 8.8 Effects of Will to Meaning and College Stress on Psychological Well-being



CHAPTER 9

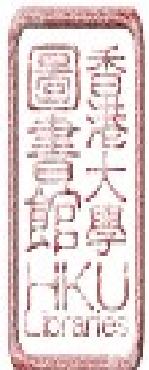
DISCUSSION

We began the empirical portion of this thesis by describing the development of measures of college stress and vision in life. We then reported a study in which we used these two scales to predict psychological well-being under college stress, as well as effects of vision in life on psychological well-being under college stress. Although the findings of this study have obvious limitations and boundary conditions (both empirical and conceptual), the data indicated that the College Stress Scale and the Vision in Life Scale possessed satisfactory or very satisfactory reliability and at least a degree of construct validity respectively. Moreover, they have predicted the theoretically meaningful outcomes. Since the respondents in the study were recruited based on several sampling steps, the findings below could be generalized to college students at least in Beijing.

MEASUREMENT ISSUES

College Stress Scale

One of the main purposes of this study is to construct a measure of college stress that is appropriate for use with college students. Specifically, behavioral-analytical (see Goldfried & D'Zurilla, 1969) techniques were used to construct a measure that adequately reflected the major stresses of students. This measure contained a number of items reflecting academic hassle, personal hassle and negative life event rather than only hassles or negative life event. Most importantly, the



factor analysis and correlations between total scale and three sub-scales provided evidence for an underlying common variable as well as for its three components.

The College Stress Scale and the sub-scales were compared with respect to the ability of each to predict psychological well-being in terms of GHQ-20, PAS, NAS and Self-esteem. Pearson correlation coefficients between each stress scale and each psychological well-being measure were significant for every case except for PAS. The strength of these correlations ranged from $r = .01$ to $r = .42$. If PAS was ruled out, the correlations ranged from $r = .17$ to $r = .42$. College Stress Scale explained as much as 18% of the variance in psychological well-being scores, whereas the Personal Hassle Scale explained 15%, Academic Hassle Scale 14%, and Negative Life Event 4% of the variance in psychological well-being scores. In contrast, previous studies on negative life event scales reported only mild relationship with outcome measures, with correlation coefficients ranged from .15 to .20 (Cleary, 1980; Ross & Mirowsky, 1979), suggesting that the in-common variance was 2% to 4%. Previous studies on college hassle scales reported higher correlations with outcome measures. The typical correlation coefficients with outcome measures ranged from .29 to .58 (Blankstein et al., 1991), and the in-common variance was as much as 34%. It is also consistent with the findings of the present study that hassles explained more variance than negative life event.

College Stress Scale predicted the most variance in psychological well-being scores compared with its sub-scales. Therefore, the total score is recommended for future studies to measure college stress. This finding further supported that the predictability of hassle and negative life event together was more than that of either hassle or negative life event individually.



With the reliability and predictability of the well-being of college students, College Stress Scale and the sub-scales developed by the present study provided psychometrically and theoretically sound measures of college stress.

Measures of Psychological Well-being

a. GHQ-20

Our validation study extracted three factors that were composed of 20 items of the GHQ-30. Two of the three factors--GHQ-Depression and GHQ-Anxiety represent the most stable factors reported by previous studies of GHQ-30 (Chan, 1985; Shek, 1988). It is possible that depression and anxiety represent the core of mental health problems. As for GHQ-Sense of Adequacy, we have not found any previous studies that extracted the same named factor as we did. However, some related factors have been reported. Some previous studies reported a factor of inadequate coping (Chan & Chan, 1983; Shek, 1988), which is very similar to our factor of sense of adequacy. Taken together, both anxiety and depression were found to have high congruence, but sense of adequacy was not.

b. PAS and NAS

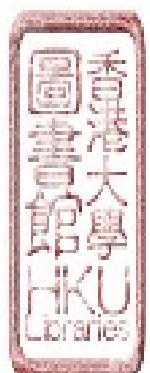
The result of the present study further supported that PAS and NAS were two independent scales (see Diener, Suh, Lucas & Smith, 1999; Diener & Emmons, 1985). Their correlation was $r = -.13$ based on our validation study and $r = -.15$ based on the main study. However, their reliability was less satisfactory, especially that of PAS. The validation study found that the reliability of PAS and NAS was Cronbach $\alpha = .55$ and $\alpha = .60$, respectively. The main study indicated that the reliability of PAS and NAS was even lower, which was Cronbach $\alpha = .35$ and α



= .57, respectively. In Headey and Wearing's (1991) review, the typical reliability of PAS and NAS was Cronbach $\alpha = .64$ and $\alpha = .65$ respectively. The analyses of what may result in the less satisfactory reliability of PAS and NAS in our studies are as follows.

First, the aim of Bradburn's (1969) classic work was to learn how certain macrolevel social changes (e.g. changes in education levels, employment patterns, urbanization, or political tensions) affected the life situations of individual citizens and, in turn, their sense of psychological well-being. To reflect the original author's aim, some items were based on two focused points: 'something' and 'affect change' which was caused by that 'something', such as item 3 "proud because someone complimented you on something you had done?"; item 5 "pleased about having accomplished something?" and item 10 "upset because someone criticized you?". However, the two focuses may lead to ambiguity in making choices in that some respondents may pay attention only to either 'something' or 'affect change'. For example, a student may choose 'yes' on item 3 because he felt 'proud', but another student who also felt 'proud' may choose the 'no' answer because his feeling of pride came from elsewhere. Still others may choose either 'yes' or 'no' after the two points are taken fully into consideration. As such, at least three different apprehensions may be given to each of these three items, and this may partly account for the low internal consistency of PAS and NAS.

Second, some descriptions tended to be ambivalent when being put into Chinese. Such an item as "on the top of the world" would imply either positive or negative meaning in Chinese, and respondents may identify more with its negative than with its positive meaning, and their answer may be based on either of the

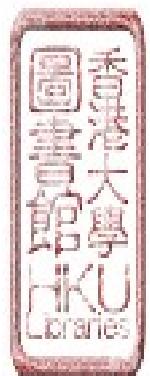


meanings. In combination, PAS included more ambiguous items than did NAS, and therefore, the reliability of PAS was even lower than that of NAS in our study.

In view of the poor psychometric properties and the ambiguous items of the PAS and NAS, we may not derive conclusions from the findings based on PAS and NAS.

c. Self-esteem

Both the validation study and the main study produced satisfactory internal consistency on the Self-esteem Scale. The reliability was Cronbach $\alpha = .86$ for the validation study and Cronbach $\alpha = .83$ for the main study. Self-esteem moderately correlated with all the four measures of college stress, with the correlation coefficients ranging from -.17 to -.37 in our main study and from -.17 to -.51 in the validation study. Self-esteem Scale possessed the similar sensitivity as GHQ-20 to college stress. We contrasted two components of self-esteem—self-confidence and self-deprecation with PAS and NAS (see Chapter 4), and further predicted that self-confidence and self-deprecation would be more appropriate than PAS and NAS as indicators of psychological well-being. The results showed that the correlations between Self-confidence and the other measures of psychological well-being were all higher than those between PAS and the other measures, though the other measures were sometimes more closely related to NAS. Based on the preceding discussion, the Self-esteem Scale is considered not only a psychometrically sound measure, but also a sensitive measure for assessing psychological well-being.

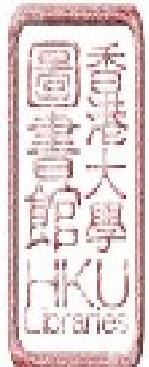


Vision in Life Scale

Results of the reliability analyses showed that the Vision in Life Scale was quite reliable (Cronbach $\alpha = .91$ for the validation study and Cronbach $\alpha = .92$ for the main study). Thus, the findings established the internal consistency on the Vision in Life Scale. In addition, the item-total correlation data showed that most of the items were correlated significantly with the total. Only four among the total of 42 items did not reach the item-total correlation of .3. The findings suggested that, with the exception of items 10, 19, 21 and 25, most of the items in the Vision in Life Scale were relatively homogenous and they measure the same psychological construct.

Factor analysis showed that four factors could be extracted from the scale. This finding was somewhat different from the hypothetical scale structure that consisted of three factors. This empirical structure divided one original factor concerning meaning in life into positive and negative orientations. The four subscales were found to have sufficiently high internal consistency.

The constructed sub-scales correlated moderately, ranging from .32 to .51 in the main study and from .22 to .40 in the validation study. This indicated that the four sub-scales underlying vision in life are independent and interrelated. We further compared the Vision in Life Scale and the sub-scales with respect to their ability to predict psychological well-being as measured by GHQ-20, PAS, NAS and Self-esteem. Pearson correlation coefficients between each vision in life scale and each psychological well-being measure were significant in every case except PAS. The strength of these correlations ranged from $r = .07$ to $r = .63$. If we ruled out PAS, the correlations ranged from $r = .20$ to $r = .63$. Vision in Life Scale explained as



much as 34% of the variance in psychological well-being scores, whereas Life Control Scale explained as much as 40%. Life Control Scale predicted more variance than the total Vision in Life Scale and the other sub-scales in psychological well-being scores. Therefore, Life Control Scale could be used individually in future studies to measure vision in life.

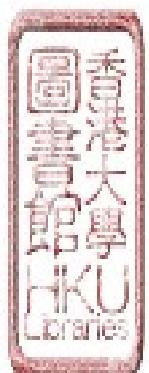
Due to homogeneity of subjects in this study, generalization of the findings is limited. Thus, further study based on a wider range of subjects may provide more illumination into the stability of the factor structure of Vision in Life.

COLLEGE STRESS

General Level of College Stress

A main result of interest is that the perceived college stress was low in general. When the conceptual mid-point was treated as a reference point for the evaluation of high and low stresses, 8.3% of the students were considered to be exhibiting high stress, 73.9% were considered to be exhibiting low stress, and approximately 18% did not report any stress. The observed mid-point of 27 and the mean score of 28.25 ($SD = 11.81$) were very much lower than the conceptual mid-point of 45. With regard to the concrete stress items, if the conceptual mid-point of 1.5 was used as a reference point for evaluation, only one item among the total 30 items reached the high stress level.

Causes of low college stress may be as follows: First, the sampled negative life events (acute stress) based on students' report were not something that would occur frequently. Moreover, as we conducted the survey at the beginning of the semester,

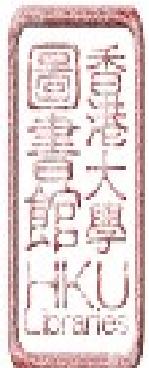


the stress due to failure in examinations may become long-lasting appraisals of stress after the examinations ended (see Baum, Cohan & Hall, 1993). Second, hassles or ongoing stresses and strains of daily living were dull in nature. According to Wheaton (1997), this kind of stress develops slowly and insidiously as a continuing problematic condition in social environments and roles, and typically has a longer time course but lower intensity than life events. In line with these two points, the result is that college stress was low rather than high.

Types of College Stressors

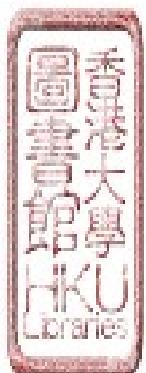
The present study identified three major types of college stressors, which were academic hassle, personal hassle and negative life event. This finding was quite similar to those by Western researchers (Archer & Lamnin, 1985; Murphy et al., 1996). Stresses of academic hassles took precedence over those of personal hassle and negative life event. The finding may suggest that academically related matters were the major concerns of college students. One of the possible explanations for the high academic stress may be that students were under social pressure to study hard, and the acculturation processes occurring in China may also contribute to it (Kim et al., 1997).

Low learning efficiency, classmates competition (academic), examination pressure, academic ranking, low grades in general, and low grades on certain subjects were among the academic hassles most frequently reported by the students. Tests, grade competition, time demands, professors and classroom environment, career and future success were reported by Western students to be common academic hassles (Archer & Lamnin, 1985). Academic stressors reported by Murphy et al.



(1993) included tests and finals, grades and competition, professors and class environment, papers and essay exams, too many demands/not enough time/deadlines, career and future success, and studies. The general pattern based on our study and the two Western studies was quite similar. Perhaps, Chinese and Western structures of the higher education enterprise were similar to a large extent. However, the stress rank order was somewhat different between our findings and the Western findings. The top academic stresses for Chinese college students were not examinations but rather low learning efficiency and competition, whereas the top academic stresses for Western college students were examination related matters. Difference may be due to the reasons below: First, it may be that Chinese students are more concerned about whether they could develop their abilities from attending university (see findings below), and whether such abilities would relate to some long-term goals. However, examination is related to relatively short-term goals. Second, in fact, examinations were not given very often, and they occurred generally at the end of semesters. As such, students are becoming more concerned about learning efficiency rather than examinations. Third, that competition was the second academic stress may be the result of the Chinese culture mingling with capitalistic cultures (see Chu, 1985), which may lead people to be both collectively (e.g. trying hard to win others' acceptance) (Hong & Lam, 1992) and individually oriented. As a result, students are trying hard to win others' acceptance by competition. Therefore, competition was the second top academic stress.

As for personal hassle, the first four stresses in descending order were: worries not being taught/educated properly, inadequate social skills, temptations from social environment, and lack of inter-personal communication. In contrast, the major personal stressors identified by Archer and Lamnin (1985) in the descending order



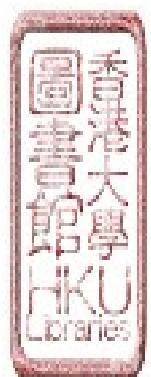
were: intimate relationships, parental conflicts, finances, and interpersonal conflicts with friends. In a report by Murphy et al. (1993), intimate relationships, finances, and parental conflicts were the top personal stressors. A study conducted by Kim et al. (1997) based on a sample of Chinese college students indicated that sociophobic, sexual problem, identity problem, dependency, other's criticism, appearance and interpersonal skills were the major personal stresses. The general pattern based on our study and others was somewhat different. Of our findings, worries not being taught/educated properly was the top one personal stress, but the findings of other studies did not report stress related to this aspect. This stress may be caused by the gap between students' high expectation in the quality of teachers and study facilities and short of them in universities. The stress may also be caused by the gap between high social expectation transformed into pressures for students and the poor conditions in universities. Stern (1966) suggested that expectations were a myth because students' positive expectations were rarely realized. In line with Stern, Pancer et al. (2000) indicated that cognitive complexity of expectations helps students to adjust to university. Findings in the present study suggest that this stress to a large extent reflected a more complex social problem rather than just that of the students. However, to help students to adjust to the campus life through regulating their expectations is also crucial to relieve them of such stresses. In fact, this stress to some extent reflected the fact that Chinese college students are more concerned about the long-term goal of their present studies in university, and it also reflected the nature of social pressure on them to perform well academically. Regarding the other personal stresses, Chinese college students seemed to be more concerned with society related matters. This finding was quite different from those in Western studies, in which students seemed to be more concerned about individual related matters (see Archer & Lamnin, 1985; Murphy et al., 1993).



Surprisingly, failure in examinations ranked below losing face and being told off in public. One possible reason may be that although all of the four events happened less frequently, failure in examinations happened even less frequently. Moreover, as we mentioned above, this survey was conducted at the beginning of the semester, and the stress from failure in examinations may have become a long-lasting stress or may have been diminished after the examinations were over.

Related Factors of College Stress

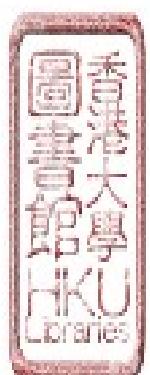
Second year students reported the most college stress, whereas first year students reported the least college stress, with third year students in between. This result further consolidated the findings by Fan et al. (2000), which were based on a large college student sample in Beijing. However, most of the Western studies reported that the first year of study was the most stressful year (e.g. Hudson & O'Regan, 1994; Pancer et al., 2000). Stern (1966) used the term "freshman myth" to describe "naïve, enthusiastic and boundless idealism," which he claimed was one of the major sources of college stress. It should be noted that in Western studies the conclusion that the first year of study was more stressful was based on theoretical perspectives. Few studies were conducted among students in different years of study. The gap between reality and freshmen myth supported a major theory that the first year of study was more stressful. But no evidence showed that students in the second and third year of study do not experience such a gap. Our finding was consistent with the finding of another study based on Chinese college students which suggested that the first year was the least stressful year (Fan et al., 2000). These findings may reflect some difference between Western students and Chinese students. However, further study is needed to confirm the observations.



It is believed that the first year was the least stressful year because students in the first year did not experience many cumulative pressures from study and other sources as did students in the other years. The second year was the most stressful year perhaps because of the following: On the one hand, in the second year of study the gap between expectation and reality may still be obvious, and adjustment is required. On the other hand, cumulative pressures from study and other sources increased. These two pressures together made the second year the most stressful year. However, when students came into the third year, the gap between expectation and reality may be diminished, and though the cumulative pressures may be increasing, the students should feel better adjusted.

The present study found that male students reported significantly higher stress than did female students on all the four measures of college stress. This finding was quite different from those reported by Western researchers (Compas, Davis & Forsythe, 1985; Koplik & Devito, 1986). One possible explanation of the difference may be the sampling. In our study, most male students majored in natural sciences and most female students majored in social sciences. Natural sciences students usually experienced more academic stresses and more pressures of examinations than did social sciences students. Moreover, society would have higher expectations for males than for females, and this would produce greater stresses for male students. In a word, male students generally faced higher stresses than did female students.

The findings on the effects of field of study on college stress showed that field of study affected hassles but negative life event. Natural sciences students reported significantly higher stresses than did social sciences students, especially on academic



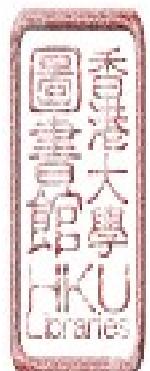
hassle. In terms of negative life event, although it seldom happened, natural sciences students also reported more stress ($M = 3.32$, $SD = 2.32$) than did social sciences students ($M = 3.01$, $SD = 2.83$). The possible explanation of the difference between natural sciences and social sciences students may be related to the ratio of male and female students in the two disciplines.

PSYCHOLOGICAL WELL-BEING

Because of the measurement issues analyzed above, findings on PAS and NAS will not be discussed. The discussion of college students' psychological well-being will focus on only mental health status and self-esteem.

Mental Health Status

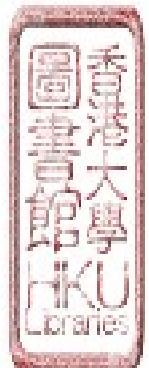
Slightly more than 82% of our college students reported low level of mental health problems, whereas about 15% of them showed high level of mental health problems. In contrast, Yeh, Chu, Ko, Lin & Lee (1972) found that 5.1% of the college students could definitely be regarded as psychiatric cases and 25.6% showed milder psychological symptoms that could be regarded as highly probable psychiatric cases. Ko (1975) found that 4% of the students under investigation had severe psychological impairments, 12% had medium psychological impairment problems and 32% to 38% had slight psychological risk problems. As the contrasting data were collected in early years in the Hong Kong context, and different cut-off scores were adopted in different studies, they may only provide us with some references. However, the impression was that the general mental health status of Chinese college students was basically satisfactory. We further examined the factors related to students' general mental health status in terms of gender, field of



study and year of study. No significant differences were reported on all the factors. In contrast, Shek's (1988) study of secondary school students in Hong Kong showed that the mental health of female students was poorer than that of the male students. Shek (1988) also suggested that older students (age range was 11-20) tended to show more psychological symptoms. Nonetheless, Shek's data were based on different age groups and were collected from different contexts, they may not be directly comparable. Our findings suggest that none of the other factors under our exploration is more influential on mental health status than did college stress.

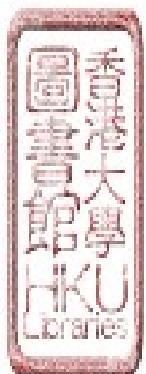
a. Issues of sense of adequacy

Approximately 70% of the respondents showed a low sense of adequacy. A number of analyses of emotion from a cross-cultural perspective (Diener & Diener, 1995; Markus & Kitayama, 1991) and investigations of human socioemotional development imply that emotional processes and the ensuing conscious experience of emotion may be drastically different depending on the surrounding sociocultural environment. For example, Kitayama, Markus and Kurokawa (1991) found that American students reported an overwhelmingly greater frequency of experiencing positive self-relevant feelings than that of negative self-relevant feelings, but there was virtually no such effect among the Japanese. The report proposed by Kitayama et al. (1991) is in line with our finding. In this respect, Markus and Kitayama's (1991) cultural press model may explain this finding when they stated that "Interdependent culture to some extent presses self not to become separate and autonomous from others but to fit-in-with others." Therefore, people in an interdependent culture would experience less positive emotion than their counterparts in independent cultures such as in the West. According to Lebra (1992), however, the interdependent view of self could be traced to Buddhism in



which the core notion is not to “objectify the self” but to submerge the self and “gain freedom from the self”. Findings based on both Kitayama et al. (1991) and our own studies seem to argue against Lebra's (1992) contention. Then, how do we explain the differences between the theoretical argument by Lebra (1992) and the empirical findings by Kitayama et al. (1991) and the culture press model by Markus and Kitayama (1991)?

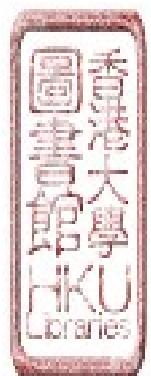
Yang's (1986) contention may provide us with some possible thinking to clarify the difference between theories and that between theory and empirical findings. According to Yang, Chinese people are changing in the direction of an increasingly individualist and decreasingly collectivist orientation. That is, in the current Chinese culture both individualist and collectivist values are endorsed. In other words, culture mingling, instead of the Chinese culture alone, may influence the findings based on the Chinese context. It may be that the interdependent view of self derived from Buddhism should be related to positive rather than negative emotion. In contrast, individualist culture encourages people to objectify the self. People affected by both cultures may experience more negative emotion than those affected by either of them. The possible reason is that, on the one hand, people want to objectify the self, and on the other hand they are also aware of the pressure of collectivism. If people are only affected by independent culture, they would objectify self without the pressure of collectivism. If people are only affected by interdependent culture, they would not want to objectify the self. This may be more suitably labeled as the 'cultural press model'. It then follows that if people do not want to objectify the self, they do not feel the pressure of collectivism. Thus, cultural press is caused by cultural mingling rather than by interdependent culture alone. That is, low sense of adequacy is caused by culture mingling rather than by



interdependent culture. Before ending this discussion, it should be noted that none of the possible influential factors we examined, including gender, field of study and year of study were observed to significantly affect sense of adequacy. It seems that stress is much more influential on sense of adequacy than these factors.

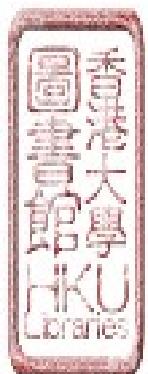
b. Issues of depression

When we used the conceptual mid-point as a reference point for the evaluation of high and low depression, 4.5% of the students were considered to be exhibiting high depression and 47.9% low depression (depressive tendency). Approximately half of the students did not show depression. Culture may be a major cause for the Chinese students to show depressive tendency. This is expected because in many ways whether or not an individual shows more optimism and/or pessimism is linked to his or her cultural environment (Eshun, 1999). Lee and Seligman (1997) reported that Mainland Chinese were more pessimistic but less self-blaming than either Chinese Americans or American college students. Furthermore, Markus and Kitayama (1991) commented on the fact that cultural differences in levels of optimism and pessimism among Asians and Americans may be related to variations in cognition and the concept of the self. Generally, they found that Asian cultures promote interdependence and conformity to social norms, whereas Taylor and Brown (1988) noted that individuals from Western cultures were described as more independent and comparatively less conforming to social norms. Harmony with others may be maintained through pressing oneself to be conforming with others to some extent.



