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The value of life purpose: Purpose as a mediator of faith and well-being

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This study investigated the relationship between faith, life purpose, and well-being, and the potential mediational effects of life purpose between faith and well-being. One hundred and three male and female college students completed a life purpose measure designed for the current study, the General Life Purpose Scale, as well as the Perceived Wellness Scale (Adams, T.B. (1995). The conceptualization and measurement of wellness (Doctoral dissertation, University of Texas at Austin, 1995). Dissertation Abstracts International, 56(6-B), 3111) and the Santa Clara Strength of Religious Faith Questionnaire (Plante, T.G., & Boccaccini, M.T. (1997). The Santa Clara Strength of Religious Faith Questionnaire. *Pastoral Psychology*, 45, 375–387). Results indicated that life purpose significantly mediated the relationship between faith and well-being. The importance of these findings for clinicians and educators is discussed.

Keywords: life purpose; faith; well-being; meaning; wellness

Introduction

People today seem to be searching for a sense of purpose in life more than ever before, according to positive psychologist Martin Seligman (2004). Why is the search for life purpose such an important quest in life? Previous research suggests that having a sense of purpose in life is beneficial in many ways. Thompson, Coker, Krause, and Else (2003), for example, found that having a sense of life purpose helped in recovering from, and coping with, stressful life events such as adjusting to spinal cord injury. Moomal (1999) found that having a sense of purpose in life was positively correlated with mental well-being, suggesting that people who have a sense of purpose in life may be less likely to experience psychological problems.

Several other studies have found a relationship between life purpose and overall well-being. Associations have been found among a variety of dimensions of well-being including physical, spiritual, psychological, and emotional well-being. For example, Adams and Bezner (2000) found a positive relationship between life purpose and perceived wellness, as measured by a six-dimensional measure of well-being. If a sense of life purpose contributes to a greater sense of overall well-being, it seems reasonable that individuals would be motivated to search for this component in their lives.

As life purpose has been shown to foster well-being in previous research, it is important to determine what elements contribute to the development of life purpose. Faith is one construct that has been theorized to relate to life purpose. Paloutzian, Richardson, and Rambo (1999) suggest that religion is the only area in which one encounters commitment to an ultimate concern or purpose. Ferris conjectures that 'religion may explain a purpose in life that fosters well-being' (2002, p. 199). Further, in Adams and Bezner's (2000) study on well-being they defined spirituality as having a sense of life purpose, thus creating a theoretical link between these constructs.

There has also been some empirical evidence, in addition to theoretical evidence, linking life purpose and faith. In 1999, Mahoney and Graci found participants who identified themselves as spiritual (yet nonreligious) experienced more purpose in life compared to their nonspiritual peers. Gerwood, LeBlanc, and Piazza (1998) similarly found high levels of spirituality to be associated with life purpose. In their study, whether participants were Catholic or Protestant had no effect on life purpose, but those reporting high levels of spirituality scored high in life purpose. Other researchers have found aspects of spirituality to be correlated with a greater degree of life purpose, such as spiritual experiences (Kass,

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Friendman, Leserman, Zuttermeister, & Benson, 1991) and spiritual strivings (Emmons, 2005). Therefore, the research literature suggests that faith, particularly spirituality, is associated with life purpose. While spirituality may be one aspect of faith, it is important to the field to determine if more global measures of faith are associated with life purpose, as theory suggests.

Although past research has identified a link between life purpose and enhanced well-being as well as life purpose and faith, many researchers have defined life purpose as having a sense of meaning in life, grouping the constructs of meaning and life purpose together (Adams & Bezner, 2000; Chamberlain & Zika, 1988; McGregor & Little, 1998; Moomal, 1999; Thompson et al., 2003). Many of these researchers used the Purpose in Life Scale developed by Crumbaugh and Maholick (1964) (as cited by Thompson et al., 2003) or other similar scales that assess general life purpose in an attempt to assess participants' sense of meaning in life. Because previous research has not distinguished between life meaning and life purpose, we attempted to do so in the current study by not incorporating the construct of life meaning within the construct of life purpose. It may not be accurate to assume these constructs are synonymous. Based on Emmons' (2005) rationale that goals are the manifestation of life purpose, the current study operationalized life purpose as action-oriented in the form of life goals. We also included items focusing on self-knowledge, as we believe an understanding of one's life's goals relies on a thorough understanding of one's self (e.g., what one is good at, what one likes to do, etc.).