As we discussed previously, in an interdependent culture if one wants to justify self, he would experience negative emotion and would be likely to feel the cultural press. In discussing how people handled pressures in ways that are contrary to their belief and values, Asch (1952) stated that "The present task is to observe directly the interaction between individuals and groups when the paramount is that of remaining independent or submitting to social pressure". Submitting to social pressure may be a reason why many Chinese students showed depressive tendency. On the one hand, as students accepted the Western individualism culture, they want freedom, authority, privacy, but on the other hand they have to submit themselves to the social pressures such as the pressure to meet parents' expectations and to please people around them. These two different wishes often conflicted with each other, and would lead to depressive tendency. In other words, independent tendency may be pressed by interdependent tendency, and this leads to students' depressive tendency. Another possible reason of Chinese students' low depressive tendency may be due to the way of expression. Briefly, interdependence and conformity to social norms may not lead to pessimism, but mixed and conflicting values of independence with interdependence may be the major cause of pessimism and even depressive tendency.

As for the other influential factors of depression, it was found that year of study and field of study significantly affected depression, whereas no gender difference was observed. Western studies indicated that depressive symptoms were more prevalent among females during adolescence (e.g. Brooks-Gunn, 1991; Rutter, 1986). Was the difference between our findings and those by Western researchers caused by culture? We could only leave the issue for further studies. With regard to year of study, we found that second year students showed the highest depression scores than students of the other two years in our study. Although we have not found any



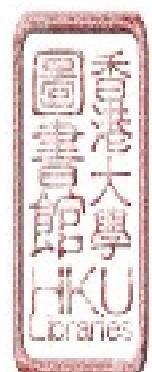
comparable studies in Western studies yet, this finding was consistent with our expectation. Since second year students showed the highest stress, they should also show the highest depression (see discussion on college stress). Another influential factor was the field of study, for which natural sciences students reported higher depression than did social sciences students. This finding also was consistent with our own findings on stress.

c. Issues of anxiety

Compared with depression, a higher percentage of anxiety was found in college students. Freud ((1926), 1964) pointed out that depressed affect and anxiety are biological reactions to the occurrence or threat of painful losses. Brenner (1974, 1982) has made the observation that depression relates to loss in the present or past, whereas anxiety relates to loss in the future. We may infer that depression relates to stresses in the present or past, whereas anxiety relates to stresses in the future. In line with both Freud ((1926), 1964) and Brenner (1974, 1982), our findings suggest that college students would worry about future stresses more than they would ruminate past or present stresses. We examined the possible influential factors on college students' anxiety in terms of gender, year of study and field of study, and no significant differences were found on all of these factors. This finding may suggest that stress is the major cause of anxiety rather than any other factors we explored.

Self-esteem

The results suggested that students' self-esteem was generally high. Then, what does high self-esteem mean to Chinese college students? Kitayama and Markus (1994) argued that in cultures in which the collectivism is emphasized, feeling good about oneself may be a sign of maladjustment. Diener et al. (1999)

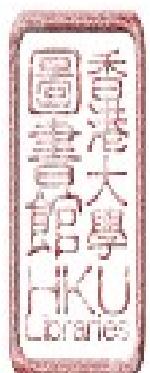


also contended that feelings about self and emotions weigh less heavily in satisfaction judgments among members of collectivist cultures. Then, was the situation with Chinese college students really like what they argued? Two issues need to be discussed to answer the question. First, what is the nature of self-esteem? Second, what is the relationship between self-esteem and self-transcendence?

a. Nature of self-esteem

This question is also very crucial for understanding the nature of psychological well-being. According to Rosenberg (1965), self-esteem is the global positive self-evaluations. Then, on what basis could people possess such global positive self-evaluations? In other words, the intention of this question is that self-esteem is a reflector. That is, it is the reflection of something rather than what that something is. The present study examined two possible sources for self-esteem—positive illusion and vision in life. These two sources were taken into account from two different theoretical perspectives of psychological well-being. The first perspective was that positive illusion was the resource of normal human thought (Taylor & Brown, 1988). The second perspective was that vision in life was the essential resource of psychological well-being, which was the argument of the present study. Self-esteem was assumed to be mainly sustained by either of them. In other words, whether people could globally positively evaluate themselves depends on whether they possess high positive illusions or have strong visions of their lives.

We examined this issue by using the Life Orientation Test (LOT), a measure of dispositional optimism developed by Scheier and Carver (1985). According to Taylor and Brown (1988), optimism is in nature related to positive illusion. Our



examination showed that Pearson's correlations between Self-esteem and LOT was $r = .41$, and between Self-esteem and Vision in Life was $r = .56$. Vision in life possessed higher correlation with self-esteem than did LOT though the correlation between self-esteem and LOT was also significant. We further examined the difference between correlations of these two pairs of relationships. The result was that correlation between Self-esteem and Vision in Life was significantly higher than that between Self-esteem and LOT ($z = 2.7$, $p < .01$). Thus, vision in life explained significantly more variance in self-esteem than did dispositional optimism (a concept related to positive illusion). We further examined the contributions of dispositional optimism and vision in life to the two components of self-esteem respectively. The contributions of dispositional optimism and vision in life to self-confidence were 19% and 24% respectively, and 8% and 26% to self-deprecation respectively. We can see that vision in life contributed much more to both self-confidence and self-deprecation than did dispositional optimism. Thus, we infer that self-esteem and its two components were bolstered more by vision in life than by dispositional optimism or positive illusion.

b. Relationship between self-esteem and self-transcendence

We addressed this issue with a view to explore the relation between self-esteem and selflessness. Self-transcendence in our study was established on the notion of selflessness. Thus, the discussion on self-transcendence could also refer to selflessness. When it comes to articulate self-esteem and selflessness, discussions nearly always put them at two extremes (e.g. Diener, 1999; Kitayama & Markus, 1991, 1994). Self-esteem is the hallmark of Western culture, whereas selflessness is the hallmark of oriental culture. Our argument is that self-esteem and selflessness may not be two opposite phenomena, but rather they are positively related to each



other. In fact, the discussion on the nature of self-esteem already showed some evidence for this argument. To further support our argument, we examined the relationships between self-esteem and different components of vision in life, and compared them with the relationships between self-esteem and some other measures relevant to self such as internal locus of control and private self-consciousness. Results showed that correlation between self-esteem and life control ($r = .60$) was significantly higher than that between self-esteem and internal locus of control ($r = .30$), the difference of which was $z = 5.4$ ($p < .01$). Correlation between self-esteem and self-consciousness ($r = .08$) was much lower than correlations between self-esteem and any of the total or sub-scales of vision in life. Although these findings cannot directly indicate a relation between self-esteem and selflessness, the relation is implied. That is, selflessness and self-esteem do not conflict with each other, but rather, positively associated. Going back to our question: what does high self-esteem mean for Chinese college students? The answer is that it means adjustment rather than maladjustment. It means high level of psychological well-being rather than high level of ill-being.

VISION IN LIFE

Vision in Life

A main result of interest was that a majority of college students possessed high vision in life. Since college students' vision in life reached an absolute high level, there is a need to discuss this finding in the context of Chinese culture. As we discussed before, collectivist culture can be traced to Buddhism within which the goal of existence is to submerge the self and "gain freedom from self" rather than to



"objectify the self" (see Lebra, 1992). Thus, it is reasonable that students' vision in life reached an absolute high level. However, when we take the findings of GHQ-Sense of Adequacy and GHQ-Depression into account, the results seem somewhat inconsistent. Students' low sense of adequacy and depressive tendency also reached a relatively high level. In previous discussions, we argued that this was a result of cultural mingling or acculturation. It may be questioned why cultural mingling or acculturation only affected sense of adequacy and depression, but left vision in life almost intact? We may explain these seemingly inconsistent findings in three possible ways: First, selflessness as a sign of oriental culture is rooted deeply in people's mind, so that it may be less influenced by other cultures. However, sense of adequacy and depression as a subjective feeling or emotion could be easily affected by incoming information including various Western thinkings. Second, vision in life is spirituality, whereas sense of adequacy and depression are emotions. Spirituality should be much more stable than emotion. Third, as we discussed previously, Chinese may tend to show more negative emotions. However, no sign shows that Chinese also tend to show 'negative' spirituality. Since selflessness is a culturally valued spirit, it is expected that Chinese may tend to show high selflessness concern. No gender difference was shown on vision in life. However, social sciences students showed significantly higher vision in life than did natural sciences students. First year students showed significantly higher vision in life than did second year students. This may be related to the freshmen myth, and social sciences students may be more capable of imaginative thinking. However, further studies are needed to support these speculations.



a. Issues of life control

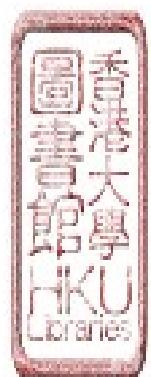
Our results showed that 81.15% of the students did not exhibit low sense of life control. That is, most of the students believed that their lives are under control no matter who is in control. With reference to our findings in vision in life, it is shown that 10% more students possessed vision in life than life control. That is, people who possess vision in life may not necessarily gain low sense of life not being in control. It is our understanding that life control is the ultimate state of vision in life. More specifically, life control may be generated only when people are fully committed to self-transcendence. A second issue is that so many students with a low sense of life not being in control implied the difference between life control and other spiritual control. Most studies reported that spiritual control was generated by severe stresses (e.g. Baugh, 1988; Maton, 1989). However, in our study only 8.3% of the students reported high stresses, but more than 80% disagreed that their life was not being in control. Obviously, a sense of life control was not induced mainly by high stress. The most important cause may be the Chinese culture. Chinese culture impresses people with the philosophy of detachment, which gives rise to a sense of a larger control. However, stress may enhance the sense of life control. A third issue that may need to be discussed is the relationship between life control and other controls such as personal control and external locus of control. At the first glance, life control seems more close to external locus of control than internal locus of control. However, when we look at them more carefully, it is found that external control is passively giving up personal control, whereas life control is actively giving up or just transcending personal control to a greater control. Here, we would explain how the items of life control were devised. We referred to life control as the ultimate state of will to self-transcendence meaning by which people perceive their lives as being in control rather than simply believe in the existence of



control. Therefore, we lay emphasis on life control as an outcome rather than just a belief. Based on our understanding and our in-depth interviews, the most direct and important sign of life control is hopefulness and helpfulness. If people have a sense of hopefulness and helpfulness, they would feel their life under control. Another issue is that "I" was used to describe our items, which was intended to imply a great self rather than a small self. In comparison with personal control that emphasizes controlling of tangible things, life control emphasizes abstract and ultimate control. Thus, life control should include personal control, but it is different from external control. A final issue we have found is that no significant difference in life control was found in relation to gender, field of study, and year of study. However, two of these factors affected vision in life. A possible explanation is that life control could be generated only when people were fully committed to self-transcendence. We infer that, people's perceptions of their lives would be much more affected by self-transcendence than by other factors such as gender, year of study, and field of study. In other words, in comparison with the power of self-transcendence, these factors may play a minimal role.

b. Issues of meaning in life

Our theoretical components of meaning in life were divided into positive and negative orientations. With reference to our findings on life control and will to meaning, it is shown that life control was reflected as "low sense of life not being in control," and will to meaning as "lacking of negative sense of will to meaning." Taken together, it seems that Chinese students are more likely to reflect negative than positive orientation, or it may be that they tend to employ a protective more than an acquisitive life orientation. Diener and Diener (1995) suggested that college students in Korea and China were more receptive of the experience of negative affect



than their Western counterparts, whereas students in United States regard positive affect to be more normative. This finding is very interesting and further studies are needed to confirm whether it is a Chinese cultural characteristic.

Our results indicated that 84.6% of the students showed high positive meaning in life (PML), whereas 20% of the respondents were considered to show high negative meaning in life (NML). The question may then be asked if Chinese students live in a state of self-transcendence. We did not mean so. What we want to convey is that people in collectivist culture are aware of self-transcendence and Yin/Yang. Or in other words, the culture impresses people with the dialectic thinking that the world consists of Yin and Yang. Interesting enough, difference was shown on NML in gender, field of study and year of study, but was not shown on PML. Male students, natural sciences students, and second year students showed significantly higher level of NML. With reference to our findings on college stress that second year students reported the highest stress than students of the other years and that male and natural sciences students reported higher stress than their counterparts, it may be that stress and negative meaning in life are positively associated with each other. That is, higher stress is related to higher negative meaning in life, and low stress is related to low negative meaning in life. However, this association was not shown in terms of PML. This finding seems to suggest that stress positively affected NML, but did not affect PML. It is inferred that PML could be a buffer under college stress, but not NML.



c. Issues of will to meaning

Our result also indicated that a majority of the college students showed high sense of will to meaning (89.3%). Based on Frankl (1992), man's search for meaning is the primary motivation in his life and not a "secondary rationalization" of instinctual drives. It is reasonable that so many students lack the negative sense of will to meaning. However, Welter (1987) reported that in 1967 about 83% of the American college students chose "developing a meaningful life" as their goals in life. In 1984, this answer was chosen by only 47%. Welter (1987) further explained when people live in poverty, survival would have a greater meaning; when living in affluence, however, people would lack that motivation. In other words, people's search for meaning is affected also by their social environments, and poor living condition could strengthen their motivation to search for meaning. Although only 8.3% of the students reported high stress in our study, that chronic stresses or hassles affected psychological well-being is not mainly due to its intensity, but rather its long duration. It could be considered that a majority of the students will to meaning also because of the long duration stresses. At this point, although will to meaning is the primary motivation in life, it also functions as the "defense mechanisms, reaction formations and sublimation" (see Frankl, 1992, p.105). It is possible that although people's search for meaning is the primary motivation in their lives, the motivation may be enhanced by stresses. Conversely, it may be diminished by affluence of life or hedonism values. We also found that female students possessed significantly more will to meaning than did male students, and social sciences students possessed significantly more will to meaning than did natural sciences students. This finding seems inconsistent with the above argument that stress may enhance will to meaning. It is difficult to explain this finding only by 'defense mechanisms' because in our study male and natural sciences students reported higher stresses. Taken together,



to understand will to meaning better, we need to consider it in terms of both primary motivation of life and defense mechanisms.

Life Control in Predictability of Vision in Life

Life control plays a pivotal role in the predictability of vision in life. Predictability of vision in life was examined with respect to the correlation of each component with psychological well-being measured by GHQ-20 and Self-esteem when partialing out the others. Pearson's correlation coefficient between GHQ-20 and Vision in Life was $r = -.58$ ($p < .01$). After Life Control was partialled out, the correlation between GHQ-20 and Vision in Life was no more significant. That is, life control significantly affected the relationship between GHQ-20 and Vision in Life. However, when controlling PML, NML and Will to Meaning, the correlations between GHQ-20 and Vision in Life were still significant. We further examined the correlation between Life Control and GHQ-20 controlling the others. After Will to Meaning, PML and NML were partialled out, respectively, the correlations between GHQ-20 and Life Control were still significant. The finding indicated that these components did not significantly affect the relationship between GHQ-20 and Life Control. The correlation between GHQ-20 and Will to Meaning was $r = -.29$ ($p < .01$). After Life Control was partialled out, the correlation between GHQ-20 and Will to Meaning was no more significant. The correlation between GHQ-20 and PML was $r = -.31$ ($p < .01$). After Life Control was partialled out, the correlation between GHQ-20 and PML was also no more significant. Life Control also significantly affected the relationship between GHQ-20 and NML. The situations of self-esteem were similar as those showed by GHQ-20. Based on the discussion above, Life Control significantly affected the relationships between vision in life and



the components and psychological well-being. Moreover, life control played the pivotal role in the predictability of vision in life and the components to psychological well-being under college stresses. This discussion partially answered one of our two major questions presented in Chapter 2. That is, there may be another variable underlying meaning in life, with which meaning in life could function as a buffer. Based on our findings, this variable should be life control.

COLLEGE STRESS AND PSYCHOLOGICAL WELL-BEING

College Stress and Psychological Well-being

We hypothesized that college stress exerts a negative impact on psychological well-being. The hypothesis was fully confirmed by our findings. We found that general mental health status was most affected by college stress ($r = .42$), while GHQ-Sense of Adequacy and GHQ-Depression were least affected by college stress ($r = .30$ for both). The difference in correlations was significant ($z = 2.14, p < .05$). We may infer that college stress was related to mental health status in general, but less significantly related to the specific components of mental health. The impact of college stress on anxiety ($r = .39$) and on self-esteem ($r = .37$) was similar. In contrast, Damush et al. (1997) suggested that the correlations of school stress with GHQ-anxiety was $r = .24$, with GHQ-depression was $r = .25$, with GHQ-social dysfunctioning was $r = .21$, and with total GHQ-30 was $r = .22$. All the correlations between school stress and mental health status based on their research were lower than that based on our findings. These comparisons were consistent with Kitayama and Markus (1991) and Diener and Diener (1995). However, our interpretation is different. That is, Chinese have more negative affect because of the acculturation



or cultural mingling rather than because of collectivist culture.

Academic Hassle and Psychological Well-being

That the hypothesis of academic hassle exerts a negative impact on psychological well-being was fully supported. Compared with the correlations between college stress and psychological well-being, the correlations between academic hassle and psychological well-being were lower. This finding may suggest that the general measure of college stress predicts more negative psychological outcomes than the specific measures. We found that general mental health status was most affected by academic hassle ($r = .38$), while GHQ-Sense of Adequacy and GHQ-Depression ($r = .26$ for both) were least affected. The difference between the correlations of them was significant ($z = 2.00, p < .05$). We may infer that mental health status was most vulnerable to academic hassle, while depression and sense of adequacy were least vulnerable to academic hassle. The impact of academic hassle on anxiety and self-esteem was not different ($r = .36$ for anxiety; $r = -.36$ for self-esteem). We may also infer that the general measure of mental health status was more sensitive to academic hassle than the specific measures.

Personal Hassle and Psychological Well-being

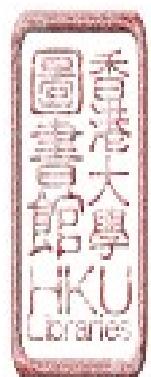
The hypothesis that personal hassle exerts a negative impact on psychological well-being was fully supported. We have found that personal hassle can explain 16% of the variance in general mental health status, whereas it only can explain 8.4% of the variance in depression, and 9% in sense of adequacy. For anxiety and self-esteem, personal hassle can explain 12% and 10% respectively. We may infer



that mental health status was most vulnerable to personal hassle and depression was the least vulnerable to it. Or we may also infer that the general measure of mental health status was more sensitive to personal hassle than did the specific measures.

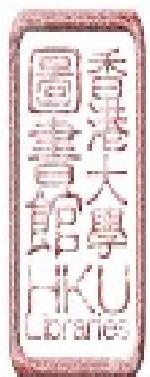
Negative Life Event and Psychological Well-being

The hypothesis that negative life event exerts a negative impact on psychological well-being was fully supported. Compared with the others mentioned above, the correlations between negative life event and psychological well-being were the lowest. We have found that negative life event contributed 2.9% to general mental health status, anxiety and self-esteem. The impacts of negative life event on sense of adequacy and depression were weak ($r = .12$ and $r = .09$). Taken together, the contribution of negative life event to all aspects of psychological well-being was less than 3%. It is suggested that the impact of negative life event on psychological well-being was weak. In Damush et al.'s (1997) study, college students who experienced life events in family/parents area reported greater anxiety ($r = .21$), depression ($r = .17$) and social dysfunctioning ($r = .11$) than those who did not. Based on Rabkin and Streuning (1976), the average correlation between life events and health outcomes is around $r = .12$. Although we used different measures on both life event and psychological well-being, it still could show some comparison among the different studies. Our findings were very similar to the findings by Western researchers. It suggests that a similar association exists between negative life event and psychological well-being for both Western and Chinese college students.



Hassles and Negative Life Event and Psychological Well-being

The hypothesis that academic and personal hassles exert more significant negative impact on psychological well-being than did negative life event was fully supported. The correlations between academic hassle and psychological well-being ranged from $r = .26$ to $r = .38$ in terms of GHQ and self-esteem. The correlations between personal hassle and psychological well-being ranged from $r = .29$ to $r = .40$. The correlations between negative life event and psychological well-being ranged from $r = .09$ to $r = .17$. The biggest difference was shown on GHQ-20 between both personal hassle and academic hassle and negative life event. It is suggested that compared with negative life event, hassles had greater impacts on mental health status than on other aspects of psychological well-being. Thus, we may infer that mental health status was more vulnerable to hassles than were the other psychological aspects. When compared with self-esteem, mental health status may be less stable and more emotional, so it was more affected by hassles. More specifically, when compared with negative life event, academic hassle seems to have affected more anxiety and self-esteem than depression and sense of adequacy. Personal hassle seems affected more depression and anxiety than sense of adequacy and self-esteem. It is reasonable that for students the most important thing was academic achievement, and thus, academic stresses may evoke their anxiety and affect their global self-evaluations, whereas stresses of personal hassle may not only affect self-esteem but also evoke anxiety.

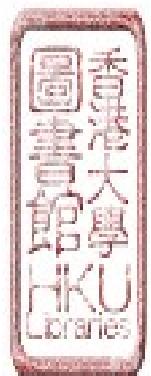


VISION IN LIFE AND PSYCHOLOGICAL WELL-BEING

Vision in Life and Psychological Well-being

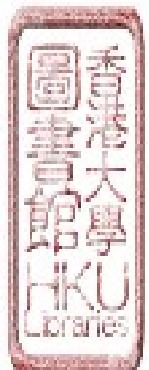
We have found the direct effect of vision in life on psychological well-being. However, most research findings of spiritual coping resource only refer to the buffering effect rather than the direct effect (e.g. Bulman & Wortman, 1977; Maton, 1989; Peacock, 1996; Wortman, 1983). Maton (1989) explained the findings above as that low life-stress samples did not need to search for explanations. These research findings seem to suggest that it is only when people encounter severe stresses that they need meaning. Spirituality seems to play its role only when people are involved in a misfortune or a traumatic life event. This identification of the role of spiritual coping resource may be a reason why few college student mental health researchers refer to meaning or spirituality. Researchers may suppose that college stress is generally low rather than high, and generally controllable rather than uncontrollable. Thus, spirituality may not be a suitable coping resource for college students.

That being the case, how does vision in life maintain and enhance students' psychological well-being? Simply, students need meaning or spirituality in their daily lives, not just in high stressful conditions. Frankl (1992) wrote: " having shown the beneficial impact of meaning orientation, I turn to the detrimental influence of that feeling of which so many people complain today, namely, the feeling of the total and ultimate meaninglessness of their lives. They lack the awareness of a meaning worth living for. They are haunted by the experience of their inner emptiness, a void within themselves; they are caught in that situation which I have called the 'existential vacuum'." (p.110) Frankl (1992) further argued



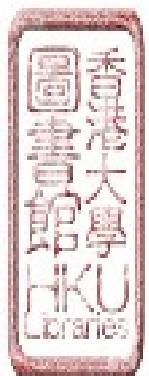
that "Sunday neurosis", a kind of depression which afflicts people who become aware of the lack of substance in their lives when the rush of the busy week is over and the void within themselves manifests. Many cases of suicide can be traced back to this existential vacuum. Such widespread phenomena as depression, aggression and addiction are not understandable unless we recognize the existential vacuum underlying them. It is clear that people need meaning or spirituality not only under severe stresses but also in their daily lives. Thus, it is reasonable that vision in life maintains and enhances students' psychological well-being directly.

A second question appears then: What is the difference between vision in life and other spiritual coping resources for which most other spiritual coping resources were not reported to directly affect psychological well-being? Firstly, we reviewed the measures that were generally used to assess spiritual well-being. Moberg (1971) has conceptualized spiritual well-being as two-faceted, with both vertical and horizontal components. The vertical dimension refers to the sense of well-being in relation to God. The horizontal dimension refers to a sense of life purpose and life satisfaction. Based on this conceptualization, Paloutzian and Ellison (1982) developed a questionnaire, which was generally used in later studies to measure spiritual coping resource. Maton (1989) measured spiritual support by a three-item scale, which was: "I experience God's love and caring on a regular basis"; "I experience a close personal relationship with God"; and "Religious faith has not been central to my coping". There are thus at least two salient differences between vision in life and other spiritual coping resources. 1) Compared with other spiritual coping resources for which relation with God was emphasized, vision in life does not lay emphasis on God. 2) Compared with other spiritual coping resources which did not address the philosophy of people's daily lives, vision in life lay emphasis on the



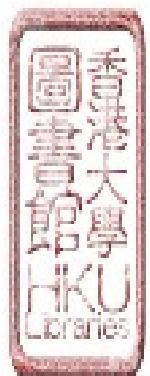
philosophy of daily life. Thus, the different findings between vision in life and other spiritual coping resources in terms of the direct effect on psychological well-being may be mainly caused by the conceptual divergence. Secondly, we reviewed the measures that were generally used to assess meaning in life. Battista and Almond (1973) designed a two-dimensional scale to measure meaning in life. The Framework subscale is designed to assess the degree to which individuals can envision their lives within some meaningful perspective or can derive a set of life-goals or philosophy of life from them. The Fulfillment subscale measures the degree to which persons see themselves as having fulfilled or being in the process of fulfilling their framework or life-goals. Many meaning relevant research findings were based on this measure. Also there are at least two salient differences between vision in life and the other meaning in life. 1) Meaning for some other meaning in life seems more concrete, whereas meaning for vision in life is more abstract. That is, meaning underlying some other meaning in life is that something may be meaningful, whereas meaning underlying vision in life is that on earth nothing is meaningful. 2) The purpose of other meaning in life is to fulfill the meaning, whereas the purpose of vision in life is to let go. Taken together, vision in life is different from the other spiritual coping resources. It maintains and enhances psychological well-being directly due to its emphasis on the philosophy of daily life rather than its emphasis on the relation with God, and also due to its letting go of things rather than fulfillment of them. For this reason, people do not ruminate things, but take them easy in their daily life.

We have also found the buffering effect of vision in life on mental health problem, depression and anxiety. These findings provide support for the view that students under high levels of college stresses are likely to benefit from vision in life.



The findings on the buffering effects of vision in life are consistent with findings of other spiritual related coping resources. For example, our findings are consistent with Maton's (1989) findings that individuals including both college students and recently bereaved parents under high levels of life-event stress are likely to benefit from perceived spiritual support. Our findings are also congruous with what was reported by Fehring et al. (1987) that spiritual well-being moderates the relationship between college stress and psychological well-being. Finally, our findings are in accordance with those of Debats (1996) that meaning in life predicted well-being under stresses. The findings also agree with other studies which reported positive relationships between religiosity and well-being for various high-stress samples, including: caretakers of Alzheimer's patients (Wright, Pratte & Schmall, 1985); cancer patients (Jenkins & Pargament, 1988); bereaved parents (Cook & Wimberley, 1983); and poor elderly in ill health (Zuckerman, Kasl & Ostfeld, 1984). As we discussed above, vision in life is conceptually different from the other spiritual coping resources. They can all act as a buffer. Why? The answer to this question may be provided by finding out the similarities between vision in life and other spiritual coping resources.

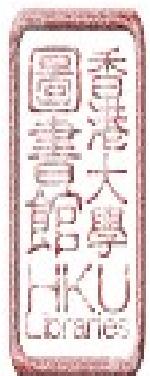
On the basis of the exploration of the differences, we now would further explore the similarities between vision in life and other spiritual coping resources. The comparison revealed at least five salient similarities between vision in life and other spiritual coping resources. 1) No matter how they address the relation with God or with the philosophy of daily life, such a belief is held by them. 2) No matter how they address the relation with God or philosophy of daily life, such an expectation is held by them. 3) No matter what emphasis they lay on concrete meaning or abstract meaning, they do have a meaningful goal ahead. 4) No matter how they search for



fulfillment or how they let go, their will is pulled by their belief and a meaningful goal. 5) No matter how they focus on meaning, they are capable of putting the bitter experience into a broad philosophical context to extract a positive interpretation. All spiritual coping resources are indeed vision related. Thus, it is reasonable that they all function to buffer the negative impact of stress on psychological well-being.

As demonstrated in the current study, not all aspects of psychological well-being were buffered equally. The buffering effect of vision in life is most significant on depression, less on general mental health status, and the least on anxiety. This finding suggested that vision in life was the most effective coping resource for depression compared with the other aspects of psychological well-being. In accordance with Buddhism, attachment is the source of all sorrows and sufferings (Mikulas, 1978). Depression is always the aggregation of sorrows and sufferings. Sorrows and sufferings end when an individual is freed from attachment (You, 1998). Therefore, depression ends when an individual is freed from attachment. Vision in life is established on the notion of detachment, and therefore, buffered depression most.

Vision in life may buffer the negative impact of college stress on mental health problem through enhancing directly self-esteem (after self-esteem was partialled out, the correlation between College Stress and GHQ-20 decreased from $r = .42$ to $r = .28$) (emotional pathway), or through enhancing positive and adaptive appraisals of the meaning in a high stress (after meaning in life was partialled out, the correlation between College Stress and GHQ-20 decreased from $r = .42$ to $r = .32$) (cognitive pathway). Although the correlations were still significant after controlling self-esteem and meaning in life, they were decreased obviously. Such emotional and



cognitive benefits may further lead to an increased capability to pursue adaptive stress-related coping strategies. Further research is necessary to clarify the emotional and cognitive mechanisms in the buffering process. The buffering effect of vision in life on anxiety was not as prominent as on depression and mental health problems. It may suggest that vision in life buffered more effectively reactions to stresses in the past or present than reactions to future possible stresses.

No significant buffering effects of vision in life were found on the negative impact of college stresses on the sense of adequacy and self-esteem. However, when we paid attention to the difference of correlations, it was found that although it was not significant, the correlations of vision in life and these two indicators were higher under high stresses than under low stresses. In other words, although the buffering effects of vision in life on self-esteem and positive affect were not significant, it played some roles under high college stresses. It may be that self-esteem and positive affect were not sensitive indicators of psychological well-being under stressful conditions, under which the identification and detection of negative affects may be considered essential for understanding the change in psychological well-being (see Boey & Chiu, 1998).

Since the findings of Academic Hassle, Personal Hassle and Negative Life Event were largely similar to those of College Stress, we only address some major different findings of College Stress. Findings based on all the three sub-scales did not report the buffering effect on anxiety. We may explain this finding based on Schwartz et al.'s (2000) reports. To them, self-transcendence values account for substantially more variance in macro than in micro worries. Anxiety is micro worries because it is caused by academic or personal or negative life event stresses



that have as their object the self or those with whom one identifies closely. According to Schwartz et al. (2000), micro worries are often provoked by directly experienced objective threats to personal welfare. Individual differences in exposure to direct, salient threats are likely to influence the incidence and intensity of micro worries. It would thereby reduce the correlations of values with micro worries. Furthermore, the threats that give rise to micro worries are often susceptible to individual coping. As a result, individual differences in actual or subjective coping ability may neutralize the effects of value differences in micro worries. Thus, it is reasonable that vision in life did not buffer the negative impact of academic hassle, personal hassle and negative life event on anxiety. However, vision in life could buffer the negative impact of college stress on anxiety as we mentioned above. It may be expected that the cumulative stresses may lead to more or higher anxiety, and thus the buffering effect of vision in life is significant. It may also be expected that global measure of college stress is more predictable than the specific measures to psychological well-being. Thus, the buffering effect of vision in life is easily observed.

In summary, our findings which suggested the direct effect of vision in life on psychological well-being was inconsistent with the existing research findings of spiritual coping (e.g. Fehring et al., 1987; Maton, 1989). The difference between our finding and the others not only confirmed conceptually but also empirically the unique existence of vision in life. We think the direct effect is important because it could serve to maintain and enhance students' psychological well-being in their daily lives, and the enhanced psychological well-being in turn affected how people perceive stresses. It is expected that direct and buffering effects are complementary to each other. The buffering effect of vision in life also showed, however, that



some issues need to be further clarified.

Life Control and Psychological Well-being

We have found the direct effect of life control on psychological well-being. This finding indicated that among those people who have life control their psychological well-being would be higher than the others. This finding is incongruous with those previous research findings of spiritual control for which spiritual control seems to play its role mainly under high stressful conditions (e.g. Baugh, 1988; Maton, 1989).

An explanation of personal control maintaining and enhancing psychological well-being (e.g. Lachman & Weaver, 1998; White, 1959) is that personal control reflects the person's self-image (Thompson, 1981). According to deCharms' (1968) theory of personal causation, individuals need to feel a sense of mastery and personal competence in their environment. A sense of personal control may lead to feelings of competence, and thus psychological well-being. How does life control which seemingly conceives the notion of giving up personal control maintain and enhance psychological well-being? In fact, life control does not mean giving up personal control as does other spiritual control, and giving up personal control does not necessarily mean accepting powerlessness (see Baugh, 1988) though sometimes it does. Moreover, life control does not mean to surrender our wills to God. Instead, it means a sense of a higher power that covers our wills. Given our understanding, life control is a larger control and people may perceive it through breaking up the boundary of personal control in their mind. Thus, life control includes personal control. That is, people can maintain their ceaseless efforts for which they can



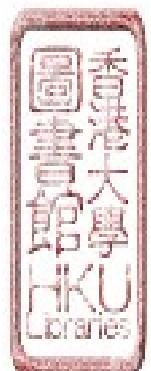
control, and they may gain a sense of life control through their efforts. The relationship between personal control and life control is that they depend on each other but have different roles in the mutual relationship. Personal control evokes life control by personal efforts, and life control finally decides the result. In this case, a person's self-image stands out when having perceived life control, and personal competence appears with the perception of life control. Life control necessitates giving up self-centeredness but not self-glorification. It is not difficult to understand why life control could directly affect psychological well-being. In fact, many things are beyond people's control. Many seemingly controllable stresses are in fact uncontrollable. What people can really control is their ceaseless efforts rather than the outcome. Many people, even young people, could be aware that they cannot control many things in their daily lives and they sometimes actively relinquish control for a better feeling in return.

In a report by Thompson et al. (1988), they indicated that many people prefer not to have control under certain circumstances. Thompson et al. (1988) examined some college students on whether they preferred or chose not to have control in each of the three areas: academic, personal, and health. The college students described each incident, rated its frequency and importance, stated whether or not they had actually exercised the control, and discussed why they did not want control in certain situations. All subjects, except for two, were able to recall an incident in which they did not want control in each of the three areas. The incidents that the subjects described were quite diverse, including actions that could affect grades or classes, being the one to make a group decision, approaching a potentially romantic partner, breaking up a relationship, intervening in a potentially bad situation, expressing one's opinions, weight loss, exercise, playing sports and responding to symptoms



that might indicate a health problem. Respondents gave one reason for not choosing control for 65% of the incidents, two reasons for 27% of the incidents, and more than two reasons for 8%. Several respondents mentioned that an advantage of not choosing control is that one can avoid performing an unpleasant act. By having an acceptable excuse, one can avoid feeling guilty. The most common types of reason for avoiding control in the academic area were not caring enough about the outcome to make an effort (e.g. "When my lab group was dividing up the work, it wasn't important enough to me to argue about what I wanted to do"). The side effects of the exercise of control on other outcomes (e.g. "I didn't try to get a grade changed because it would be embarrassing to talk to the professor."). Frequently cited reasons for not preferring control in the personal realm were uncertainty about the outcome or fear of failure (e.g. "I didn't approach someone I wanted to get to know because I was afraid she would reject me.") and the side effect (e.g. "I didn't want to control the plans for our trip because I might be seen as pushy."). For health issues, the most common reasons given was the presence of a more effective agent (e.g. My trainer knows better than I regarding when I'm healthy and can play, so I let him decide."); and not caring enough to make the effort (e.g. "I didn't try to control my weight because it just wasn't that important to me."). These data suggest that at least in the college student population, incidents in which individuals regard control as undesirable are not rare.

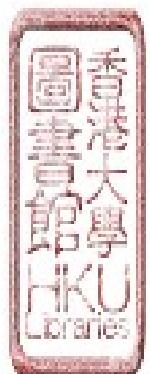
Indeed, that students preferred no control is not because control is not important, but because they are afraid of the negative impact of pursuing personal control. Thus, to obtain a larger control by breaking up the boundary of personal control is a suitable way to let people feel safe and feel good in their daily lives. Taken together, it is reasonable that life control directly maintains and enhances students'



psychological well-being. We have also established the buffering effect of life control on mental health problem, depression and anxiety. These findings provided support for the view that students under high levels of college stresses are likely to benefit from life control.

The buffering effects of life control are consistent with findings on other previous spiritual control. For example, our findings are in accordance with Peacock's (1996) finding that spiritual schema involves efforts to deal with situations perceived as humanly uncontrollable by focusing on the spiritual dimension. In fact, Maton's (1989) spiritual support could also be treated as spiritual control, and in this sense, our findings agreed with his. Our findings are also congruous with what was reported by Baugh (1988) about the sense of gaining a larger control when a desired control is beyond one's power or ability. Finally, our findings are consistent with what was indicated by Thompson (1981) that God control may play an important role in a severe accident. Individuals who saw the accident as a logical consequence of their freely chosen lifestyle coped best with their victimization. In fact, studies in searching for meaning in misfortunes reported at least one meaning that was related to a larger control such as God's means or God's plan for us (e.g. Silver et al., 1983). Although our findings agree with these in a broad background of spiritual control, life control in fact is conceptually different from them.

First, to obtain life control does not mean giving up personal control, but rather breaking through the boundary of personal control in mind. However, the other spiritual control, for example, Baugh's (1988) spiritual control, means giving up personal control. This is a possible reason why life control could directly affect psychological well-being, but other spiritual control could not. Regarding the



buffering effect of life control, we expect that the buffering effect may be more significant when personal control transcends into spiritual control instead of being given up. This expectation is based on the thinking that 'giving up' means passively waiting for, whereas 'breaking up' means actively exploring. Further comparison studies are needed to provide evidence for our speculation and expectation.

Second, life control does not mean to accept that one is powerless, but rather that one is more powerful. However, the other spiritual control, for example, Baugh's (1988) spiritual control, means to accept that one is powerless. This is a second possible reason why life control could directly affect psychological well-being, but other spiritual control could not. Regarding the buffering effect of life control, we expect that the buffering effect may be more significant when a spiritual control is established on the basis that one is powerful instead of being powerless. This expectation is based on the thinking below: 1) It is difficult for one to accept that he/she is powerless even in a difficult situation, and therefore, it is also difficult for him/her to give up. Whereas, it is easy for one to accept that he/she is more powerful, and therefore, it is also easy for one to let go. 2) Even if one accepts that he/she is powerless, there may not be strength there. Whereas, if one think that he/she would be more powerful when he/she breaks through, there should be strength there. Further comparison studies are needed to provide evidence for our speculation and expectation.

Third, life control does not mean to surrender our wills to God, but rather to search for a higher power and our wills within the power. However, the other spiritual control, for example, Baugh's (1988) spiritual control means to surrender our wills to God. This may be a third possible reason why life control could



directly affect psychological well-being, but the other spiritual control could not. Regarding the buffering effect of life control, we expect that the buffering effect may be more significant when a spiritual control is established on the basis that one's will merges into a higher power than one's will surrenders to a higher power. This expectation is based on the thinking below: 1) It is difficult for one to surrender his/her wills, whereas it is relatively easier for one to believe that his/her will exists within a higher power. 2) If one surrenders his/her wills to a higher power, at the same time he/she also gives up self-centeredness and self-glorification. Whereas if one believes that his/her will exists within a higher power, he/she only gives up self-centeredness but not self-glorification. Self-glorification is important for psychological well-being. Further comparison studies are needed to provide evidence for our speculation and expectation.

Taken together, life control is conceptually different from other spiritual controls. Then, can they all act as a buffer? And why? Simply, there are also some similarities among them. Two of them may be salient. 1) They all address a higher power or a larger power. 2) They all lay emphasis on giving up self-centeredness. Thus, it may be that the belief in a higher power, and giving up self-centeredness are the core issues of spiritual control in respect to its buffering effect.

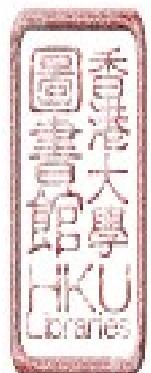
As demonstrated in this study, not all aspects of psychological well-being were buffered equally. The buffering effect of life control was most significant on depression, less on mental health problem, and the least on anxiety. This finding suggested that life control was the most effective coping resource for depression compared with the other aspects of psychological well-being. Life control was built on giving up self-centeredness, and depression is always the result of attaching



to self. Thus, it is reasonable that life control buffered depression most.

No significant buffering effects of life control were observed on the negative impact of college stresses on the sense of adequacy and self-esteem. This finding may be interpreted as self-esteem and positive affect were not sensitive indicators of psychological well-being under stressful conditions. Because the findings of academic hassle, personal hassle and negative life event were quite similar to those of college stress, we do not redundantly discuss them here.

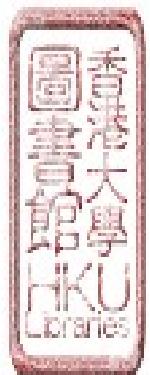
In summary, our findings suggested that the direct effect of life control on psychological well-being was inconsistent with some previous research findings of spiritual control (e.g. Baugh, 1988; Maton, 1989; Peakcock, 1996). The difference between our findings and the others confirmed not only conceptually but also empirically the unique existence of life control. The direct effect of life control is important because it could serve to maintain and enhance people's psychological well-being in their daily lives as does vision in life, and the enhanced psychological well-being in turn affected how people perceive stresses. It is also expected that direct and buffering effects of life control are complementary to each other. The buffering effect of life control was also shown, and life control explained as much as 40% of the total variance in psychological well-being. This contribution is not only higher than those of the other components of vision in life (including vision in life per se), but also reaches an absolute high level. We would suggest that life control is a very powerful spiritual coping resource. We shall further compare the contributions of life control and other components of vision in life later on.



Meaning in Life and Psychological Well-being

We have established the direct effect of meaning in life on psychological well-being. This finding indicated that among those students who have the sense of meaning in life their psychological well-being would be higher than the others. Although we adopted this concept from Frankl, it was indeed originated from the Chinese culture, upon which the interpretation of the findings is based.

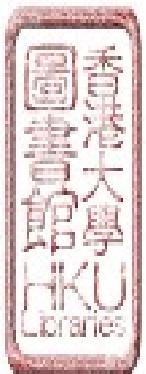
Studies related to Chinese culture generally address self fit-in-with others (see Markus & Kitaya, 1991) and submission to social pressure (see Asch, 1952). In fact, collectivism rooted in Buddhism emphasizes self fit-in-with others, but this is not obtained by submitting to social pressure, but through merging into social environment. Pressure is actually caused by the feeling of self rather than by Chinese culture. Or, submitting to social pressure may be just an interpretation of Western researchers of the Chinese culture, which however, does not totally reflect the nature of Chinese culture. For the Chinese, culture originally impresses them with a positive identification of self-transcendence. That is, self-transcendence is valued in the Chinese culture, and thus commitment to such a value is most conducive to psychological well-being (see Diener et al., 1999). According to Triandis (1994), in in-group settings, when people feel interdependent or when the collective achieves important goals, collectivists should experience more positive emotions than individualists. Moreover, when there is order and self-control, when there is in-group cooperation, collectivists should experience positive emotions than individualists. When groups are homogeneous, harmonious and orderly and hierarchy is unchallenged, collectivists should feel especially positive emotions than individualists. In a word, self-transcendence meaning directly affects psychological



well-being for Chinese college students.

A second issue that needs to be discussed is the difference between self-transcendence meaning and other spiritual coping resources. Most other spiritual coping resources did not directly affect psychological well-being (see discussion on vision in life and psychological well-being). As we have analyzed, there are also two salient differences between self-transcendence and other spiritual coping resources. 1) Other spiritual coping resources emphasized relation with God, but self-transcendence did not. 2) Other spiritual coping resources did not address the philosophy of people's daily lives, but self-transcendence laid emphasis on philosophy of daily life. Regarding other studies on meaning in life, Yalom (1980) distinguished between two broad classes of meaning: cosmic meaning and terrestrial meaning. Self-transcendence addresses cosmic meaning, thus, resulting in a state of letting go, whereas the other meaning in life often have mixed focuses and may lead people to pursuit or fulfill a meaning which in turn may result in stresses. Self-transcendence meaning could maintain and enhance psychological well-being directly perhaps due to its emphasis on philosophy of daily life rather than on the relation with God, and it may be also due to its letting go rather than fulfillment.

We have also established the buffering effect of meaning in life on mental health problem, depression and self-esteem. These findings provided support for the view that students under high levels of college stresses are likely to benefit from self-transcendence meaning.



We now focus our discussion on the comparison between the buffering effects of self-transcendence and will to meaning. This comparison is crucial for clarifying whether the philosophical approach (content of meaning) or the relativistic approach (commitment of meaning) is more important in predicting psychological well-being. When we first refer to this issue in Chapter 3, we argued that both were important. In the discussion on vision in life and psychological well-being, we found that some conceptually different spiritual coping resources can all act as the buffer. Thus, we even considered the possibility that commitment to meaning or meaningfulness may be more important than the substance of meaning. Then, discussion on will to meaning and psychological well-being seems to further confirm that the relativistic approach (commitment of meaning) was important. We have found that regardless of where meaning arises, there is a clear link between people's search for meaning and their emotional health (Chamberlain & Zika, 1992). One thing is clear so far, which is that both philosophical and relativistic approaches were important.

However, the comparison between the buffering effects of meaning in life and will to meaning showed different results. First, meaning in life buffered mental health problem, depression and self-esteem, whereas will to meaning only buffered depression. At this point, the buffering effect of will to meaning was weaker than that of meaning in life. Second, regarding the buffering effect on depression, the *F* change of meaning in life was 31.80 ($p < .001$), whereas the *F* change of will to meaning was 24.20 ($p < .001$). Although they were both very significant, the effect of meaning in life was more significant. At this point, the buffering effect of will to meaning was also weaker than that of meaning in life. Since not only the strength of the buffering effect of meaning in life was stronger than that of will to meaning, but also the aspects that could be buffered by meaning in life were more than that by

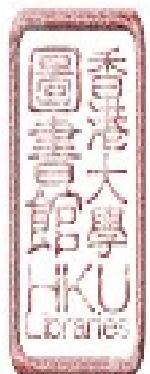


will to meaning, we can conclude that the substance of meaning may be more important than commitment of meaning though they both were necessary in predicting psychological well-being. It may be questioned that if they were both necessary in predicting psychological well-being, for what purpose should such comparison be conducted? We propose two aims here: 1) In theory, philosophical and relativistic approaches are two important theoretical models in understanding the effects of meaning in life in psychological well-being. The clarification of them therefore may be theoretically implicated. 2) In practice, although commitment to meaning links to psychological well-being, if people are committed to self-transcendence, the linkage between meaning and psychological well-being would be more significant. The clarification of them therefore may be empirically implicated.

Will to Meaning and Psychological Well-being

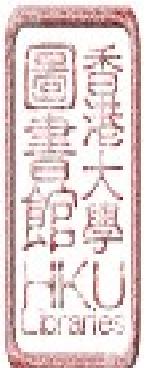
We have established the direct effect of will to meaning on psychological well-being. This finding suggested that commitment to meaning or meaningfulness maintains and enhances psychological well-being directly. The direct relation obtained in our study confirms previous research findings. Simply, will to meaning directly affects psychological well-being because the students need meaning in their daily life.

According to Chamberlain and Zika (1992), regardless of where meaning arises, whether from a religious source or not, there is a clear link between people's search for meaning and their emotional health. This view has been supported both theoretically and empirically. Frankl (1959, 1967) believed that the will to meaning was an essential human motive, and that when a person's search for meaning was



blocked, existential frustration would occur, leading to the pathological condition he called "noogenic neurosis." Maddi (1967) described an analogous condition, existential neurosis, which was "characterized by the belief that one's life is meaningless, by the affective tone of apathy and boredom, and by the absence of selectivity in actions" (p.313). Similarly, Reker and Wong (1988) proposed that the attainment of personal meaning provided a person with an interpretation of life experiences, worthwhile and purposeful goals, and feelings of satisfaction and fulfillment. Research also supports the general conclusion that the attainment of meaning is associated with positive mental health outcomes, whereas a lack of meaning is associated with pathological outcomes (e.g. Coleman et al., 1986; Ganellen & Blaney, 1984; Yalom, 1980).