The purpose of the current study was to assess the relationships between faith, life purpose, and well-being. In particular, we were interested in determining whether life purpose may be a mediator between the constructs of faith and well-being. Such a relationship seems plausible based on the research literature suggesting a relationship between life purpose and well-being, as well as a relationship between life purpose and faith. In addition, although prior research has linked faith and well-being (Adams & Bezner, 2000; Chamberlain & Zika, 1988; Ferris, 2002), life purpose has not been examined as a possible mediator of this relationship and would contribute to a better understanding of the inner workings of these relationships. Therefore, we hypothesized that life purpose would mediate the relationship between faith and well-being (see Figure 1).

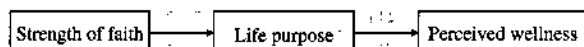


Figure 1. Hypothesized model: Life purpose mediating the relationship between strength of faith and perceived wellness.

Method

Participants

The sample included 103 respondents from a participant pool of 187 students randomly selected from the 2002 entering class of a private, Christian, liberal arts university in Southern California. These students were selected as part of a larger longitudinal study on vocational development. The sample for the current study was 42% male and 58% female. Participants ranged in age from 18–23 years with a mean age of 21.05. The sample was primarily Caucasian (76%) with the majority reporting Protestant (71%) as their religious affiliation. The majority of participants had a high socio-economic status, as 50.1% of the sample came from home with parents earning more than US\$100,000 a year.

Measures

General Life Purpose Scale

To assess participants' general sense of life purpose, a 15-item survey was created for the current study. Based on Emmons' (2005) rationale that goals are the manifestation of life purpose, the General Life Purpose Scale operationalized life purpose as attempts to pursue one's life goals. Within the context of life goals, we also included items focusing on self-knowledge, as we believe an understanding of one's life's goals depends on some level of self-understanding. Example items for this scale include, 'I have goals that I am working toward,' and 'I have no sense of direction in life' (see Appendix 1 for the complete scale). Participants responded to each item using a Likert scale ranging from 1 (*Strongly disagree*) to 7 (*Strongly agree*). A composite total score is calculated by summing scores for all 15 items. Scores range from 15–105 with higher scores indicating a greater general sense of life purpose.

Perceived Wellness Scale

Participants completed the Perceived Wellness Scale (PWS) created by Adams (1995) as a measure of perceived well-being. This scale consists of 36 items broken down into six dimensions: psychological, emotional, social, physical, spiritual, and intellectual. Example items include, 'I am always optimistic about my future,' and 'In general, I feel confident about my abilities.' Each item is rated on a 6-point Likert scale, ranging from 1 (*Very strongly disagree*) to 6 (*Very strongly agree*). A composite total score is calculated by summing all items, as well as six sub-scores by summing the scores of the six items in each dimension. Previous studies using the PWS indicate that the scale has excellent internal consistency reliability (Cronbach's $\alpha = 0.91$) as well as factorial and

construct validity (Adams, Bezner, & Steinhardt, 1997). To eliminate overlap with the faith measure used for the current study, the spiritual dimension of this scale was not included in participants' total perceived wellness score. Taking this omission into account, scores range from 30–180 with higher scores indicating a greater perceived wellness. Internal consistency reliability for the current sample was excellent (Cronbach's $\alpha = 0.88$).

Santa Clara Strength of Religious Faith Questionnaire

The Santa Clara Strength of Religious Faith Questionnaire (SCSORF), created by Plante and Boccaccini (1997), was used to measure participants' strength of faith. The SCSORF consists of 10 items rated on a 4-point Likert scale ranging from 1 (*Strongly disagree*) to 4 (*Strongly agree*). Example items include, 'I pray daily,' and 'My relationship with God is extremely important to me.' Participants' scores were summed to create a total strength of faith score. Scores range from 10–40 with higher scores indicating greater strength of faith. Previous studies using the SCSORF indicate that the scale has excellent internal consistency reliability (Cronbach's $\alpha = 0.93$) as well as factorial validity (Lewis, Shevlin, McGuckin, & Navratil, 2001). Internal consistency reliability for the current sample was excellent (Cronbach's $\alpha = 0.96$).

Procedure

After all materials were approved by the university's Institutional Review Board, participants were sent an email asking them to participate in the current study by completing all measures as a web-based survey. After reading and agreeing to the terms of an informed consent form, participants completed the materials via an Internet link. Students completed the measures in the following order: General Life Purpose Scale, Perceived Wellness Scale, Santa Clara Strength of Religious Faith Questionnaire, and demographic information. Participants received an hour of psychology course credit for participating.

Table 1. Descriptive statistics and gender differences on measures of life purpose, perceived wellness, and strength of faith.