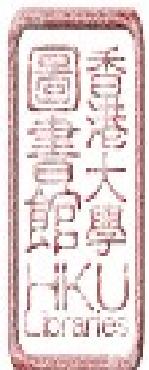
Clearly, meaning can be derived from a variety of sources. Battista and Almond (1973) suggested several different models for identifying meaning in life, with meaning stemming from God (religious), from being (existential), from humanity (humanistic), or from life (self-transcendence). They found that people were frequently committed to two or more systems of belief, with meaning derived from a combination of sources. DeVogler-Ebersole and Ebersole (1985) found that meaning could be classified into eight different sources, with individuals typically reporting about four as relevant to themselves. Reker and Wong (1988) proposed 13 important sources of meaning. Chamberlain and Zika (1988), in a factor analytic study of meaning measures, concluded that meaning was multidimensional. They suggested that meaning may have several origins, through goal achievement or fulfillment, through an enthusiastic orientation that views life as interesting and exciting, through having a clear philosophy or framework, or through contentedness and satisfaction with what one has in life. However, will to meaning in our study



was designed to focus on commitment to self-transcendence meaning. Our findings on will to meaning supported the relativistic approach of meaning (see Chapter 3), for which commitment per se can be associated with positive mental health.

We have established the buffering effect of will to meaning only on depression, and no buffering effect of will to meaning was found on other aspects of psychological well-being. The buffering effect obtained in the relationship of college stress and depression confirms previous research findings by Harlow et. al., (1986) which was based on a 722 adolescence sample and which indicated that lack of purpose in life or meaning in life leads into adolescent depression, self-derogation, drug abuse, and suicide ideation, especially under high stressful conditions. Then, how does one explain that will to meaning did not buffer the other aspects of psychological well-being? We think it may be that only will to meaning is not strong enough to buffer most negative impacts of college stress on psychological well-being. However, we shall further explain this finding with the discussion of meaning in life together.

In summary, our findings suggested that the direct effect of will to meaning on psychological well-being is consistent with the previous research findings (e.g. Chamberlain & Zika, 1992; Coleman et al., 1986; Ganellen & Blaney, 1984; Yalom, 1980). This finding is important because it confirms the relativistic approach of meaning in life, for which commitment is crucial for psychological well-being. The buffering effect of will to meaning was only observed on depression. Thus, it may be expected that compared with other components of vision in life the buffering effect of will to meaning on psychological well-being was weaker.



The overall results in terms of vision in life, based mainly on cross-sectional data, lead strongly to the conclusion that there is a substantial and consistent relation between vision in life and psychological well-being. We originally expected that three components of vision in life--life control, meaning in life and will to meaning--jointly affected the negative impacts of college stresses on psychological well-being. However, the results showed that different components of vision in life correlated differentially with different aspects of psychological well-being. The components of vision in life including vision in life per se that related most closely to psychological well-being was life control. The findings indicated that life control correlated strongly with both negative and positive psychological well-being measures. For example, the correlation between life control and GHQ-20 was $r = .63$ ($p < .01$), and between life control and self-esteem was $r = .60$ ($p < .01$). Although the correlations between vision in life and psychological well-being was lower than that between life control and psychological well-being, they were strong. For example, the correlation between vision in life and GHQ-20 was $r = .58$ ($p < .01$), and between vision in life and self-esteem was $r = .56$ ($p < .01$). The other components were moderately associated with both negative and positive psychological well-being measures. These findings were important. On the one hand, they confirmed our theory that the three components of vision in life jointly affected psychological well-being, though their correlations with psychological well-being were different. On the other hand, they further suggested that although both vision in life and life control would be effective buffers, life control with less items (13 only), and with higher correlations with psychological well-being than vision in life, we could only use life control to buffer in the future studies. These findings also indicated that compared with substance of meaning or commitment of meaning, life control is the most important meaning for psychological well-being.



CHAPTER 10

IMPLICATIONS AND CONCLUSION

In this final chapter it is our intention to spell out the implications and contributions of the ways that vision in life can contribute to psychological well-being at the theoretical and practical levels for assessment and intervention. We have found that the significance of vision in life is far beyond what we have postulated at the time of our study of college students. We also intend to spell out other important implications and contributions of this study besides vision in life. In addition, this final chapter will address the limitations of this study and recommend issues for further studies.

IMPLICATIONS AND CONTRIBUTIONS TO THEORY

Development of Vision in Life

The present study constitutes the first explicit attempt to explain the phenomenon of Vision in Life. Mental health researches have long established two different views of self—without spirituality and with spirituality. Self without spirituality represented the mainstream of mental health researches especially researches on college students' mental health in Western literature. Examples of classic works are effects of positive illusion (see Taylor & Brown, 1988) and contact with reality (see Jahoda, 1958) on psychological well-being. Self with spirituality is mainly practiced by Frankl's logotherapy, though some others also refer to Fromm's (1955) humanistic model and Bugental's (1965) Being model. Frankl did

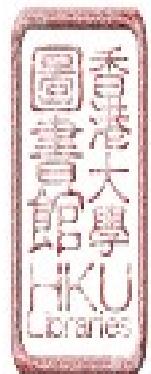


not agree with the two-dimensional view--somatic and psychological. He saw the two-dimensional model of self as reductionistic and presented only a partial picture of human nature. Vision in Life is developed on the sublimation of the two different views of self. It adds to these earlier efforts in at least three important respects.

First, the present study has advanced from these previous approaches by documenting and empirically supporting the existence of relatively stable characteristic of vision in life. Until now, the possibility that such characteristic might exist and is important for mental health has been largely overlooked.

Second, the present study has extended these previous approaches by documenting and empirically supporting the pivotal role of life control in the predictability of psychological well-being. Until now, the important role of life control has been largely overlooked in spiritual coping approaches.

Third, life control has also developed these previous approaches by documenting and empirically supporting the role of breaking through the limits of personal control in psychological well-being. Until now, the important role of transcending personal control has been largely overlooked in control studies which either hinging on or giving up personal control. Our finding may add to control studies another idea--breaking through the limits of personal control is a larger control.

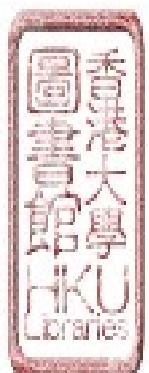


Because vision in life is developed on the sublimation of two different views of self, it also bears certain similarities to them especially to the spiritual view of self. Three of the similarities are striking enough that they deserve some focused attention. The first of these concerns Frankl's search for meaning (1970); the second concerns Kobasa's hardiness (1979; Kobasa et al., 1982); and the third concerns Ellis' RET (1962, 1991).

a. Comparison with Frankl's Meaning in Life

Vision in life overlaps largely with Frankl's meaning in life. However, it distinguishes from and adds to Frankl's early work an important respect which is life control. Life control is the pivotal part of vision in life. In Frankl's logotherapy, although both will to meaning and self-transcendence were addressed, but not control. Frankl did not mention a sense of life control or any other control, which however, based on our finding plays a crucial part in why self-transcendence and will to meaning could function as the effective coping resources. In other words, only when self-transcendence and will to meaning were strong enough to generate sense of life control, they function as the effective coping resources. This may be sufficient to distinguish between vision in life and Frankl's perspectives. This comparison may also provide us with a new direction to see Frankl's logotherapy. That is, life control may be underlying the effects of Frankl's meaning in life in psychological well-being.

Vision in life may be advanced to Frankl's meaning in life also by the following: We explicitly defined vision in life at both conceptual and operational levels. However, we have not found any explicit definitions at either of these two levels by Frankl. The absence of the explicit definitions resulted in logotherapy mainly



existed as a therapy theory or practice, and somewhat independent from the empirical literature in Western mental health researches. Of course, there is no way to compare the effects of logotherapy and other mental health theories. In comparison, we successfully introduced vision in life in empirical study and provided the possibility to compare the effects of vision in life with other spiritual related coping resources such as Hardiness and RET. The comparison is important at both theoretical and practical levels because we can then have clear understanding of the strengths and weaknesses of vision in life, also understanding the uses of vision in life in practice.

b. Comparison with Hardiness

Hardiness as a construct is interesting to us partly because certain of its characteristics appear to overlap with the characteristics we attribute to vision in life. Two of the three components of hardiness—commitment and control seem also to be focused by vision in life. However, when we look at them more closely, they are indeed two quite different constructs. First, commitment of hardiness refers to people's reliance on themselves to find ways of changing whatever they are experiencing into something interesting and important to them, getting involved rather than being alienated. Commitment of vision in life refers to people's will to self-transcendence, being alienated rather than getting involved. Second, control of hardiness refers to people's belief that through their own efforts, they can more often than not influence the course of events around them, rather than passively allowing themselves to be victims of the circumstances. Control of vision in life refers to people's belief that their lives are under control. We also believe the role of efforts, but the final determinant of the outcomes was not efforts, but life control. Vision in life and hardiness are different in fact fundamentally. Simply, hardiness is rooted in

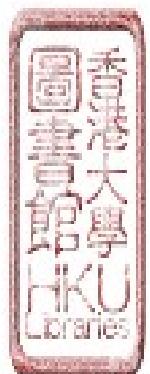


existential psychology, whereas vision in life is established on Buddhist's non-self.

Hardiness as a construct is also interesting to us because other research on hardiness (Kobasa et al., 1982; Kobasa, 1979) has shown its consequences on health outcomes which are similar to those demonstrated in our study for vision in life. However, it is difficult to assess the degree of similarity between vision in life and hardiness in our study because hardiness is a multifaceted construct and because the methods used to measure hardiness vary from study to study.

c. Comparison with RET

RET was developed by Albert Ellis in 1955 as both a counseling theory and a philosophy. RET is interesting to us because both RET and vision in life have their roots in selflessness or self-detachment. However, they are notably different in at least four aspects. First, cognition is the most important proximal determinant of human emotion for RET (Walen, DiGiusep & Dryden, 1992), whereas, cognition is one of the most important antecedents of human emotion for vision in life, with the understanding of life control strongly affecting the relationship between cognition and emotion. Second, dysfunctional thinking is a major determinant of emotional distress for RET (Walen et al., 1992), whereas low sense of life control is the major determinant of emotional distress for vision in life (it is rational or functional thinking). Third, the best way to conquer distress is to change the irrational thinking for RET (Walen et al., 1992), whereas it is to enhance the sense of life control through enhancing will to meaning and self-transcendence belief, as well as decreasing self-centeredness for vision in life. Fourth, beliefs can be changed for RET, whereas not only beliefs, but also will to meaning, sense of life control all can be changed for vision in life. Thus, although RET and vision in life possessed the

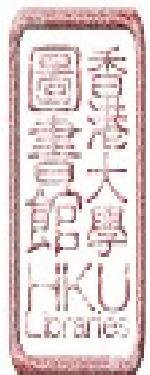


roots in selflessness or self-detachment, they are quite different constructs.

In conclusion, vision in life as a coping resource was presented by the present study together with evidence for its proposition. Following presentation of the construct, comparisons were undertaken between vision in life and three other theories. Each of these comparisons revealed and further confirmed the unique existence of vision in life. Because vision in life was established on a profound basis of selflessness or self-detachment, it is expected that it could also function as an effective coping resource for other people under other stresses.

Linking between Self-esteem and Selflessness

When it comes to articulating self-esteem and selflessness, documents nearly always put them at two extremes (e.g. Diener, 1999; Kitayama & Markus, 1991, 1994). Self-esteem represents Western culture, whereas selflessness is the hallmark of oriental culture. However, the present study found that self-esteem is strongly and positively correlated with vision in life. Since vision in life is established on the notion of selflessness, it could infer that self-esteem and selflessness did not conflict with each other but rather they were positively associated with each other. We may interpret the inference in two ways. 1) As we discussed in Chapter 9, if self-esteem were treated as a reflector of something, the notion of selflessness may be something to be reflected. Thus, self-esteem is mainly bolstered by the notion of selflessness. 2) In Chinese culture, selflessness could largely represent self-esteem, or they are actually the same thing. That is, for Chinese students, self-esteem is not toward self, but rather toward selflessness. The link between self-esteem and selflessness may be especially implicated in the following theoretical arguments:



First, the linkage between self-esteem and the notion of selflessness raised the question whether psychological well-being is culture-specific (e.g. Diener et al., 1999; Markus & Kitayama, 1991), and that this linkage rather suggested the existence of universal criteria for psychological well-being. Kitayama and Markus (1994) argued that in cultures in which the collective is emphasized, feeling good about oneself may be a sign of maladjustment. Diener et al. (1999) also contended that feelings about self and emotions weigh less heavily in satisfaction judgments by members of collectivist cultures. Our contention is that selflessness is our culturally valued notion, and therefore, selflessness is not a hallmark of maladjustment, but rather adjustment. Since self-esteem is strongly and positively correlated with the notion of selflessness, self-esteem is a hallmark of adjustment in collectivist culture. Thus, feeling good about self is a hallmark of adjustment in Chinese culture. In other words, although the oriental and the Western may have different culturally valued notions, the criteria of psychological well-being could be the same.

Second, the linkage between self-esteem and notion of selflessness challenged the interdependent view of self that is associated with pessimism (Diener & Diener, 1995; Markus & Kitayama, 1991). The linkage suggested that the interdependent view of self should be adversely associated with pessimism, but rather positively associated with optimism. Interdependent view of self can be traced to Buddhism within which the core notion is not to "objectify the self" but to submerge the self and "be free from the self". Based on this contention, people in interdependent culture should have less negative emotion than their Western counterparts. Selflessness strongly and positively correlated with self-esteem confirmed this argument since self-esteem of course is a sign of optimism rather than pessimism.



However, it seems true that people in interdependent culture are more pessimistic (Diener & Diener, 1995; Markus & Kitayama, 1991). We think that cultural mingling or acculturation may result in pessimism (see Chapter 9).

In conclusion, we think this study may have two contributions at the theoretical level. The first one is the development of vision in life as a spiritual coping resource, which also has some significant implications. The second one is to link self-esteem and selflessness together, which also has some significant implications.

CONTRIBUTIONS TO ASSESSMENT

Development of Vision in Life Scale

The Vision in life Scale is recommended for research purposes, as it allows one to embark on the subject of spiritual coping resource rarely empirically studied thus far. Its independence of any particular theory regarding spiritual coping resource, as confirmed by this study, makes the Vision in Life Scale an adequate and unique research assessment.

Briefly, the development of Vision in Life Scale and the sub-scales has the following contributions: 1) Enabling further study to examine vision in life and its components, in different samples and different stressful conditions, and thus to further confirm our theory, as well as to generalize the effects we have found in this study. 2) Providing further study an instrument to assess commitment and content of meaning together. We suppose that the previous researches seldom related to substance of meaning because of the theoretical uncleanness. In this case, Vision in Life Scale and sub-scales may serve to compare and clarify different belief systems,



as well as the effects between commitment and substance of meaning. 3) Suggesting further study of spiritual coping as an instrument to assess life control. 4) Providing the possibility to further study and compare the effects between two different views of self-with spirituality and without spirituality coping resources. This is a unique function of vision in life scales because each component of vision in life has a counterpart in coping resources without spirituality. The further study thus can facilitate comparison of the effects between personal control and life control, as well as effects between other meaning in life and self-transcendence meaning.

Development of College Stress Scale

The College Stress Scale was developed with regard to two considerations: First, none of the appropriate Chinese college stress scales has been found in our literature review. Second, previous Western measures refer to college stress related to generally either negative life event or daily hassles. These two trends resulted in few measures of college stress have been constructed by both hassle and negative life event. Thus, we developed the College Stress Scale. The development of College Stress Scale has the following contributions: 1) Providing further study with an appropriate instrument for college stress. 2) Enabling further study to measure negative life event and daily hassles together, and these two types of stress are indeed often interrelated. 3) Providing further study an appropriate measure to compare between the impacts of negative life event and daily hassles.



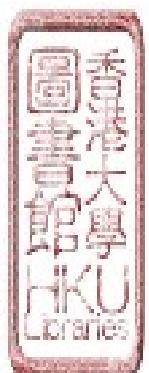
IMPLICATIONS AND CONTRIBUTIONS TO INTERVENTION

Primary Prevention

When there is still no evidence of dysfunction, prevention seems to differ little from educational efforts to maximize constructive and minimize destructive tendencies. The direct effects of vision in life and the components on psychological well-being may serve primary prevention.

The findings of direct effects of vision in life suggest that the universities should conduct a course of philosophy of life for all the students. These findings further suggest that the content of this course should include: 1) Enlightening students to search for meaning in life, and encouraging them to commit to the search process. 2) Helping the students to understand self-transcendence, and help them believe meaning in life is indeed beyond self. 3) Teaching students to appreciate some Buddhist and Taoist philosophy of self and of life, and helping them to understand self to be in harmony with the universe, and life is suffering. 4) Enlightening students to believe a larger control would bolster them if they do not give up their efforts. This study has found that these contents are very effective for maintaining Chinese students in good mental health. Moreover, these contents are systematically correlated with each other, and our four suggestions are also four steps in order for the course.

We expect that the course may achieve the following purposes: First, regarding academic attainment, students may realize their ultimate purpose of study is beyond self, then their concerns of study would be moved from micro to macro level, they would then have a peaceful mind no matter low or high academic stresses,



thus maintaining and enhancing psychological well-being. Second, regarding daily life, students may understand that self is emerged in the collective. As long as the students know that without collective without self and without control, their concerns would be moved from self to collective, then they would have a peaceful mind no matter low or high personal stresses, thus maintaining and enhancing psychological well-being. Third, regarding happenings, students may realize that good fortune lies within bad, and bad fortune lurks within good. Then, they would have a peaceful mind no matter what happens to them, thus maintaining and enhancing psychological well-being.

Secondary Prevention

When we observe signs of distress and dysfunction, much of the damage has already been done. The professional task then changes from primary prevention to secondary prevention, in which we must help the vulnerable students to discover a coping resource. Secondary prevention is considered appropriate for temporary and manageable distress and dysfunction. Vision in life could buffer the negative impact of college stress on psychological well-being, and the buffering effect was especially significant on depression and other mental health problems. Thus, vision in life may serve the secondary prevention. Furthermore, life control was confirmed as the most effective coping resource among vision in life. The effects of other components of vision in life, including vision in life itself were much influenced by life control, and they also serve to generate and enhance life control. Thus, the secondary prevention would focus on enhancing a sense of life control through enhancing the others.

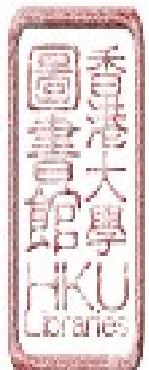


First, enlightening students to search for meaning in life under stressful conditions. It is expected that students may find meaning in stresses, and thus the negative impacts of stresses would be buffered. This study has found that will to meaning buffered especially depression.

Second, helping students to understand self-transcendence meaning under stressful conditions. It is expected that students may rebuild their notions of self and life in stresses, and thus the negative impacts of stresses would be buffered. This study has found that self-transcendence meaning especially buffered depression, mental health problem, and self-esteem.

Third, enlightening the students to break through the links of personal control in mind, and build up a sense of life control under stressful conditions. Encouraging students to keep up their efforts forever which could help them experience the sense of life control. This study has found that life control buffered especially depression, mental health problem and anxiety.

Although we present the secondary prevention procedures individually, they are in fact interacted to each other, and to vision in life which underlined them. Regarding the difference between primary and secondary prevention, we think that primary prevention may be more general, but secondary prevention may be more specific. For primary prevention, we only need to tell students in general some philosophy of life. For secondary prevention, we need to teach students how to draw from vision in life to deal with the problems that they have encountered, which is based on what mental health problems they have encountered.



In conclusion, what is crucial of vision in life is it provides for intervention which activates and enhances a sense of life control through strengthening will to meaning and self-transcendence, as well as through decreasing self-centeredness. Whether for primary prevention or secondary prevention, the central task is to activate and enhance a sense of life control, especially for secondary prevention. This is the unique characteristic of vision in life as a new construct, a new coping resource, and a new intervention.

LIMITATIONS AND RECOMMENDATIONS

Limitations of the Present Study

Although vision in life was supported as an effective coping resource by the present study, the findings of this study have limitations both theoretically and empirically.

a. Theoretical limitations

The first theoretical limitation is that although this study successfully documented the existence of a phenomenon which we call vision in life, as well as its effects on psychological well-being, there is insufficient document on the nature of the mechanism or mechanisms that underlies the effects of vision in life. We postulated that the cognitive-processing mechanism of vision in life might be explained by a vision schema that accommodates all the incoming information into itself. However, this study only showed the outcomes of the postulated cognitive-processing mechanisms, rather than the operation of the mechanisms. Further research is necessary regarding how the mechanisms of vision in life work.



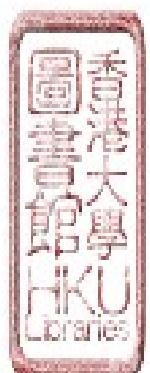
A second theoretical limitation is that it is less clear certain about how the behavioral mechanisms of vision in life buffer. What is the difference between high vision and low vision in using the general strategies of coping that are available to everyone? What is the difference between high vision and low vision in respect of health habits? We believe that both of these behavioral mechanisms play a part in the buffering process of vision in life. Further studies are needed to clarify them.

b. Empirical limitations

A first empirical limitation is that this study could not tell whether vision in life is long-term adaptive or not because the study was conducted as a cross-sectional rather than a longitudinal study, though theoretically vision in life is a long-term adaptive.

A second empirical limitation is also caused by the cross-sectional study. Although we adopted some widely used measures of psychological well-being to measure the effects of vision in life, a longitudinal study may be needed to see the stable effects of vision in life on psychological well-being. The results we have found on psychological well-being based on a cross-sectional study may be related to emotional well-being more than psychological well-being.

A third empirical limitation is the absence of comparisons of the effects between vision in life, RET and hardiness. These comparisons would be important to further ensure the specific effects of vision in life as a coping resource.



Recommendations for the Further Studies

Further studies on vision in life are necessary because of the limitations both theoretically and empirically as discussed above. Further studies will be needed on the removal of these limitations. We make our recommendations as follows.

First, to explore further the nature of the mechanisms that underling the effects of vision in life. Efforts would be required to confirm the postulated cognitive-processing mechanism of vision in life for which a vision schema might accommodate all the incoming information in itself. It would be our aims to understand how vision in life works through the cognitive-processing mechanism.

Second, understanding the behavioral mechanisms of how vision in life does buffer. Efforts should be made to understand the difference between high vision in life and low vision in life in using the general strategies of coping that are available to everyone? Efforts should also be made to find out the difference between high vision and low vision in health habits.

Third, a longitudinal study should be conducted for providing empirical data on whether vision in life is long-term adaptive. Such study would show up the stable effects of vision in life on psychological well-being.

Finally, an empirical study may also be conducted to compare the effects of vision in life, RET, and hardiness respectively. These comparisons would be important to endorse the specific effects of vision in life as a coping resource.



OVERALL CONCLUSION

Guided by the central purpose of exploring a new spiritual coping resource, this study developed a new construct of vision in life. The idea to explore a new coping resource was initiated by the observation of healthy and happy college students, as well as by the necessity of interpreting the observation theoretically. To examine whether vision in life adequately represents and interprets the observed phenomenon, moreover, whether it is an effective coping resource, this study established a conceptual framework that focused on two explorations.

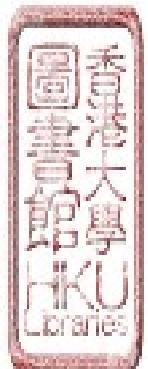
The first exploration focused on the effects of vision in life on the psychological well-being under college stress. The present study provided empirical data on both the direct and the buffering effects of vision in life. These data indicated that the direct effects were more significant than the buffering effects. This finding is different from the research findings on other spiritual coping resources, which only refer to the buffering effects rather than the direct effects. Most previous studies found that only when people are involved in a misfortune or a traumatic life event do they need meaning. However, in this study, students need meaning or spirituality in their daily lives rather than only in highly stressful conditions. This difference is important because it not only confirmed conceptually but also empirically the unique existence of vision in life. The direct effect is important because it serves to maintain and enhance students' psychological well-being in their daily lives, and the enhanced psychological well-being in turn affects how they perceive stresses. It is expected that direct and buffering effects are complementary to each other. This study has found a buffering effect of vision in life on general mental health problem (measured by GHQ-20), depression (measured by GHQ-Depression) and anxiety



(measured by GHQ-Anxiety). These findings provide support for the view that students under high levels of college stresses were likely to benefit from vision in life. The findings on the buffering effects of vision in life are consistent with findings of other spiritual coping resources. However, as demonstrated in the present study, not all aspects of psychological well-being were buffered equally. The buffering effect of vision in life was most significant on depression, then on general mental health problem, and the least on anxiety. This finding suggests that vision in life is a resource which is effective in coping with depression than with other aspects of psychological well-being.

The second exploration focused on the effects of different dimensions of vision in life on the psychological well-being under college stress. This study firstly reported that vision in life is multi-dimensional which consists of life control, meaning in life and will to meaning. Then, both direct and buffering effects in regard to each of all the three components were indicated, with direct effects more significantly demonstrated. Life control also was found to play a pivotal role in the predictability of vision in life and the components to psychological well-being under college stresses. This finding suggested that compared with meaning in life and will to meaning, life control was the most important determinant of psychological well-being. It also suggested that life control could be used individually as a measure of vision in life.

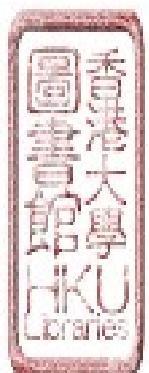
In exploring the effects of vision in life, the present study found that most students reported low rather than high college stress. First year of study was the least stressful year, which is inconsistent with most previous Western research findings. Male students reported significantly higher stress than did female



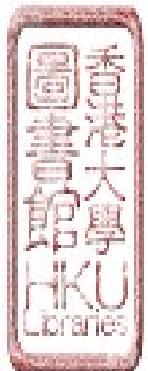
students in this study, which is also quite different from findings reported by Western researchers. The present study found that vision in life existed with a high frequency among Chinese college students. First year students showed a significantly higher level of vision in life than did second year students, while social science students showed a significantly higher level of vision in life than did natural science students. No gender difference in vision in life was observed. With regard to psychological well-being, the results suggested good mental health status in Chinese college students. College stress was found to exert a negative impact on psychological well-being, with academic and personal hassles exerting a greater negative impact than did negative life event. These findings are consistent with most other research findings reported in the field.

Besides the above observations, this study also observed some important but unexpected findings. For examples, Chinese students tend to be protective rather than acquisitive in their outlook; will to meaning is not only a primary motivation in life but also act as defense mechanisms; and Chinese students' self-esteem is oriented towards selflessness more than focusing on self.

The confirmation of the effects of vision in life on psychological well-being may have implications for and contributions to mental health theory. The findings of this study also have implications for assessment and social work intervention. The direct effects of vision in life may operate at the level of primary prevention, and the buffering effects may serve as a coping resource in secondary prevention.



This study made two important contributions to the psychological well-being among college students. First, it discovered a new spiritual coping resource which has been overlooked by previous researchers. Second, it established a linkage between self-esteem and selflessness. This linkage suggests the existence of universal criteria for psychological well-being, as well as an interdependent view of self should be positively associated with optimism.

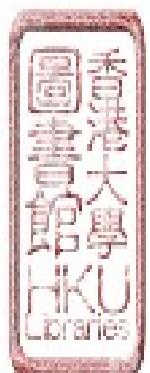


References

- Ainslie, R., Shafer, A., & Reynolds, J. (1996). Mediators of adolescents' stress in a college preparatory environment. *Adolescence*, 31, 913-924.
- Aldwin, C.M. (1994). *Stress, Coping and Development: An Integrative Perspective*. New York: Guilford Press.
- Aldwin, C.M., & Revenson, T. (1987). Does coping help? A reexamination of the relationship between coping and mental health. *Journal of Personality and Social Psychology*, 53, 337-348.
- Aliche, M.D. (1985). Global self-evaluation as determined by the desirability and controllability of trait adjectives. *Journal of Personality and Social Psychology*, 49, 1621-1630.
- Antonovsky, A. (1979). *Health, Stress and Coping*. San Francisco: Jossey-Bass.
- Antonovsky, A. (1987). Unraveling the mystery of health: How people manage stress and stay well. San Francisco: Jossey-Bass.
- Archer, J., & Lamnin, A. (1985). An investigation of personal and academic stressors on college campuses. *Journal of College Student Personnel*, 26, 210-215.
- Asch, S. (1952). *Social psychology*. Englewood Cliffs, New Jersey: Prentice Hall.
- Aspinwall, L.G. (1998). Rethinking the role of positive affect in self-regulation. *Motivation and Emotion*, 22, 1-32.
- Aspinwall, L.G., & Taylor, S.E. (1992). Modeling cognitive adaptation: A longitudinal investigation of the impact of individual differences and coping on college adjustment and performance. *Journal of Personality and Social Psychology*, 63, 989-1003.
- Averill, J. (1973). Personal control over aversive stimuli and its relationship to stress. *Psychological Bulletin*, 80, 286-303.
- Baker, R.W. (1963). Pattern of initial contacts with a university psychological clinic and its relation to academic stressors. *Journal of Clinical Psychology*, 19, 361-363.
- Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, 37, 122-147.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Upper Saddle River, New Jersey: Prentice Hall.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
- Baron, R.M., & Kenny, D.A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173-1182.
- Battista, J., & Almond, R. (1973). The development of meaning in life. *Psychiatry*, 36, 409-



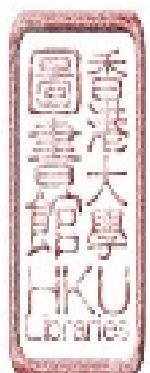
- Baugh, J. (1988). Gaining control by giving up control. In Miller & Martin (ed.) *Behavior Therapy and Religion: Integrating Spiritual and Behavioral Approach to Change*. Newbury Park: SAGE.
- Baum, C., Cohen, L., & Hall, M. (1993). Control and intrusive memories as possible determinants of chronic stress. *Psychosomatic Medicine*, 55, 274-286.
- Berdie, R.F. (1966). College expectations, experiences, and perceptions. *Journal of College Student Personnel*, 7, 336-344.
- Bernard, M., & Cronan, F. (1999). The child and adolescent scale of irrationality: Validation data and mental health correlates. *Journal of Cognitive Psychotherapy: An International Quarterly*, 13, 121-132.
- Billings, A., & Moos, R. (1981). The role of coping responses and social resources in attenuating the stress of life events. *Journal of Behavioral Medicine*, 4, 157-189.
- Blankenstein, K.R., Flett, F.L., & Koledin, S. (1991). The brief college hassles scale: Development, validation and relation with pessimism. *Journal of College Student Development*, 32, 258-264.
- Boey, K.W., & Chiu, H. (1998). Assessing psychological well-being of the old-old: A comparative study of GDS-15 and GHQ-12. *Clinical Gerontologist*, 19, 65-75.
- Bonner, R., & Rich, A. (1987). Toward a predictive model of suicidal ideation and behavior: Some preliminary data in college students. *Suicide and Life Threatening Behavior*, 17, 50-63.
- Bradburn, N. (1969). *The Structure of Psychological Well-being*. Chicago: Aldine.
- Bradburn, N., & Caplovitz, D. (1965). Reports on happiness. Chicago: Aldine.
- Brehm, J.W. (1966). A theory of psychological reactance. New York: Academic Press.
- Brennan, P., Fehring, R., & Keler, M. (1984). Psychological and spiritual well-being in college students. In R. Fehring, J. Hungelmann, & R. Stollenwerk, (eds.). *Spirituality: A New Perspective on Health*. Proceedings of the conference sponsored by Marquette University Continuing Education in Nursing, August 15-16, Milwaukee, Wisconsin.
- Brenner, C. (1974). On the nature and development of affects: A unified theory. *Psychoanalytic Quarterly*, 43, 532-556.
- Brenner, C. (1982). *The Mind in Conflict*. Madison: International Universities Press.
- Brickman, P. Coates, D., & Janoff-Bulman, R. (1978). Lottery winners and accident victims: Is happiness relative? *Journal of Personality and Social Psychology*, 35, 917-927.
- Brigham, D., Davis, A., & Cameron-Sampey, D. (1994). *Imagery for Getting Well: Clinical Applications of Behavioral Medicine*. New York: Norton & Company.
- Bronfenbrenner, U. (1986). Ecology of family as a context for human development: Research perspectives. *Developmental Psychology*, 22, 723-742.
- Brooks-Gunn, J. (1991). How stressful is the transition to adolescence for girls? In M.E.



- Colten & Gore (eds.), Adolescent Stress: Causes and Consequences (pp. 131-149). New York: Aldine de Gruyter.
- Brown, G., & Harris, T. (1978). The Social Origins of Depression: A Study of Psychiatric Disorder in Women. London: Tavistock.
- Brown, J.D. (1986). Evaluations of self and others: Self-enhancement biases in social judgments. *Social Cognition*, 4, 353-376.
- Buehler, C. (1968). The general structure of the human life cycle. In C. Buehler & F. Massarik (eds.), *The Course of Human Life*. New York: Springer.
- Bugental, J. (1965). The Search for Authenticity. Holt: Rinehart & Winston.
- Buhler, C. Der (1933). Menschliche Leberslauf als Psychologisches Problem. Leipzig, S. Hirzel.
- Bulman, R., & Wortman, C. (1977). Attributions of blame and coping in the "real world": Severe accident victims react to their lot. *Journal of Personality and Social Psychology*, 35, 351-363.
- Burger, J. (1992). Desire for control: Personality, social, and clinical perspectives. New York: Plenum Press.
- Burger, J. M. (1989). Negative reactions to increases in perceived personal control *Journal of Personality and Social Psychology*, 56, 246-256.
- Burger, J.M., McWard, J., & LaTorre, D. (1986). Relinquishing control over aversive stimuli. Paper presented at the meeting of the Western Psychological Association, Seattle.
- Burger, J.M., McWard, J., & LaTorre, D. (1989). Boundaries of self-control: Relinquishing control over aversive events. *Journal of Social and Clinical Psychology*, 8, 209-221.
- Campbell, A. (1976). Subjective measures of well-being. *American Psychologist*, 31, 117-124.
- Campbell, A. (1981). The Sense of Well-being in America: Recent Patterns and Trends. New York: McGraw-Hill.
- Cannon, W.B. ([1929], 1953). Bodily Changes in Pain, Hunger, Fear, and Rage. Boston: Branford.
- Cantril, H. (1965). The Pattern of Human Concerns. Rutgers University Press.
- Caplan, G. (1981). Mastery of stress: Psychosocial aspects. *American Journal of Psychiatry*, 138, 413-420.
- Carney, C., & Savitz, C. (1980). Student and faculty perceptions of student needs and the services of a university counseling center: Differences that make a difference. *Journal of Counseling Psychology*, 27, 597-604.
- Carney, C., Peterson, K., & Moberg, T. (1990). How stable are student and faculty perceptions of student concerns and of a university counseling center? *Journal of College Student Development*, 31, 423-428.
- Carson, D.K., & Runco, M.R. (1999). Creative problem solving and problem finding in



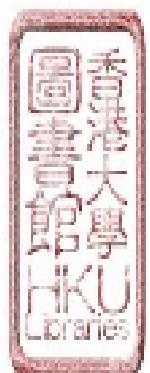
- young adults: interconnections with stress, hassles, and coping abilities. *Journal of Creative Behavior*, 33, 167-190.
- Carver, C., Blaney, P., & Scheier, M. (1979). Focus of attention, chronic expectancy, and responses to a feared stimulus. *Journal of Personality and Social Psychology*, 37, 1186-1195.
- Carver, C.S. Harris, S.D., Lehman, J.M., Durel, L.A., Antoni, M.H., Spencer, S.M., & Pozo-Kaderman, C. (2000). How important is the perception of personal control? Studies of early stage breast cancer patients. *Personality and Social Psychology Bulletin*, 26, 139-149.
- Carver, C.S., & Scheier, M.F. (1981). *Attention and Self-regulation: A Control-theory Approach to Human Behavior*. New York: Springer.
- Carver, C.S., & Scheier, M.F. (1982). Control theory: A useful framework for conceptualizing human behavior. *Psychological Bulletin*, 92, 111-135.
- Carver, C.S., & Scheier, M.F. (1983). A control-theory approach to human behavior and implications for self-management. In P.C. Kendall (ed.), *Advances in Cognitive-Behavioral Research and Therapy*. New York: Academic.
- Carver, C.S., & Scheier, M.F. (1986). Functional and dysfunctional responses to anxiety: The interaction between expectancies and self-focused attention: In R. Schwarzer (ed.), *Self-related cognitions in anxiety and motivation* (pp. 111-141). Hillsdale, New Jersey: Erlbaum.
- Carver, C.S., & Scheier, M.F. (1990). Principles of self-regulation: Action and emotion. In E.T. Higgins & R.M. Sorrentino (eds.), *Handbook of motivation and cognition: Foundations of social behavior* (Vol. 2, pp. 3-52). New York: Guilford.
- Carver, C.S., & Scheier, M.F. (1994). Optimism and health-related cognition: What variables actually matter? *Psychology and Health*, 9, 191-195.
- Carver, C.S., & Scheier, M.F. (1998). *On the self-regulation of behavior*. New York: Cambridge University Press.
- Caspi, A., Bolger, N., & Eckenrode, J. (1987). Linking person and context in the daily stress process. *Journal of Personality and Social Psychology*, 52, 184-195.
- Cervone, D. (1989). Effects of envisioning future activities on self-efficacy judgments and motivation: An availability heuristic interpretation. *Cognitive Therapy and Research*, 13, 246-261.
- Chamberlain, K., & Zika, S. (1992). Religiosity, meaning in life, and psychological well-being. In F.S. John (ed.), *Religion and Mental Health*. New York: Oxford University Press.
- Chan, D. W., & Chan, T. S. (1983). Reliability, validity and the structure of the General Health Questionnaire in a Chinese context. *Psychological Medicine*, 13, 363-371.
- Chan, D.W. (1985). The Chinese version of the General Health Questionnaire: Does



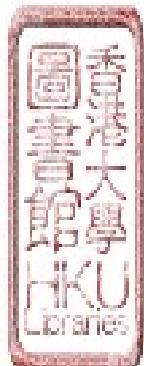
- language make a difference? *Psychological Medicine*, 15, 147-155.
- Chang, E., & Zurilla, J. (1996). Irrational beliefs as predictors of anxiety and depression in a college population. *Personality and Individual Difference*, 20, 215-219.
- Cohen, S. (1976). Environmental load and the allocation of attention. In A. Baum & S. Valins (eds.), *Advances in environmental psychology*. Hillsdale, New Jersey: Erlbaum.
- Chinese Youth Daily 《中國青年報》(1988). 13, January.
- Chu, G.C. (1985). The emergence of the new Chinese culture. In *Chinese Culture and Mental Health*. W.S. Tseng & Y.H. Wu (eds.). Orlando: Academic Press.
- Cleary, D., Goldberg, I., Kessler, L., & Nycz, G. (1982). Screening for mental disorder among primary care patients. *Archives of General Psychiatry*, 39, 837-840.
- Cleary, P. (1980). Checklist for life event research. *Journal of Psychosomatic Research*. 24, 199-207.
- Coddington, R.D. (1972). The significance of life events as etiologic factors in the diseases of children- I . *Journal of Psychosomatic Research*, 16, 7-18.
- Cohen, F., & Lazarus, R. (1979). Coping with the stresses of illness. In G. C. Stone, F. Cohen & Adler (eds.), *Health Psychology: A Handbook* (pp. 217-254). San Francisco: Jossey-Bass.
- Cohen, S. (1980). Aftereffects of stress on human performance and social behavior: A review of research and theory. *Psychological Bulletin*, 88, 82-108.
- Cohen, S., & Edwards, J.R. (1989). Personality characteristics as moderators of the relationship between stress and disorder. In R.W.J. Neufeld (ed.), *Advances in the investigation of psychological stress* (pp. 235-283). New York: Wiley.
- Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, 98, 310-357.
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24, 385-393.
- Cole, T., & Sapp, G. (1988). Stress, locus of control, and achievement of high school seniors. *Psychological Reports*, 63, 355-359.
- Coleman, S., Kaplan, J., & Downing, R. (1986). Life cycle and loss-- The spiritual vacuum of heroin addiction. *Family Process*, 25, 5-23.
- Compas, B., Davis, G., & Forsythe, C. (1985). Characteristics of life events during adolescence. *American Journal of Community Psychology*, 13, 677-691.
- Constantini, A., Braun, J., & Lernoline, A. (1974). The life change inventory: A device for quantifying psychological magnitude of changes experienced by college students. *Psychological Reports*, 34, 991-1000.
- Constantini, A., Braun, J., Davis, J., & Lervoline, A. (1973). Personality and mood correlates of schedule of recent experience scores. *Psychological Reports*, 32, 1143-1150.
- Conze, E. (1975). *Buddhism: Its essence and development*. New York: Norton.



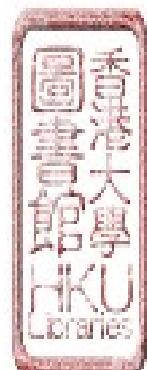
- Cook, J., & Wimberley, D. (1983). If I should die before I wake: Religious commitment and adjustment to the death of a child. *Journal for the Scientific Study of Religion*, 22, 222-238.
- Coyne, J. C. (1976). Toward an interactional description of depression. *Psychiatry*, 39, 28-40.
- Craig, L.E., & Senter, R.J. (1972). Student thoughts about suicide. *Psychological Record*, 22, 355-358.
- Crocker, J., Luhtanen, R., Blaine, B., & Broadnax, S. (1994). Collective self-esteem and psychological well-being among white, black, and Asian college students. *Personality and Social Psychology Bulletin*, 20, 503-513.
- Crumbaugh, J., & Maholick, L. (1964). An experimental study in existentialism: The psychometric approach to Frankl's concept of noogenic neurosis. *Journal of Clinical Psychology*, 20, 200-207.
- Csikszentmihalyi, M., & Csikszentmihalyi, I.S. (1988). Optimal experience: Psychological Studies of Flow in Consciousness. New York: Cambridge University Press.
- Cutrona, C.E. (1982). Transition to college: Loneliness and the process of social adjustment. In L.A. Peplau & D. Perlman (eds.), *Loneliness: A source book of current theory, research and therapy*. New York: John Wiley.
- Damush, T., M., Hays, R.D., & Dimatteo, M.R. (1997). Stressful life events and health-related quality of life in college students. *Journal of College Student Development*, 38, 181-190.
- Debats, D. L., Drost, J., & Hansen, P. (1995). Experiences of meaning in life: A combined qualitative and quantitative approach. *British Journal of Psychology*, 86, 359-375.
- Debats, D. L., Lubbe, M., & Wezeman, R. (1993). On the psychometric properties of the life regard index (LRI): A measure of meaningful life. *Personality and Individual Difference*, 14, 337-345.
- Debats, D.L. (1996). Meaning in life: Clinical relevance and predictive power. *British Journal of Clinical Psychology*, 35, 503-516.
- deCharms, R. (1968). *Personal Causation: The Internal Affective Determinants of Behavior*. New York: Academic Press.
- Delongis, A. (1985). The relationship of everyday stress to health and well-being: Inter- and intra-individual approaches. Unpublished doctoral dissertation, University of California, Berkeley.
- Delongis, A., Coyne, J.C., Dakof, G. Folkman, S., & Lazarus, R.S. (1982). Relationship of daily hassles, uplifts, and major life events to health status. *Health Psychology*, 1, 119-136.
- Dempsey, P. (1964). A unidimensional scale for the MMPI. *Journal of Consulting Psychology*, 28, 364-370.



- DeVogler-Ebersole, K., & Ebersole, P. (1985). Depth of meaning in life. *Psychological Reports*, 56, 303-310.
- Diener, E. (1984). Subjective well-being. *Psychological Bulletin*, 95, 542-575.
- Diener, E., & Diener, M. (1995). Cross-cultural correlates of life satisfaction and self-esteem. *Journal of Personality and Social Psychology*, 68, 653-663.
- Diener, E., & Emmons, R. (1985). The independence of positive and negative affect. *Journal of Personality and Social Psychology*, 47, 1105-1117.
- Diener, E., Suh, E., Lucas, R., & Smith, H. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin*, 125, 276-302.
- Dill, D., Feld, E., Martin, J., Beukema, S., & Belle, D. (1980). The impact of the environment on the coping efforts of low-income mothers. *Family Relations*, 29, 503-509.
- Dittes, J. (1969). Psychology of religion. In G. Lindzey & E. Aronson (eds.), *The handbook of Social Psychology*. Reading: Addison-Wesley.
- Dixon, W., Heppner, P., & Anderson, W. (1991). Problem-solving appraisal, stress, hopelessness, and suicide ideation in a college population. *Journal of Counseling Psychology*, 38, 51-56.
- Dohrenwend, B.S., & Dohrenwend, B.P. (1970). Class and race as status-related sources of stress. In S. Levine and N. Scotch (eds.), *Social Stress* (pp. 111-140). Chicago: Aldine.
- Dohrenwend, B.S., & Dohrenwend, B.P. (1974). A brief historical introduction to research on stressful life events. In B.S. Dohrenwend and B.P. Dohrenwend (eds.), *Stressful Life Events: Their Nature and Effects* (pp. 1-5). New York: Wiley.
- Dohrenwend, B.S., & Dohrenwend, B.P. (1978). Some issues in research on stressful life events. *Journal of Nervous and Mental Disease*, 166, 7-15.
- Dohrenwend, B.S., & Dohrenwend, B.P. (1981). Socioenvironmental factors, stress and psychopathology. *American Journal of Community Psychology*, 9, 128-165.
- Dubois, D. L., Felner, R.D., Brand, S., Adan, A.M., & Evaznts, E. (1992). A prospective study of life stress, social support, and adaptation in early adolescence. *Child Development*, 63, 542-557.
- Elisabeth, L. (1979). "Logotherapy's message to parents and teachers. *The International Forum for Logotherapy*, 1, 10.
- Ellis, A. (1962). *Reason and emotion in psychotherapy*. Secaucus, New Jersey: Lyle Stuart.
- Ellis, A. (1977). *Handbook of Rational-Emotive Therapy*. New York: Springer.
- Ellis, A. (1991). How to fix the empty self. *American Psychologist*, 46, 206-219.
- Erickson, R.C., Post, R., & Paige, A. (1975). Hope as a psychiatric variable. *Journal of Clinical Psychology*, 31, 324-329.
- Erikson, E.H. (1950). *Childhood and Society*. New York: Norton.
- Eshun, S. (1999). Cultural variations in hopelessness, optimism, and suicidal ideation: A study of Ghana and U.S. college samples. *Cross-Cultural Research*, 33, 227-238.



- Everly, J., Poff, D., Lampert, N., Hamant, C., & Alvey, G. (1994). Perceived stress and coping strategies of occupational therapy students. *American Journal of Occupational Therapy*, 48, 1022-1028.
- Exline, J., Yali, A., & Lobel, M. (1999). When God disappoints. *Journal of Health Psychology*, 4, 365-379.
- Fabes, R., & Eisenberg, N. (1997). Regulatory control and adults' stress-related responses to daily life events. *Journal of Personality and Social Psychological*, 73, 1107-1117.
- Fabry, J. (1968). *The Pursuit of Meaning*. Beacon Press.
- Fabry, J. (1988). *Guideposts to Meaning: Discovering what really matters*. Oakland: New Harbinger.
- Fan, F., Wu, S. & Wong, J. (2000). Report of college students' psychological quality status in Beijing.
- Fehring, R.J., Brennan, P.F., & Keller, M. (1987). Psychological and spiritual well-being in college students. *Research in Nursing and Health*, 10, 391-398.
- Feng, G., & English, J. (1972). *Lao Tzu: Tao Te Ching*. New York: Vintage Books.
- Fenigstein, A., Scheier, M.F., & Buss, A.H. (1975). Public and private self-consciousness: Assessment and theory. *Journal of Consulting and Clinical Psychology*, 43, 522-527.
- Fisher, S., & Hood, B. (1987). The stress of the transition to university: a longitudinal study of psychological disturbance and vulnerability to homesickness. *British Journal of Psychology*, 78, 425-442.
- Fisher, S., Murray, K., & Frazer, N. (1985). Homesickness, health and efficiency in first year students. *Journal of Environmental Psychology*, 5, 181-195.
- Folkman, S. (1984). Personal control and stress and coping processes: A theoretical analysis. *Journal of Personality and Social Psychology*, 46, 839-852.
- Folkman, S., & Lazarus, R. (1984). Puzzles in the study of daily hassles. *Journal of Behavioral Medicine*, 7, 375-389.
- Folkman, S., Lazarus, R., Dundel-Schetter, C., DeLongis, A., & Gruen, R. (1986). Dynamics of a stressful encounter: Cognitive appraisal, coping, and encounter outcomes. *Journal of Personality and Social Psychology*, 50, 992-1003.
- Frank, J. (1968). The role of hope in psychotherapy. *International Journal of Psychiatry*, 6, 383-395.
- Frankl, V. (1959). *Man's Search for Meaning*. London: Hodder & Schuster.
- Frankl, V. (1963). *Man's Search for Meaning*. Washington: Square Press.
- Frankl, V. (1967). *Psychotherapy and Existentialism*. New York: Simon & Schuster.
- Frankl, V.E. (1970). *Psychotherapy and Existentialism*. London: Souvenir Press.
- Frankl, V.E. (1971). *Man's search for meaning: An introduction to logotherapy*. London: Hodder and Stoughton Press.
- Free, L.A., & Cantril, H. (1968). *The Political Beliefs of Americans: A Study of Public*



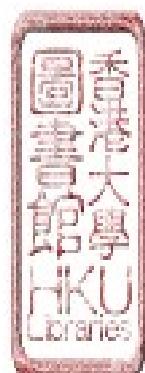
- Opinion. New York: Clarion.
- Frankl, V.E. (1992). *Man's Search for Meaning: An Introduction to Logotherapy*. Boston: Beacon Press.
- Freud, S. ((1926), 1964). Inhibition, symptoms and anxiety. In J. Strachey (ed.), *The Standard Edition of the Complete Psychological Works of Sigmund Freud*. London: Hogarth Press.
- Fromm, E. (1955). *The Sane Society*. New York: Rinehart.
- Gadzella, B.M. (1994). Student-life stress inventory: Identification of and reactions to stressors. *Psychological Reports*, 75, 395-402.
- Ganellen, R., & Blaney, P. (1984). Hardiness and social support as moderators of the effects of life stress. *Journal of Personality and Social Psychology*, 47, 156-163.
- Ganzer, V.J. (1968). Effects of audience presence and test anxiety on learning and retention in a serial learning situation. *Journal of Personality and Social Psychology*, 8, 194-199.
- Gartner, J., Larson, D., & Allen, G. (1991). Religious commitment and mental health: A review of the empirical literature. *Journal of Psychology and Theology*, 19, 6-25.
- Ge, X., Lorenz, F., Conger, R. Elder, G., & Simons, R. (1994). Trajectories of stressful life events and depressive symptoms during adolescence. *Developmental Psychology*, 30, 467-483.
- Gibbons, F.X., Smith, T.W., Ingram, R.E., Pearce, K., Brehm, S.S., & Schroeder, D.J. (1985). Self-awareness and self-confrontation: Effects of self-focused attention on members of a clinical population. *Journal of Personality and Social Psychology*, 78, 662-675.
- Goldberg, D.P. (1972). *The Detection of Psychiatric Illness by Questionnaire*. London: Oxford University Press.
- Goldberg, D. P., & Blackwell, B. (1970). Psychiatric illness in general practice: A detailed study using a new method of case identification. *British Medical Journal*, 2, 439-443.
- Goldberg, G., & Huxley, P. (1992). *Common mental disorders. A bio-social model*. London & New York: Tavistock/Routledge.
- Goldfried, M., & D'Zurilla, T. (1969). The behavioral-analytic method for assessing competence. In C.D. Spielberger (ed.), *Current Topics in Clinical and Community Psychology* (pp. 151-196). New York: Academic Press.
- Gore, S., Aseltine, R., & Colton, M.E. (1992). Social structure, life stress, and depressive symptoms in a high school-aged population. *Journal of Health and Social Behavior*, 33, 97-113.
- Gould, W. B. (1993). Viktor E. Frankl: Life with Meaning. Pacific Grove: Brooks/Cole Publishing Company.
- Greenwald, A.G. (1980). The totalitarian ego: Fabrication and revision of personal history. *American Psychologist*, 35, 603-618.
- Groth-Marnat, G. (1992). Buddhism and mental health: A comparative analysis. In F.S. John



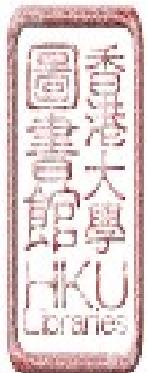
- (ed.) Religion and Mental Health. New York: Oxford University Press.
- Harlow, L., Newcomb, M., & Bentler, P. (1986). Depression, self-derogation, substance use, and suicide ideation: Lack of purpose in life as a mediational factor. *Journal of Clinical Psychology*, 42, 5-21.
- Harvey, P. (1995). The Selfless Mind. Richmond, Surrey: Curzon Press.
- Hawkins, N., Davies, R., & Holmes, T. (1957). Evidence of psychosocial factors in the development of pulmonary tuberculosis. *American Review of Tuberculosis*, 75, 768-780.
- Headey, B., & Wearing, A. (1991). Subjective well-being: A stocks and flows framework. In S. Fritz, A. Michael & S. Norbert (eds.) *Subjective Well-being: An interdisciplinary perspective*. Oxford: Pergamon Press.
- Health Daily 《健康報》(1989). 23, Sep.
- Heinz, M., Fahey, S., & Leiden, L. (1984). Perceived stress in medical, law and graduate student. *Journal of Medical Education*, 59, 169-179.
- Hilary, G., & Brent, M. (1994). Emotional, social and academic adjustment of college students: A longitudinal study of retention. *Journal of Counseling and Development*, 72, 281-285.
- Holahan, C., Moos, R., & Schaeffer, J. (1996). Coping, stress resistance and growth: Conceptualizing adaptive functioning. In Z. Moshe & S. Norman (eds.). *Handbook of Coping: Theory, Research, Applications*. New York: Wiley.
- Hollenbeck, J., & Klein, H. (1987). Gold commitment and the goal-setting process: Problems, prospects, and proposals for future research. *Journal of Applied Psychology*, 72, 212-220.
- Holmes, J.A., & Stevenson, C.A. (1990). Differential effects of avoidant and attentional coping strategies on adaptation to chronic and recent-onset pain. *Health Psychology*, 9, 577-584.
- Holmes, T., & Rahe, R. (1967). The social readjustment rating scale. *Journal of Psychosomatic Research*, 11, 213-218.
- Hong, Y.Y., & Lam, D.J. (1992). Appraisal, coping, and guilt as correlates of test anxiety. In K.A. Hagtvet & T. Backer Johnsen (eds.), *Advances in Test Anxiety Research* (pp.277-287). Amsterdam: Swets & Zeitlinger.
- Hope, D., & Heimberg, R. (1985). Public and private self-consciousness in a social phobic sample. Paper presented at the meeting of the Association for the Advancement of Behavior Therapy. Houston.
- Hope, D., Heimberg, R., Zollo, L., Nyman, D., & O'Brien, G. (1987). Thought listing in the natural environment: Valence and focus of listed thoughts among socially anxious and nonanxious subjects. Paper presented at the meeting of the Association for Advancement of behavior Therapy. Boston.
- Houston, B.K. (1971). Sources, effects, and individual vulnerability of psychological



- problems for college students. *Journal of Counseling Psychology*, 18, 157-165.
- Houston, B.K. (1972). Control over stress, locus of control, and response to stress. *Journal of Personality and Social Psychology*, 21, 249-255.
- Hudson, S., & O'Regan, J. (1994). Stress and the graduate psychology student. *Journal of Clinical Psychology*, 50, 973-977.
- Hull, J.G. (1981). A self-awareness model of the causes and effects of alcohol consumption. *Journal of Abnormal Psychology*, 90, 586-600.
- Ingram, R.E. (1990). Self-focused attention in clinical disorders: Review and a conceptual model. *Psychological Bulletin*, 107, 156-176.
- Ingram, R.E., & Smith, T.W. (1984). Depression and internal versus external focus of attention. *Cognitive Therapy and Research*, 8, 139-152.
- Ingram, R.E., Lumry, A., Cruet, D., & Sieber, W. (1987). Attentional processes in depression disorders. *Cognitive Therapy and Research*, 11, 351-360.
- Jackson, L., & Coursey, R. (1988). The relationship of God control and internal locus of control to intrinsic religious motivation, coping and purpose in life. *Journal for the Scientific Study of Religion*, 27, 399-410.
- Jackson, L., Pancer, S., Pratt, M., & Hunsberger, B. (in press). Great expectations: The relation between expectancies and adjustment during the transition to university. *Journal of Applied Social Psychology*.
- Jacobi, J. (1965). *The Way of Individuation*. Harcourt, Brace & World.
- Jacoby, R. (1993). The miserable has no other medicine, but only hope: Some conceptual considerations on hope and stress. *Stress Medicine*, 9, 61-69.
- Jahoda, M. (1958). Current concepts of positive mental health. New York: Basic Books.
- Jahoda, M. (1959). *Current Concepts of Positive Mental Health*. New York: Basic Books.
- James, W. (1902). *Varieties of Religious Experience*. Modern Library.
- Janoff-Bulman, R., & Brickman, P. (1982). Expectations and what people learn from failure. In N.T. Feather (ed.), *Expectations and action: Expectancy-value models in psychology* (pp. 207-272). Hillsdale, New Jersey: Erlbaum.
- Janoff-Bulman, R., & Frieze, I. (1983). A theoretical perspective for understanding reactions to victimization. *Journal of Social Issues*, 39, 1-17.
- Jenkins, R., & K. Pargament (1988). Cognitive appraisals in cancer patients. *Social Science and Medicine*, 26, 625-33.
- Ji, H. (1999). Study on college student's mental health status and risk of suicide. *Journal of Beijing Normal University*, 1, 26-33.
- Johnson, J.E. (1984). Psychological interventions and coping with surgery. In A. Baum, S.E. Taylor, & J.E. Singer (eds.). *Handbook of Psychology and Health: Vol. 2. Social Psychological Aspects of Health*. Hillsdale, New Jersey: Erlbaum.
- Johnson, J., & Sarason, I. (1978). Life stress, depression and anxiety: Internal-external



- control as a moderator variable. *Journal of Psychosomatic Research*, 22, 205-208.
- Kanner, A.D., Goyne, J.C., Schaefer, C., & Lazarus, R.S. (1981). Comparison of two modes of stress measurement: Daily hassles and uplifts versus major life events. *Journal of Behavioral Medicine*, 4, 1-39.
- Kaplan, H.D. (1979). Social psychology of disease. In H.G. Freeman et al. (eds.), *Handbook of Medical Sociology* (3rd ed.) (53-70). Englewood Cliffs, New Jersey: Prentice-Hall.
- Kernis, M. H., Grannemann, B., & Mathis, L. (1991). Stability of self-esteem as a moderator of the relation between level of self-esteem and depression. *Journal of Personality and Social Psychology*, 61, 80-84.
- Kim, K., Won, H., Liu, X., Liu, P., & Kitanishi, K. (1997). Students' stress in China, Japan and Korea: A transcultural study. *International Journal of Social Psychiatry*, 43, 87-94.
- Kimmel, H. (1965). Instrumental factors in classical conditioning. In W. Prokasy (ed.), *Classical Conditioning*. New York: Appleton-Century-Crofts.
- Kitayama, S., & Markus, H. (1994). Introduction to cultural psychology and emotion research. In S. Kitayama & H. Markus (eds.) *Emotion and Culture*. Washington, DC: American Psychological Association.
- Kitayama, S., Markus, H., & Kurokawa, M. (1991). Culture, self, and emotion: The structure and frequency of emotion experience. Paper presented at the biannual meeting of the Society for Psychological Anthropology, Chicago.
- Ko, Y.H. (1975). Student mental health problems in two differently industrialized cities. *Acta Psychol Taiwanica*, 17, 25-38.
- Kobasa, S. (1979). Stressful life events, personality and health: An inquiry into hardiness. *Journal of Personality and Social Psychology*, 37, 1-11.
- Kobasa, S. (1982). Commitment and coping in stress resistance among lawyers. *Journal of Personality and Social Psychology*, 42, 168-177.
- Kobasa, S.C., & Puccetti, M.C. (1983). Personality and social resources in stress resistance. *Journal of Personality and Social Psychology*, 45, 839-850.
- Kobasa, S.C., Maddi, S.R., & Kahn, S. (1980). Hardiness and health: a prospective study. *Journal of Personality and Social Psychology*, 42, 168-177.
- Koenig, L.J., Clements, C.M., & Alloy, L.B. (1992). Depression and the illusion of control: The role of esteem maintenance and impression management. *Canadian Journal of Behavioral Science*, 24, 233-252.
- Kohn, M.L., & Schooler, C. (1969). Class, occupation and orientation. *American Sociological Review*, 34, 659-78.
- Koos, E.L. (1946). *Families in Trouble*. New York: Kings Crowe.
- Koplik, E.K., & Devito, A.J. (1986). Problems of freshman: Comparisons of classes of 1976 and 1986. *Journal of College Student Personnel*, 27, 124-131.
- Kuhn, T. (1970). *The Structure of Scientific Revolution* (2nd ed.). Chicago: University of

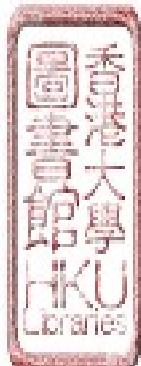


Chicago Press.

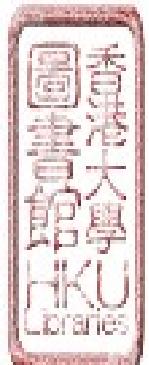
- Kwee, M., & Ellis, A. (1998). The interface between rational emotive behavior therapy (REBT) and zen. *Journal of Rational-Emotive and Cognitive-Behavior Therapy*, 16, 5-43.
- Lachman, M., & Weaver, S. (1998). The sense of control as a moderator of social class differences in health and well-being. *Journal of Personality and Social Psychology*, 74, 763-773.
- Lazarus, A.A. (1976). Multimodal behavior therapy. New York: Springer.
- Lazarus, R. S. (1966). Psychological stress and the coping process. New York: McGraw-Hill.
- Lazarus, R. S. (1999). Stress and Emotion: a New Synthesis. New York: Springer.
- Lazarus, R., & Smith, C. (1988). Knowledge and appraisal in the cognition-emotion relationship. *Cognition and Emotion*, 2, 281-300.
- Lazarus, R.S. (1966). Psychological Stress and the Coping Process. New York: McGraw-Hill.
- Lazarus, R.S. (1968). Emotions and adaptation: Conceptual and empirical relations. In W. J. Arnold (ed.), *Nebraska Symposium on Motivation* (pp. 175-266). Lincoln: University of Nebraske Press.
- Lazarus, R.S. (1984). Puzzles in the study of daily hassles. *Journal of Behavioral Medicine*, 7, 375-389.
- Lazarus, R.S., & Averill, J.R. (1972). Emotion and cognition: With special reference to anxiety. In C.D. Spielberger (ed.), *Anxiety and Behavior*. New York: Academic Press.
- Lazarus, R.S., & Folkman, S. (1984). *Stress, Appraisal, and Coping*. New York: Springer.
- Lazarus, R.S., & Folkman, S. (1991). The concept of coping. In Monat & Lazarus (eds.), *Stress and Coping*. New York: Columbia University Press
- Lazarus, R.S., Cohen, J.B., Folkman, S., Kanner, A., & Schaefer, C. (1980). Psychological stress and adaptation: Some unresolved issues. In H. Selye (ed.), *Selye's Guide to Stress Research* (pp. 90-117). New York: Van Nostrand Reinhold.
- Leasor, S. (1983). Spiritual well-being and psychological mood states in patients with COPD. Master's Thesis, Marquette University, Milwaukee.
- Lebra, T.S. (1992). Culture, self, and communication. Paper presented at the University of Michigan, Ann Arbor, Michigan.
- Lee, Y., & Seligman, M. (1997). Are American more optimistic than the Chinese? *Personality and Social Psychology Bulletin*, 23, 32-40.
- Lefcourt, H.M. (1992). Perceived control, personal effectiveness, and emotional states. In B.N. Carpenter (ed.), *Personal Coping: Theory, Research, and Application*. New York: Praeger.
- Lepore, S.J., Evans, G.W., & Schneider, M.L. (1992). Role of control and social support in explaining the stress of hassles and crowding. *Environment and Behavior*, 24, 795-811.



- Lewinsohn, P., Zeiss, A., & Duncan, E. (1988). Probability for relapse after recovery from an episode of depression. Unpublished mimeo.
- Linehan, M.M. (1981). Suicidal behaviors questionnaire. Unpublished manuscript, University of Washington, Seattle.
- Linville, P.W. (1987). Self-complexity as a cognitive buffer against stress-related illness and depression. *Journal of Personality and Social Psychology*, 52, 663-676.
- Maddi, S. (1967). The existential neurosis. *Journal of Abnormal Psychology*, 72, 311-325.
- Maddux, J.E. (1995). Self-efficacy theory: An introduction. In E.M. James (ed.) *Self-efficacy, Adaptation, and Adjustment: Theory, Research, and Application*. New York: Plenum Press.
- Mandler, G., & Sarason, S.B. (1952). A study of anxiety and learning. *Journal of Abnormal and Social Psychology*, 47, 166-173.
- Mandler, G., & Watson, D.L. (1966). Anxiety and the interruption of behavior. In C.D. Spielberger (ed.), *Anxiety and Behavior* (pp. 22-49). New York: Academic Press.
- Markus, H., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, 98, 224-253.
- Markus, H., & Nurius, P. (1986). Possible selves. *American Psychologist*, 41, 954-969.
- Marlett, N.J., & Watson, D. (1968). Test anxiety and immediate or delayed feedback in a test-like avoidance task. *Journal of Personality and Social Psychology*, 8, 200-203.
- Marshall, G., & Lang, E.L. (1990). Optimism, self-mastery, and symptoms of depression in women professionals. *Journal of Personality and Social Psychology*, 59, 132-139.
- Maslow, A.H. (1950). Self-actualizing people: A study of psychological health. *Personality Symposium*, 1, 11-34.
- Maslow, A.H. (1953). *Toward a Psychology of Being*. Van Nostrand.
- Maslow, A.H. (1962). *Toward a Psychology of Being*. Princeton, New Jersey: D. Van Nostrand.
- Maslow, A.H. (1972). *The Farther Reaches of Human Nature*. New York: Viking Press.
- Mason, J.W. (1975). A historical view of the stress field. *Journal of Human Stress*, 1, 6-12.
- Matheny, K., Aycock, D., Pugh, J., Curlette, W., & Cannella, K. (1986). Stress coping: A qualitative and quantitative synthesis with implications for treatment. *The Counseling Psychologist*, 14, 499-549.
- Maton, K.I. (1989). The stress-buffering role of spiritual support: Cross-sectional and prospective investigations. *Journal for the Scientific Study of Religion*, 28, 310-323.
- Marlett, N. & Watson, D. (1968). Test anxiety and immediate or delayed feedback in a test-like avoidance task. *Journal of Personality and Social Psychology*, 8, 200-203.
- McGee, R. (1984). Hope: A factor influencing crisis resolution. *Advances in Nursing Science*, 34-44.
- McIntosh, D., Kojetin, & Spilka, B. (1985). Form of personal faith and general and specific



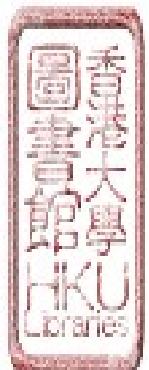
- locus of control. Paper presented at annual convention of the Rocky Mountain Psychological Association, Tucson, Arizona.
- McIntosh, W., Harlow, T., & Martin, L. (1995). Linkers and nonlinkers: Goal beliefs as a moderator of the effects of everyday hassles on rumination, depression, and physical complaints. *Journal of Applied Social Psychology*, 25, 1231-1244.
- Mechanic, D. (1974). Discussion of research programs on relations between stressful life events and episodes of physical illness. In B.S. Dohrenwend and B.P. Dohrenwend (eds.), *Stressful Life Events: Their Nature and Effects* (pp. 87-97). New York: Wiley.
- Mikulas, W. (1978). Four noble truths of Buddhism related to behavior therapy. *Psychological Record*, 28, 59-67.
- Miller, J.F. (1985). Loneliness and spiritual well-being in chronically ill and healthy adults. *Journal of Professional Nursing*, 1, 42-57.
- Miller, N.E. (1980). A perspective on the effects of stress and coping on disease health. In S. Levine and H. Ursin (eds.), *Coping and Health* (NATO Conference Series III: Human Factors). New York: Plenum.
- Miller, S.M. (1979). Controllability and human stress: Method, evidence, and theory. *Behavior Research and Theory*, 17, 287-306.
- Mishara, B.L. (1982). College students' experiences with suicide and reactions to suicidal verbalizations: A model for prevention. *Journal of Community Psychology*, 10, 142-150.
- Mizuno, K. (1996). *Essentials of Buddhism*. Tokyo: Kosei.
- Moberg, D.O. (1979). *Spiritual well-being*. Washington, DC: University Press of America.
- Maton, K. (1989). The stress-buffering role of spiritual support: Cross-sectional and prospective investigations. *Journal for the Scientific Study of Religion*, 28, 310-323.
- Monks & Health (1954). A challenge of academic, social, and personal problems that is in a college student health department. *Journal of Medicine*, 2, 44-62.
- Muraven, M. Tice, D.M., & Baumeister, R. (1998). Self-control as limited resource: Regulatory depletion patterns. *Journal of Personality and Social Psychology*, 74, 774-789.
- Murphy, M.C., & Archer, J. (1996). Stressors on the college campus: A comparison of 1985 and 1993. *Journal of College Student Development*, 37, 20-28.
- Musson, R. F., & Alloy, L.B. (1988). Depression and self-directed attention. In L.B. Alloy (ed.), *Cognitive Processes in Depression* (pp. 193-220). New York: Guilford Press.
- National Center for Health Statistics. (1990). Advance report of final mortality statistics, 1988, *Monthly Vital Statistics Report*, 7 (pp143-148). Hyattsville: U.S. Department of Health and Human Services, Public Health Service.
- Newcomb, M.D., & Harlow, L.L. (1986). Life events and substance use among adolescents: Mediating effects of perceived loss of control and meaninglessness in life. *Journal of Personality and Social Psychology*, 51, 564-577.
- Newcomb, M.D., Huba, G.J., & Bentler, P.M. (1981). A multidimensional assessment of



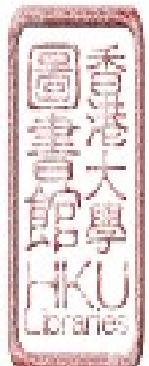
- stressful life events among adolescents: Derivation and correlates. *Journal of Health and Social Behavior*, 22, 400-415.
- Norris, F. H. (1992). Epidemiology of trauma: Frequency and impact of different potentially traumatic events on different demographic groups. *Journal of Consulting and Clinical Psychology*, 60, 409-418.
- Novacek, J., & Lazarus, R.S. (1990). The structure of personal commitments. *Journal of Personality*, 58, 693-715.
- Nowicki, S., & Roundtree, J. (1971). Correlates of locus of control in a secondary school population. *Developmental Psychology*, 4, 477-478.
- Owens, T.J. (1992). The effect of post-high school social context on self-esteem. *Sociological Quarterly*, 33, 553-577.
- Owens, T.J. (1993). Accentuate the positive—and the negative: rethinking the use of self-esteem, self-deprecation and self-confidence. *Social Psychology Quarterly*, 56, 288-299.
- Pachuta, D. (1989). Chinese Medicine: the law of five elements. In A.A. Sheikh and K.S. Sheikh (eds.), *Eastern and Western Approaches to Healing: Ancient Wisdom and Modern Psychology* (pp.64-90). New York: John Wiley & Sons.
- Paloutzian, R., & Ellison, C. (1982). "loneliness, spiritual well-being and quality of life." In L. Peplau and D. Perlman, (eds.). *Loneliness: A Sourcebook of Current Theory, Research and Therapy* (pp.224-237). New York: John Wiley & Sons.
- Pancer, S.M., Hunsberger, B., Pratt, M.W., & Alisat, S. (2000). Cognitive complexity of expectations and adjustment to university in the first year. *Journal of Adolescent Research*, 15, 38-57.
- Parr, G.D. (1998). Flow theory as a model for enhancing student resilience. *Professional School Counseling*, 1,5.
- Peacock, E.J., & Wong, P.T. P (1996). Anticipatory stress: The relation of locus of control, optimism, and control appraisals to coping. *Journal of Research in Personality*, 30, 204-222.
- Peacock, E.J., Wong, P.T.P., & Reder, G.T. (1993). Relations between appraisals and coping schemas: Support for the congruence model. *Canadian Journal of Behavioral Science*, 25, 64-80.
- Pearlin, L., & Schooler, C. (1978). The structure of coping. *Journal of Health and Social Behavior*, 19, 2-21.
- Pearlin, L.I. (1982). Life strains and psychological distress among adults. In A. Monat & R.S. Lazarus (eds.), *Stress and Coping*. New York: Columbia University Press.
- Pearlin, L.I. (1983). Role strains and personal stress. In H. Kaplan (ed.), *Psychosocial Stress: Trends in Theory and Research* (pp. 3-33). New York: Academic Press.
- People's Daily 《人民日报》(1989). 15, Aug.
- Petersen, A.C., Sarigiani, P.A., & Kennedy, R.E. (1991). Adolescent depression: Why more



- girls? *Journal of Youth and Adolescence*, 20, 247-271.
- Petrie, K., & Brook, R. (1992). Sense of coherence, self-esteem, depression and hopelessness as correlates of reattempting suicide. *British Journal of Clinical Psychology*, 31, 293-300.
- Pyszczynski, T., & Greenberg, J. (1985). Depression and preference for self-focusing stimuli after success and failure. *Journal of Personality and Social Psychology*, 49, 1066-1075.
- Pyszczynski, T., & Greenberg, J. (1986). Evidence for a depressive self-focusing style. *Journal of Personality and Social Psychology*, 50, 95-106.
- Pyszczynski, T., & Greenberg, J. (1987). Self-regulatory perseveration and the depressive self-focusing style: A self-awareness theory of reactive depression. *Psychological Bulletin*, 102, 122-138.
- Rabkin, J.G., & Struening, E.L. (1976). Life events, stress, and illness. *Science*, 194, 1013-1020.
- Reker, G., & Wong, P. (1988). Aging as an individual process: Toward a theory of personal meaning. In J.E. Birren & V. Bengtson (eds.), *Emergent Theories of Aging* (pp.214-246). New York: Springer.
- Reker, G.T. (1985). Toward a holistic model of health, behavior and aging. In J.E. Birren & J. Livingston (eds.), *Cognition, Stress, and Aging* (pp. 47-71). Englewood Cliffs, New Jersey: Prentice-Hall.
- Reker, G.T., & Wong, P. T. (1984b). Personal optimism, physical and mental health: The triumph of successful aging. In J.E. Birren & J. Livingston (eds.), *Cognition Stress, and Aging* (pp. 134-173). New York: Prentice-Hall.
- Ritzema, R. (1979). Attribution to supernatural causation: An important component of religious commitment. *Journal of Psychology and Theology*, 7, 286-93.
- Rivkin, I., & Taylor, S. (1999). The effects of mental simulation on coping with controllable stressful events. *Personality and Social Psychology Bulletin*, 25, 1451-1462.
- Roberts, G., & White, W. (1989). Health and stress in developmental college students. *Journal of College Student Development*, 30, 515-521.
- Rodin, J. (1986). Aging and health: Effects of the sense of control. *Science*, 233, 1271-1276.
- Rosenberg, M. (1965). *Society and the Adolescent Self-image*. Princeton, New Jersey: Princeton University Press.
- Rosenberg, M. (1979). *Conceiving the Self*. Malabar: Robert Krieger.
- Rosenberg, M., Schooler, C., Schoenbach, C. & Rosenberg, F. (1995). Global self-esteem and specific self-esteem: Different concepts, different outcomes. *American Sociological Review*, 60, 141-156.
- Ross, C., & Mirowsky, J. (1979). A comparison of life event weighting schemes: Change, undesirability, and effect-proportional indices. *Journal of Health and Social Behavior*, 20, 166-177.



- Rothbaum, F., Weisz, J., & Snyder, S. (1982). Changing the world and changing the self: A two-process model of perceived control. *Journal of Personality and Social Psychology*, 42, 5-37.
- Rotter, J.B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs: General and Applied*, 80, 1-28.
- Rotter, J.B. (1955). The role of the psychological situation in determining the direction of human behavior. In M.R. Jones (ed.), *Nebraska symposium on motivation* (pp.245-269). Lincoln: University Nebraska Press.
- Rubin, J.B. (1996). *Psychotherapy and Buddhism: Toward an Integration*. London: Plenum Press.
- Rudd, M.D. (1989). The prevalence of suicidal ideation among college students. *Suicide and Life-Threatening Behavior*, 19, 173-183.
- Rutter, M. (1986). The developmental psychopathology of depression: Issues and perspectives. In M. Rutter, C.E. Izard & P.B. Read (eds.), *Depression in young people: Developmental and clinical perspectives* (pp. 3-22). New York: Guilford Press.
- Ryff, C.D. (1995). Psychological well-being in adult life. *Current Directions in Psychological Science*, 4, 99-104.
- Sandler, I., & Lakey, B. (1982). Locus of control as a stress moderator: The role of control perceptions and social support. *American Journal of Community Psychology*, 10, 65-80.
- Sante, Nationale et Bien-être social Canada (1988). *La Sante Mentale des Canadiens; Vers un juste équilibre*, Cat. H39-128/1988F (Ministère des Approvisionnements et Services, Canada).
- Sarason, I.G. (1986). Test anxiety, worry, and cognitive interference. In R. Schwarzer (ed.), *Self-related Cognitions in Anxiety and Motivation* (pp. 19-33). Hillsdale, New Jersey: Erlbaum.
- Sarason, I.G., Johnson, J.H., & Siegel, J.M. (1978). Assessing the impact of life changes: Development of the life experiences survey. *Journal of Consulting and Clinical Psychology*, 46, 932-946.
- Sartre, J.P. (1943). *L'Etre et le néant*. Paris: NRF.
- Scheier, M., Weintraub, J., & Carver, C. (1986). Coping with stress: Divergent strategies of optimists and pessimists. *Journal of Personality and Social Psychology*, 51, 1257-1264.
- Scheier, M., & Carver, C. (1977). Self-focused attention and the experience of emotion: Attraction, repulsion, elation, and depression. *Journal of Personality and Social Psychology*, 35, 625-636.
- Scheier, M.F., & Carver, C.S. (1985). Optimism, coping and health: Assessment and implications of generalized outcome expectancies. *Health Psychology*, 4, 219-247.
- Scheier, M.F., & Carver, C.S. (1987). Dispositional optimism and physical well-being: The influence of generalized outcome expectancies on health. *Journal of Personality*, 55, 169-

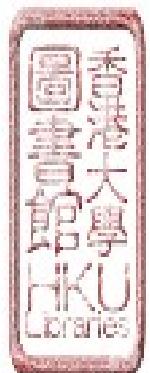


210.

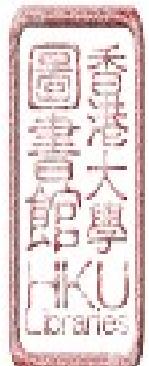
- Schotte, D.E., & Clum, G. A. (1982). Suicide ideation in a college population: A test of a model. *Journal of Consulting and Clinical Psychology*, 50, 690-696.
- Schulz, R., & Heckhausen, J. (1996). A life span model of successful aging. *American Psychologist*, 51, 702-714.
- Schwartz, S., Sagiv, L., & Boehnke, K. (2000). Worries and Values. *Journal of Personality*, 68, 309-346.
- Seligman, M., Maier, S., & Solomon, R. (1971). Unpredictable and uncontrollable aversive events. In F. R. Brush (ed.), *Aversive Conditioning and Learning*. New York: Academic Press.
- Seligman, M.E.P. (1975). *Helplessness*. San Francisco: Freeman.
- Selye, H. ([1956], 1976b). *The Stress of Life*. New York: McGraw-Hill.
- Selye, H. (1991). History and present status of the stress concept. In Monat & Lazarus (eds.) *Stress and Coping*. New York: Columbia University Press.
- Shek, D. (1988). Mental health of secondary school students in Hong Kong: an epidemiological study using the General Health Questionnaire. *International Journal of Adolescent Medicine and Health*, 3, 191-215.
- Silver, B., Goldstein, S., & Silver, L. (1984). The 1990 objectives for the nation for the control of stress and violent behavior: Progress report. *Public Health Reports*, 99, 374-384.
- Silver, R.L., Boon, C., & Stones, M.H. (1983). Searching for meaning in misfortune: Making sense of incest. *Journal of Social Issues*, 39, 81-102.
- Silvestri, P. (1979). Locus of control and God-dependence. *Psychological Reports*, 45, 89-90.
- Silvestri, P.J. (1979). Locus of control and God-dependence. *Psychological Reports*, 45, 89-90.
- Smelser, N.J. (1963). *Theory of Collective Behavior*. New York: Free Press.
- Smith, T. W., & Greenberg, J. (1981). Depression and self-focused attention. *Motivation and Emotion*, 5, 323-331.
- Smith, T.W., Ingram, R.E., & Roth, D.L. (1985). Self-focused attention and depression: Self-evaluation, affect, and life stress. *Motivation and Emotion*, 9, 381-389.
- Smith, W.K. (1987). The stress analogy. *Schizophrenia Bulletin*, 13, 215-220.
- Solomon, S., Holmes, D., & McCaul, K. (1980). Behavioral control over aversive events: Does control that requires effort reduce anxiety and physiological arousal? *Journal of Personality and Social Psychology*, 39, 729-736.
- Solway, K.S. (1985). Transition from graduate school to internship: A potential crisis. *Professional Psychology: Research and Practice*, 16, 50-54.
- Spilka, B., & Schmidt, G. (1983). General attribution theory for the psychology of religion:



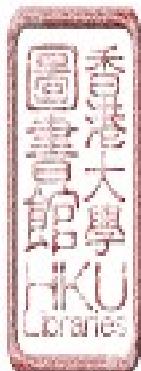
- The influence of event-character on attributions to God. *Journal for the Scientific Study of Religion*, 22, 326-29.
- Stern, G.G. (1966). Myth and reality in the American college. *American Association of University Professors Bulletin*, 52, 408-414.
- Tamney, J. (1992). Religion and self-actualization. In F.S. John (ed.) *Religion and Mental Health*. New York: Oxford University Press.
- Taylor, S. (1983). Adjustment to threatening events. *American Psychologist*, 38, 1161-1173.
- Taylor, S., & Brown, J. (1988). Illusion and well-being: A social psychological perspective on mental health. *Psychological Bulletin*, 103, 193-210.
- Taylor, S., Pham, L., Rivkin, I., & Armor, D. (1998). Harnessing the imagination. *American Psychologist*, 53, 429-439.
- The Oxford Paperback Thesaurus (1994). New York: Oxford University Press.
- Thoits, P.A. (1983). *The Youngest Science*. New York: Academic Press.
- Thompson, S.C. (1981). A complex answer to a simple question: Will it hurt less if I can control it? *Psychological Bulletin*, 90, 89-101.
- Thompson, S.C., & Spacapan, S. (1991). Perceptions of control in vulnerable populations. *Journal of Social Issues*, 47, 1-21.
- Thompson, S.C., Cheek, P.R., & Graham, M.A. (1988). The other side of perceived control: Disadvantages and negative effects. In S. Spacapan & S. Oskamp (eds.), *The Social Psychology of Health*.
- Tolan, P., Miller, L., & Thomas, P. (1988). Perception and experience of types of social stress and self-image among adolescents. *Journal of Youth and Adolescence*, 17, 147-163.
- Trad, P., & Greenblatt, E. (1990). Psychological aspects of child stress: Development and the spectrum of coping responses. In L. Eugene (ed.). *Childhood Stress*. New York: Wiley Press.
- Triandis, H.C. (1994). Major cultural syndromes and emotion. In K. Shinobu & M. R. Hazel(eds.) *Emotion and Culture: Empirical Studies of Mutual Influence*. Washington, D.C.: American Psychological Association.
- Tubasing, D.A. (1980). Stress, spiritual outlook and health. *Specialized Pastoral Care Journal*, 3, 17-23.
- Ursin, H. (1980). Personality, activation, and somatic health: A new psychosomatic theory. In S. Levine, & H. Ursin (eds.), *Coping and Health (NATO Conference Series III: Human Factors)* (pp. 259-279). New York: Plenum.
- Vieweg, B., & Hedlund, S. (1983). The General Health Questionnaire (GHQ): A comprehensive review. *Journal of Operational Psychiatry*, 14, 74-81.
- Walen, S.R., DiGiusep, R., & Dryden, W. (1992). *A Practitioner's Guide to Rational-emotive Therapy* (2nd ed.). New York: Oxford University Press.
- Walsh, R. (1989). Toward a synthesis of eastern and western psychologies. In A.A. Sheikh



- and K.S. Sheikh (eds.), *Eastern and Western Approaches to Healing: Ancient Wisdom and Modern Psychology* (pp.542-555). New York: John Wiley & Sons.
- Walster, E., Berscheid, E. & Walster, G.W. (1976). New directions in equity research. In L. Berkowitz, & E. Walster (eds.), *Advances in Experimental Social Psychology* (Vol. 9, pp. 1-42). New York: Academic Press.
- Weinrach, S.G. (1996). Nine experts describe the essence of rational-emotive therapy while standing on one foot. *Journal of Counseling and Development*, 74, 326-331.
- Weiss, J.M. (1971a). Effects of coping behavior in different warning signal conditions of stress pathology in rats. *Journal of Comparative and Physiological Psychology*, 77, 1-13.
- Weiss, J.M. (1971b). Effects of punishing the coping response (conflict) on stress pathology in rats. *Journal of Comparative and Physiological Psychology*, 77, 14-21.
- Weisskopf-Joelson (1968). *The Course of Human Life: A Study of Goals in the Humanistic Perspective*. New York: Springer.
- Weisskopf-Joelson, E. (1984). Meaning as an integrating factor. In Buehler & Massaric (eds.), *The Course of Human Life*. New York: Springer.
- Weiten, W., Liroyd, M.A., & Lashley, R.L. (1990). *Psychology Applied to Modern Life: Adjustment in the 90's*. (3rd ed.). Pacific Grove: Brooks.
- Wells, A.J. (1988). Self-esteem and optimal experience. In M. Csikszentmihalyi & I.S. Csikszentmihalyi (Eds.). *Optimal experience: Psychological studies of flow in consciousness* (pp. 327-341). New York: Cambridge University Press.
- Welter, P.R. (1987). *Counseling and the Search for Meaning*. Waco, Tex: Word Books Press.
- Werner, E. & Smith, R. (1982). *Vulnerable but invincible: A study of resilient children*. New York: McGraw-Hill.
- Wessell, T.R., Engle, K., & Smidchens, V. (1978). Reducing attrition on the college campus. *National Association of Student Personnel Administrators Journal*, 10, 26-32.
- Wheaton, B. (1983). Stress, personal coping resources, and psychiatric symptoms: An investigation of interactive models. *Journal of Health and Social Behavior*, 24, 208-229.
- Wheaton, B. (1997). The nature of chronic stress. In H.G. Benjamin (ed.), *Coping with Chronic Stress*. New York: Plenum Press.
- White, R.W. (1959). Motivation reconsidered: The concept of competence. *Psychological Review*, 66, 297-333.
- Wine, J. (1980). Cognitive-attentional theory of test anxiety. In I.G. Sarason (ed.), *Test Anxiety: Theory, Research, and Applications* (pp. 349-385). Hillsdale, New Jersey: Erlbaum.
- Wine, J. (1982). Evaluation anxiety: a cognitive-attentional construct. In H.W. Krohne & L. Laux (eds.), *Achievement, Stress, and Anxiety* (pp. 207-219). Washington, DC: Hemisphere.
- Wortman, C.B. (1983). Coping with victimization: Conclusions and implications for future



- research. *Journal of Social Issues*, 39, 195-221.
- Wortman, C.B., & Silver, R.C. (1989). The myths of coping. *Journal of Consulting and Clinical Psychology*, 57, 349-357.
- Wortman, C.B., Sheedy, C., Gluhoski, V., & Kessler, R. (1992). Stress, coping, and health: Conceptual issues and directions for future research. In. H.S. Friedman (ed.), *Hostility, coping, and health*. Washington, DC: American Psychological Association.
- Wright, J.J. (1964). Environmental stress evaluation in a student community. *College Health*, 12, 325-336.
- Wright, S., Pratt, & Schmall (1985). Spiritual support for caregivers of dementia patients. *Journal of Religion and Health*, 24: 31-38.
- Wu, K.K., & Lam, D.J. (1993). The relationship between daily stress and health: replicating and extending previous findings. *Psychology and Health*, 8, 329-344.
- Yalom, I.D. (1980). *Existential psychotherapy*. New York: Basic Books.
- Yang, K.-S. (1986). Chinese personality and its change. In M.H.Bond (ed.), *The psychology of the Chinese people*. Hong Kong: Oxford University Press.
- Yeh, E., Chu, H., Ko, Y., Lin, T., & Lee, S. (1972). Student mental health: An epidemiological study in Taiwan. *Acta Psychol Taiwanica*, 14, 1-23.
- You, Q.G. (1998). *Using Buddhism to Cure the Heart*. TaiBei: Yuan Liu Company.
- Zarski, J.J. (1984). Hassles and health: A replication. *Health Psychology*, 3, 243-251.
- Zautra, A., & Reich, J. (1983). Life events and perceptions of life quality: Developments in a two factor approach. *Journal of Community Psychology*, 11, 121-132.
- Zika, S., & Chamberlain, K. (1992). On the relation between meaning in life and psychological well-being. *British Journal of Psychology*, 83, 133-145.
- Zirkel, S., & Cantor, M. (1990). Personal construal of life tasks: Those who struggle for independence. *Journal of Personality and Social Psychology*, 58, 172-185.
- Zuckerman, D., Kasl, S., & Ostfeld, A. (1984). Psychological predictors of mortality among the elderly poor: The role of religion, well-being, and social contacts. *American Journal of Epidemiology*, 119, 710-23.

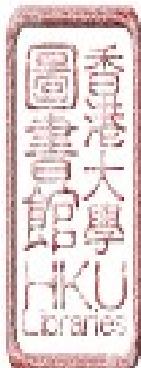


Appendices



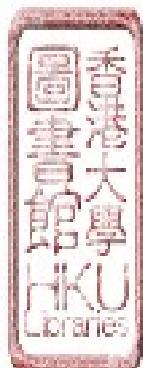
Appendix I College Stress Scale

Scale	Item
Personal Hassle	1. Not being loved 2. Problems related to adulthood/adolescence 3. Personal problems 4. Dissatisfied with own physical appearance 5. Health problems 6. Comparisons with classmates (non-academic) 7. Unsatisfactory living condition 8. Felt ignored 9. Temptations from social environment 10. Noisy dormitory 11. No girl/boy friend 12. Lack of inter-personal communication 13. Worries not being taught/educated properly 14. Low independent capability 15. Inadequate social skills 16. Unsatisfactory family financial situation
Academic Hassle	17. Low grades on certain subjects 18. Low grades in general 19. Difficulty discussing academic problems 20. Examination pressure 21. Classmates competition (academic) 22. Low learning efficiency 23. Academic ranking 24. Lagging behind academically 25. Too many homework 26. Too many tests
Negative Life Event	27. Failed in more than two examinations 28. Failure in an examination 29. Losing face in public 30. Being told off in public



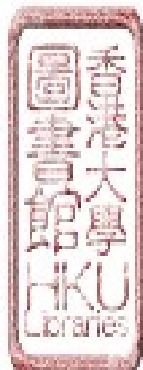
Appendix II Vision in Life Scale

Scale	Item
Life Control	1. I feel hopeless and helpless 2. I can cope with any life 3. I can sense the direction of life 4. I feel abandoned by life 5. Life is just like duckweed 6. Failure in examinations make me lose confidence in life 7. Failure leads me to doubt about both self and life 8. I fail in setting life goals 9. I feel that my life is uncontrollable 10. I can make myself happy 11. I feel life is reliable 12. I cannot bear any failure 13. I can let unhappiness go
Positive Meaning in Life	14. Loss maybe more meaningful than gain in life 15. People learn more from loss than gain 16. I can sense that life is rich in losses 17. Both success and failure are meaningful 18. More success/failure more experience of life 19. One can face losses peacefully can see the meaning in life 20. More experiences rather than gains is the essence of a meaningful life 21. Failure is more meaningful than not trying at all
Negative Meaning in Life	22. Life would be meaningless if you cannot get what you want 23. I cannot make sense of losses 24. I am always worrying about the loss 25. Failure only brings me with loss and disappointment 26. Loss of love leads me into despair 27. Unhappy life is meaningless 28. Loss make me feel that life is meaningless 29. I am unhappy since I cannot reach my goals 30. Failure brings mainly pain
Will to Meaning	31. I feel life is making do and mend 32. It does not make sense considering the meaning in life 33. I set life goals for myself 34. I hope for a meaningful life 35. I try to make my life meaningful 36. I try to make everyday meaningful 37. I have a sense of mission for my life 38. I seldom think of meaning in life



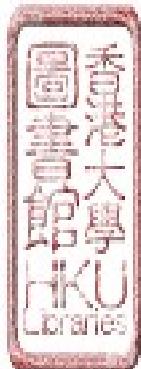
Appendix III General Health Questionnaire (GHQ-30)

1. Been able to concentrate on whatever you're doing
2. Lost much sleep over worry
3. Been having restless, disturbed nights
4. Been managing to keep yourself busy and occupied
5. Been getting out of the house as much as usual
6. Been managing as well as most people would in your shoes
7. Been feeling on the whole you were doing things well
8. Been satisfied with the way you've carried out your task
9. Been able to feel warmth and affection for those near to you
10. Been finding it easy to get on with other people
11. Spent much time chatting with people
12. Felt that you are playing a useful part in things
13. Felt capable of making decisions about things
14. Felt constantly under strain
15. Felt that you couldn't overcome your difficulties
16. Been finding life a struggle all the time
17. Been able to enjoy your normal day-to-day activities
18. Been taking things hard
19. Been getting scared or panicky for no good reason
20. Been able to face up to your problems
21. Found everything getting on top of you
22. Been feeling unhappy and depressed
23. Been losing confidence in yourself
24. Been thinking of yourself as a worthless person
25. Felt that life is entirely hopeless
26. Been feeling hopeful about your own future
27. Been feeling reasonably happy, all things considered
28. Been feeling nervous and strung-up all the time
29. Felt that life isn't worth living
30. Found at times you couldn't do anything because your nerves were too bad



Appendix IV Self-esteem Scale

1. I feel that I am a person of worth.
2. I feel that I have a number of good qualities.
3. All in all, I am inclined to feel that I am a failure.
4. I am able to do things as well as most other people.
5. I feel I do not have much to be proud of.
6. I take a positive attitude toward myself.
7. On the whole, I am satisfied with myself.
8. Sometimes I think I am no good at all.
9. I certainly feel useless at times.
10. I feel that I can't do anything right.



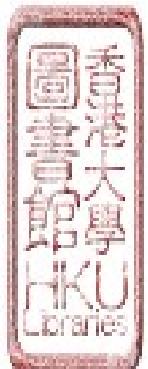
Appendix V

Positive Affect Scale

1. Particularly excited or interested in something
2. Proud because someone complimented you something you had done
3. Pleased about having accomplished
4. On the top of the world
5. That things were going your ways

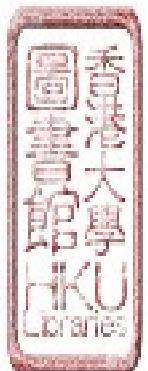
Negative Affect Scale

1. So restless that you could not sit long in a chair
2. Very lonely or remote from other people
3. Bored
4. Depressed or very unhappy
5. Upset because someone criticized you



Appendix VI Final Version of GHQ-20

Scale	Item
Sense of Adequacy	<ol style="list-style-type: none"> 1. Been feeling reasonably happy, all things considered 2. Been able to concentrate on whatever you've doing 3. Been satisfied with the way you've carried out your task 4. Been managing to keep yourself busy and occupied 5. Been managing as well as most people would in your shoes 6. Felt that you were playing a useful part in things 7. Been feeling unhappy and depressed 8. Been able to enjoy your normal day-to-day activities 9. Been finding it easy to get on with other people
Depression	<ol style="list-style-type: none"> 10. Been feeling hopeful about your own future 11. Felt that life wasn't worth living 12. Been losing confidence in yourself 13. Felt that life was entirely hopeless 14. Been thinking of yourself as a worthless person 15. Been finding life a struggle all the time
Anxiety	<ol style="list-style-type: none"> 16. Lost much sleep over worry 17. Been having restless, disturbed nights 18. Been feeling nervous and strung-up all the time 19. Felt constantly under strain 20. Found at times you couldn't do anything because your nerves were too bad



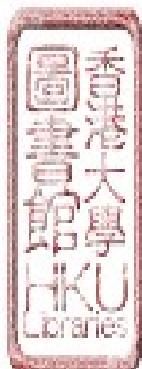
Appendix VII Gender Difference in Stress Items

College	Stress	Male ^a	Female ^b	F
Personal Hassle		<i>M (S D)</i>		
1.	Not being loved	.109 (.89)	.76 (.87)	28.58 ***
2.	Problems related to adulthood/adolescence	.86 (1.14)	.78 (.78)	1.34
3.	Personal problems	.74 (.68)	.74 (.75)	.01
4.	Dissatisfied with own physical appearance	.79 (.70)	.87 (.69)	2.28
5.	Health problems	.88 (.79)	.70 (.69)	7.74 **
6.	Comparisons with classmates (non-academic)	.67 (.70)	.57 (.93)	4.79 *
7.	Unsatisfactory living condition	.84 (.88)	.66 (.65)	9.32
8.	Felt ignored	.92 (.71)	.87 (.82)	.85
9.	Temptations from social environment	1.12 (.79)	.89 (.71)	19.31 ***
10.	Noisy dormitory	1.01 (.88)	.88 (.85)	4.64 *
11.	No girl/boy friend	.81 (.98)	.49 (.72)	26.63 ***
12.	Lack of inter-personal communication	1.01 (.85)	.89 (.90)	3.56
13.	Worries not being taught/educated properly	1.60 (.87)	1.66 (.80)	.84
14.	Low independent capability	.77 (.77)	.76 (.80)	.04
15.	Inadequate social skills	1.12 (.80)	1.09 (.84)	.24
16.	Unsatisfactory family financial situation	.94 (.85)	.65 (.78)	24.55 ***
Academic Hassle				
17.	Low grades on certain subjects	1.18 (.89)	1.02 (.87)	6.70 **
18.	Low grades in general	1.29 (.82)	1.08 (.84)	12.12 ***
19.	Difficulty discussing academic problems	1.09 (.80)	.93 (.81)	7.79 **
20.	Examination pressure	1.48 (.81)	1.33 (.85)	6.00 *
21.	Classmates competition (academic)	1.37 (.75)	1.47 (.84)	3.04
22.	Low learning efficiency	1.44 (.86)	1.41 (.73)	.21
23.	Academic ranking	1.24 (.84)	1.21 (.87)	.26
24.	Lagging behind academically	.91 (.79)	.65 (.73)	23.28 ***
25.	Too many homework	.85 (.83)	.55 (.70)	27.51 ***
26.	Too many tests	.60 (.77)	.41 (.63)	13.98 ***
Negative Life Event				
27.	Failed in more than two examinations	.65 (.91)	.47 (.83)	8.58 **
28.	Failure in an examination	.76 (.88)	.54 (.78)	12.68 ***
29.	Losing face in public	1.02 (.86)	.92 (.86)	2.68
30.	Being told off in public	.98 (.85)	.89 (.85)	2.01

p* < .05 *p* < .01 ****p* < .001 (two-tailed)

^a *N* = 436-440

^b *N* = 347-348

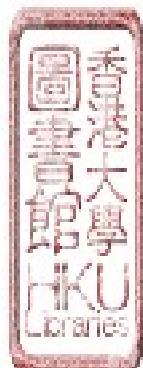


Appendix VIII Difference of Field of Study in Stress Items

College Stress	Natural Science ^a	Social Science ^b	F
Personal hassle			
1. Not being loved	.1.06 (.87)	.86 (.90)	10.21 ***
2. Problems related to adulthood/adolescence	.87 (1.25)	.79 (.76)	1.29
3. Personal problems	.79 (.68)	.70 (.73)	2.70
4. Dissatisfied with own physical appearance	.80 (.67)	.85 (.72)	1.02
5. Health problems	.92 (.81)	.71 (.89)	11.41 ***
6. Comparisons with classmates (non-academic)	.73 (.69)	.55 (.66)	14.16 ***
7. Unsatisfactory living condition	.89 (.85)	.66 (.84)	14.34 ***
8. Felt ignored	.92 (.68)	.88 (.82)	.61
9. Temptations from social environment	1.12 (.76)	.94 (.75)	10.59 ***
10. Noisy dormitory	1.09 (.85)	.86 (.87)	12.91 ***
11. No girl/boy friend	.83 (1.01)	.56 (.77)	17.79 ***
12. Lack of inter-personal communication	.99 (.85)	.93 (.89)	.71
13. Worries not being taught/educated properly	1.53 (.81)	1.70 (.86)	7.73 **
14. Low independent capability	.82 (.77)	.72 (.79)	2.76
15. Inadequate social skills	1.10 (.75)	1.11 (.87)	.02
16. Unsatisfactory family financial situation	.90 (.81)	.75 (.84)	6.39 *
Academic Hassle			
17. Low grades on certain subjects	1.22 (.83)	1.03 (.92)	8.34 **
18. Low grades in general	1.33 (.81)	1.10 (.85)	14.78 ***
19. Difficulty discussing academic problems	1.12 (.76)	.94 (.83)	9.51 **
20. Examination pressure	1.53 (.81)	1.33 (.84)	11.39 ***
21. Classmates competition (academic)	1.37 (.74)	1.45 (.82)	2.14
22. Low learning efficiency	1.48 (.84)	1.39 (.85)	2.04
23. Academic ranking	1.38 (.82)	1.12 (.86)	18.60 ***
24. Lagging behind academically	1.01 (.79)	.64 (.73)	46.17 ***
25. Too many homework	1.10 (.81)	.44 (.64)	165.48 ***
26. Too many tests	.75 (.78)	.36 (.62)	61.15 ***
Negative Life Event			
27. Failed in more than two examinations	.68 (.89)	.50 (.87)	8.03 **
28. Failure in an examination	.73 (.80)	.61 (.88)	3.56
29. Losing face in public	.98 (.81)	.97 (.90)	.01
30. Being told off in public	.94 (.79)	.93 (.91)	.01

p* < .05 *p* < .01 ****p* < .001 (two-tailed)

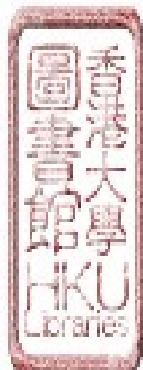
^a*N* = 324-328 ^b*N* = 449-458



Appendix IX Difference of Year of Study in Stress Items

College Stress	First Year ^c	Second Year ^d	Third Year ^e	F
Personal hassle				
1. Not being loved	.84 (.88)	1.15 (.88)	.98 (.90)	7.96 ^a
2. Problems related to adulthood/adolescence	.80 (.76)	.97 (1.53)	.75 (.76)	2.59
3. Personal problems	.69 (.69)	.79 (.77)	.79 (.70)	1.91
4. Dissatisfied with own physical appearance	.82 (.70)	.87 (.67)	.81 (.73)	.522
5. Health problems	.73 (.91)	.87 (.80)	.89 (.79)	3.27
6. Comparisons with classmates (non-academic)	.56 (.67)	.71 (.71)	.69 (.67)	4.41 ^a
7. Unsatisfactory living condition	.59 (.77)	.96 (.94)	.92 (.87)	16.85 ^b
8. Felt ignored	.86 (.80)	1.03 (.74)	.84 (.69)	3.62
9. Temptations from social environment	.85 (.72)	1.18 (.74)	1.22 (.80)	20.94 ^b
10. Noisy dormitory	.89 (.90)	1.05 (.85)	1.01 (.83)	2.62
11. No girl/boy friend	.58 (.79)	.84 (.82)	.71 (1.10)	5.98 ^a
12. Lack of inter-personal communication	.95 (.90)	1.00 (.89)	.93 (.82)	.33
13. Worries not being taught/educated properly	1.63 (.83)	1.63 (.83)	1.65 (.85)	.09
14. Low independent capability	.76 (.81)	.74 (.72)	.79 (.78)	.26
15. Inadequate social skills	1.13 (.86)	.99 (.79)	1.15 (.76)	2.20
16. Unsatisfactory family financial situation	.67 (.77)	.98 (.93)	.97 (.81)	14.12 ^b
Academic Hassle				
17. Low grades on certain subjects	1.05 (.91)	1.21 (.94)	1.15 (.78)	2.23
18. Low grades in general	1.13 (.83)	1.28 (.88)	1.27 (.81)	3.71
19. Difficulty discussing academic problems	.98 (.81)	1.12 (.81)	1.00 (.78)	1.77
20. Examination pressure	1.35 (.83)	1.51 (.84)	1.46 (.81)	2.79
21. Classmates competition (academic)	1.45 (.81)	1.46 (.78)	1.32 (.73)	2.03
22. Low learning efficiency	1.41 (.86)	1.49 (.85)	1.40 (.82)	.77
23. Academic ranking	1.15 (.85)	1.33 (.87)	1.29 (.83)	3.57 ^b
24. Lagging behind academically	.67 (.75)	.98 (.77)	.89 (.79)	12.35 ^b
25. Too many homework	.50 (.69)	.99 (.78)	.91 (.85)	35.08 ^b
26. Too many tests	.39 (.62)	.68 (.78)	.65 (.79)	14.90
Negative Life Event				
27. Failed in more than two examinations	.55 (.89)	.64 (.95)	.55 (.80)	.74
28. Failure in an examination	.62 (.83)	.66 (.86)	.76 (.85)	1.83
29. Losing face in public	.97 (.87)	1.00 (.83)	.96 (.87)	.11
30. Being told off in public	.94 (.90)	.97 (.81)	.90 (.83)	.27

^ap <.05 at first and second year ^bp <.05 at first and second year, as well as at first and third year
(two-tailed) ^cN = 409-411 ^dN = 181-182 ^eN = 194-195



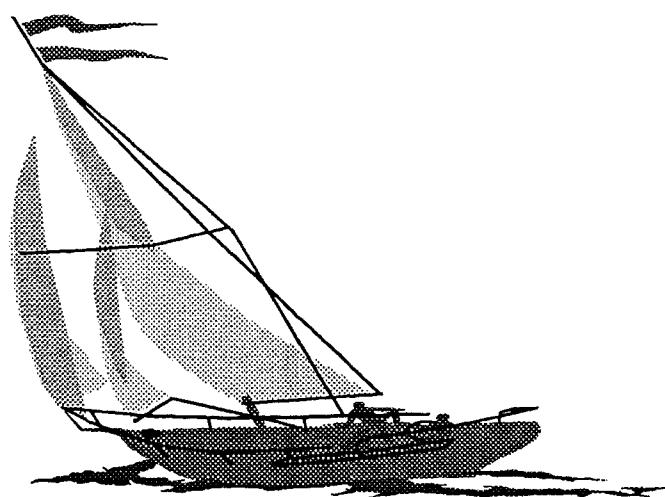
Appendix X

大學生心理健康調查問卷

我們設計這套問卷旨在了解在校學習的大學生們所面臨的各種壓力，所具有的壓力應對能力以及心理健康狀況。希望能夠通過這樣的研究幫助大家提高壓力應對能力，圓滿完成學業，成功走向社會。

在此，懇請大家認真填寫每一份問卷，并深切致謝！

性別：_____ 年級：_____ 年齡：_____ 系別：_____

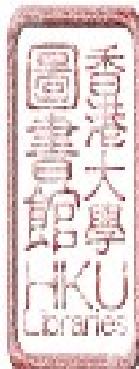


1. 請就下列各題選擇一個最適合你近幾個月情況的答案，“0”代表沒有經歷過或雖有經歷並無壓力：

很大壓力	較大壓力	輕度壓力	無壓力
3	2	1	0

如果你認為以下壓力是可控的(包括自控或他控)，請選：是。如果你認為不可控(包括自己或他人均不可控)，請選：否

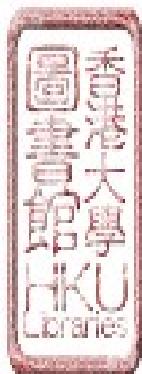
	壓力	可控性				
1. 渴望真(愛)情卻得不到	3 2 1 0	是	否			
2. 青春期成長	3 2 1 0	是	否			
3. 同學關係緊張	3 2 1 0	是	否			
4. 外形不佳	3 2 1 0	是	否			
5. 身體不好	3 2 1 0	是	否			
6. 同學間互相攀比	3 2 1 0	是	否			
7. 居住條件差	3 2 1 0	是	否			
8. 遭受冷遇	3 2 1 0	是	否			
9. 社會上的各種誘惑	3 2 1 0	是	否			
10. 晚上宿舍太吵	3 2 1 0	是	否			
11. 沒有人追或找不到男/女朋友	3 2 1 0	是	否			
12. 沒有人說知心話	3 2 1 0	是	否			
13. 沒有學到多少真本領	3 2 1 0	是	否			
14. 獨立生活能力差	3 2 1 0	是	否			
15. 各種應酬有困難	3 2 1 0	是	否			
16. 家庭經濟條件差	3 2 1 0	是	否			
17. 對有些科目怎麼努力成績也不好	3 2 1 0	是	否			
18. 學習成績總體不理想	3 2 1 0	是	否			
19. 討論問題時常反應不過來	3 2 1 0	是	否			
20. 考試壓力	3 2 1 0	是	否			
21. 同學間的競爭	3 2 1 0	是	否			
22. 學習效率低	3 2 1 0	是	否			
23. 每學期末考試成績排名	3 2 1 0	是	否			
24. 完成課業有困難	3 2 1 0	是	否			



25. 有些課程作業太多	3	2	1	0	是 否
26. 各種測驗繁多	3	2	1	0	是 否
27. 累計兩門以上功課考試不及格	3	2	1	0	是 否
28. 一門功課考試不及格	3	2	1	0	是 否
29. 當眾出丑	3	2	1	0	是 否
30. 被人當眾指責	3	2	1	0	是 否

2. 請就下列各題選擇一個最能表達你對生活的一般性態度或看法的答案：

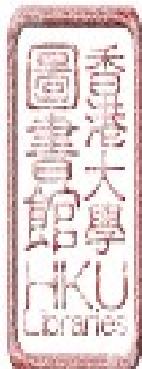
	很同意	同意	不同意	很不同意	
	4	3	2	1	
1. 我感到無助和無望	4	3	2	1	
2. 生命如浮萍一般不知所系	4	3	2	1	
3. 考試失敗會使我對生活失去信心	4	3	2	1	
4. 失敗使我懷疑自己也懷疑生活	4	3	2	1	
5. 我覺得生活有方向有著落	4	3	2	1	
6. 我有被生活拋棄的感覺	4	3	2	1	
7. 我能應對各種生活	4	3	2	1	
8. 我找不到生活目標	4	3	2	1	
9. 我生活得踏實	4	3	2	1	
10. 我感到生活失去控制	4	3	2	1	
11. 我能給自己創造快樂	4	3	2	1	
12. 我難以承受失敗	4	3	2	1	
13. 我對事情放得下	4	3	2	1	
14. 我會從喪失中體會丰富的人生	4	3	2	1	
15. 人生之失可能比得更有意義	4	3	2	1	
16. 喪失教給人們的東西更多	4	3	2	1	
17. 成敗對人都有積極意義	4	3	2	1	
18. 能夠坦然面對喪失是真正獲得了生命的意義	4	3	2	1	
19. 多一次成敗多体会一層人生	4	3	2	1	



20. 生活不在于得失而在于丰富	4	3	2	1
21. 失敗比放棄嘗試更有意義	4	3	2	1
22. 我覺得生活就是得過且過	4	3	2	1
23. 考慮不考慮生命的意義無區別	4	3	2	1
24. 我很少去考慮人為什麼要活著	4	3	2	1
25. 我有一种人生使命感	4	3	2	1
26. 我著意把握好生命中的每一天	4	3	2	1
27. 我為自己創造生活目標	4	3	2	1
28. 我期望過有意義的生活	4	3	2	1
29. 我努力使生命更有意義	4	3	2	1
30. 生活不能如願以償就沒意思了	4	3	2	1
31. 不幸福的人生是沒意義的人生	4	3	2	1
32. 我生怕失去什么	4	3	2	1
33. 我無法從喪失中體會生命意義	4	3	2	1
34. 失去愛情使我對生活近乎絕望	4	3	2	1
35. 失敗帶給我的只有失落和絕望	4	3	2	1
36. 失敗帶給人的主要是痛苦	4	3	2	1
37. 喪失使我對生活失去興趣	4	3	2	1
38. 我不快樂因為我達不到目標	4	3	2	1

3. 我們想了解你最近的感受，在過去几周里你是否感到：

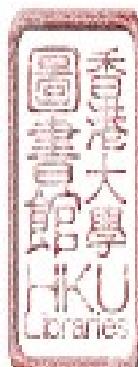
- | | | |
|-----------------------------|---|---|
| 1. 大致來說樣樣事情都頗開心 | 是 | 否 |
| 2. 你是不是做事情都能夠集中精神 | 是 | 否 |
| 3. 是不是很滿意自己做事情的方式 | 是 | 否 |
| 4. 最近是否忙碌及充分利用時間 | 是 | 否 |
| 5. 處理日常事務是不是和別人一樣好 | 是 | 否 |
| | | |
| 6. 是不是覺得自己在很多事情上都能幫手或提供一些意見 | 是 | 否 |
| 7. 覺得很不開心及悶悶不樂 | 是 | 否 |
| 8. 能夠開心地過你平日正常的生活 | 是 | 否 |



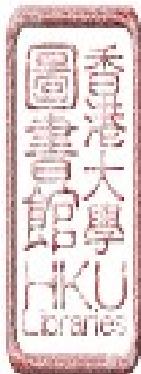
9. 是不是容易同人相處	是	否
10. 覺得自己的將來還有希望	是	否
11. 覺得做人沒有什麼意思	是	否
12. 對自己失去信心	是	否
13. 覺得人生完全沒有希望	是	否
14. 覺得自己是個無用的人	是	否
15. 整天覺得人生好似戰場一樣	是	否
16. 是不是因為擔心而睡不著	是	否
17. 是不是心情煩躁睡得不好	是	否
18. 整天覺得心神不安與緊張	是	否
19. 是不是覺得整天有精神壓力	是	否
20. 因為神經太過緊張覺得有時什么事情都做不到	是	否
21. 對某事特別熱衷或特別感興趣	是	否
22. 感到坐立不安	是	否
23. 因為別人對你工作的贊揚而感到驕傲	是	否
24. 十分孤獨或遠離他人	是	否
25. 由於完成了某項工作而感到愉快	是	否
26. 心煩	是	否
27. 彷彿處在世界的頂峰(有飄飄然的感覺)	是	否
28. 憂鬱或非常不幸福	是	否
29. 事情在按你的意愿發展	是	否
30. 由於某人的批評而感到不安	是	否

4. 請就下列各題選擇一個最適合你的情況或看法的答案：

	很同意	同意	不同意	很不同意	
	4	3	2	1	
1. 我認為自己是個有價值的人			4	3	2 1
2. 我覺得我有許多優點			4	3	2 1
3. 總的來說，我傾向於認為自己是一個失敗者			4	3	2 1
4. 我做事可以和大多數人一樣好			4	3	2 1



5. 我覺得自己沒有什麼值得自豪的地方	4	3	2	1
6. 我對自己持有一種肯定的態度	4	3	2	1
7. 整體而言，我對自己感到滿意	4	3	2	1
8. 我要是能更看得起自己就好了	4	3	2	1
9. 有時我的確感到自己很沒用	4	3	2	1
10. 我有時認為自己一無是處	4	3	2	1
11. 對於不確定的環境，我通常期望它們是好的	4	3	2	1
12. 我知道如何放鬆自己	4	3	2	1
13. 對於我，如果某事可能不順利，它多半會不順利	4	3	2	1
14. 我總是去看事物好的一面	4	3	2	1
15. 我對自己的未來總是很樂觀	4	3	2	1
16. 對朋友，我多半持欣賞態度	4	3	2	1
17. 我需要經常使自己處於忙碌狀態	4	3	2	1
18. 我很少去期望事情會按照我的意願發展	4	3	2	1
19. 事情的結果總不如我所期望的	4	3	2	1
20. 我不會動輒忐忑不安	4	3	2	1
21. 我相信凡事都有好的一面	4	3	2	1
22. 我几乎不指望好事會光顧我	4	3	2	1
23. 我總是試圖弄明白我自己	4	3	2	1
24. 通常我對自己不很關注	4	3	2	1
25. 我常常進行自我反省	4	3	2	1
26. 我常常進行自我幻想	4	3	2	1
27. 我從不仔細審視我自己	4	3	2	1
28. 我一般比較關注自己的內在感受	4	3	2	1
29. 我總是反覆掂量我的行動動機	4	3	2	1
30. 我有時覺得我正站在某處觀察自己	4	3	2	1
31. 我對我的情緒變化有所警覺	4	3	2	1
32. 當我處理一個問題的時候，我更關注自己的 内心活動方式	4	3	2	1
33. 我是否能成為一個領導者主要取決於我自己的能力	4	3	2	1
34. 我的一生在很大程度上是被一些偶然事件所左右	4	3	2	1



35 · 我覺得我一生中的大部分事情是被他人權勢左右	4	3	2	1
36 · 我開車是會發生交通事故主要取決于我的駕駛水平	4	3	2	1
37 · 我是否會與吵架主要取決于我自己當時脾氣的好壞	4	3	2	1
38 · 通常我根本無法在噩運中保護自己個人的利益	4	3	2	1
39 · 我之所以能實現自己的愿望通常是因為我很幸運	4	3	2	1
40 · 當然我可能有才能，但是如果我不求助于那些有權有勢的人，我也不會被委以領導重任	4	3	2	1
41 · 我有多少朋友取決于我自己的人品有多好	4	3	2	1
42 · 我常常發現該發生的事情總是會發生	4	3	2	1
43 · 我的一生主要被有權有勢的人所左右	4	3	2	1
44 · 我開車是否會發生交通事故主要看運氣	4	3	2	1
45 · 像我這樣的人，如果與強大的利益集團發生衝突 是沒有辦法保護自己個人利益的	4	3	2	1
46 · 對我來說早定計劃並不很明智，因為很多事情只 不過是运气好坏的結果而已	4	3	2	1
47 · 要實現我的愿望就必須去取悅我的上司	4	3	2	1
48 · 我是否能成為一個領導取決于我是否運氣好	4	3	2	1
49 · 如果有權有勢的人不喜歡我，我就不可能有很多 的朋友	4	3	2	1
50 · 我自己大致可以決定我這一生要干什么	4	3	2	1
51 · 我通常可以保護自己的個人利益	4	3	2	1
52 · 我之所以能實現自己的愿望通常因為我盡了努力	4	3	2	1
53 · 我的一生是操縱在自己手中的	4	3	2	1
54 · 我有多少朋友主要看緣份	4	3	2	1