Variable	Mean (SD)			<i>t</i>
	Total sample	Males	Females	
General Life Purpose Scale	85.59 (11.16)	84.14 (13.03)	87.07 (9.54)	-1.291*
Perceived Wellness Scale	140.13 (16.85)	140.14 (16.41)	140.25 (17.63)	-0.031
Santa Clara Strength of Religious Faith Questionnaire	31.40 (7.84)	29.45 (9.49)	32.82 (5.99)	-2.163**

**t* is significant at the 0.05 level (2-tailed).

***t* is significant at the 0.01 level (2-tailed).

Results

Preliminary analyses

Descriptive statistics were examined for scores on the General Life Purpose Scale, Perceived Wellness Scale, and Santa Clara Strength of Religious Faith Questionnaire and *t*-tests were conducted to analyze gender differences across these measures (see Table 1). Results indicated significant differences between males and females for the Santa Clara Strength of Religious Faith Questionnaire scores ($t = -2.163$, $df = 97$, $p < 0.01$), with females scoring higher than males ($M = 32.82$ vs. $M = 29.45$). Females also scored significantly higher than males on the General Life Purpose Scale ($t = -1.29$, $df = 97$, $p < 0.05$; $M = 87.07$ vs. $M = 84.14$). Considering these differences, gender was controlled for in subsequent analyses.

Psychometric properties of the General Life Purpose Scale

Because the General Life Purpose Scale was developed for the current study, several analyses were conducted in order to examine various psychometric properties of the scale including the factor structure of the measure, internal consistency reliability, split-half reliability, and construct validity.

Exploratory factor analysis

An exploratory factor analysis was conducted using principle component analysis to examine the factor structure of the General Life Purpose Scale. The analysis resulted in three factors with eigenvalues above 1.0, accounting for 63.18% of the total variance.

Table 2. Correlation results.

Variable	Perceived wellness	Strength of faith
Life purpose	0.703**	0.391**
Perceived wellness		0.223*

*Correlation is significant at the 0.05 level (2-tailed).

**Correlation is significant at the 0.01 level (2-tailed).

An analysis of the related scree plot suggested the possibility of a three-factor solution with eigenvalues of 6.78, 1.55, and 1.15 for factors 1–3, respectively. Due to the correlation between factors one and three (i.e., $r=0.22$), and between factors two and three (i.e., $r=0.49$), direct oblimin rotation was used. We rotated the three- and two-factor solutions in a stepwise fashion and applied interpretability criteria at each step to evaluate the appropriateness of each model (Pett, Lackey, & John, 2003). In the component matrix, factor loadings needed to be 0.30 or higher to be retained and we required simple structure and a minimum of three items to define a factor. Using this approach, we found the one-factor model to be the only model that could be supported in the data. Both the three- and two-factor models had less than three significant and unique loadings. The factor loadings for all of the items of the General Life Purpose Scale were high, ranging from 0.45 to 0.82, with the majority of the factor loadings ranging from 0.61 to 0.76.

Internal consistency and split-half reliabilities

Cronbach's alpha was calculated for internal consistency for the total scale using the data from all 103 respondents. Mean item-total correlation for the total scale was 0.41 ($SD=0.13$) with a range from 0.40 to 0.78. The alpha value for the total scale was 0.91. Additionally, split-half reliability for the General Life Purpose Scale was 0.83. These findings indicate excellent internal consistency reliability and suggest that the total scale was homogeneous in content.

Construct validity

The convergent validity of the General Life Purpose Scale was examined by correlating total scores on the General Life Purpose Scale with a vocation measure used in the longitudinal study from which the sample for the current study was drawn. The vocation measure (Cronbach's alpha = 0.81) included several items that assessed participant's sense of life purpose defined in a religious or spiritual context (e.g., 'I have a good sense of God's purpose for my life'). A statistically significant Pearson correlation was obtained between the total scores for the General Life Purpose Scale and the vocation measure ($r=0.51$, $p < 0.001$).

Variables meeting the preconditions for mediation

Correlation analyses were conducted to determine whether the preconditions for mediation analyses were met (see Table 2). General life purpose was significantly positively correlated with both perceived wellness ($r=0.703$, $p < 0.01$) and strength of faith ($r=0.391$, $p < 0.01$). Perceived wellness and strength of faith were also significantly positively correlated

($r=0.223$, $p < 0.05$). This indicated that all preconditions for mediation according to Baron and Kenny (1986) were satisfied.

Mediation analyses

Regression analyses were conducted to determine the relationships between faith, life purpose, and well-being, controlling for gender, according to the mediation method of Baron and Kenny (1986) and described by Jaccard, Guilamo-Ramos, Johansson, and Bouris (2006) as follows:

- (1) The regression coefficient for predicting Y from X must be statistically significant, thereby establishing a link between the distal variable and the outcome variable.
- (2) The regression coefficient predicting M from X must be statistically significant, thereby establishing a link between the distal variable and the mediator.
- (3) The regression coefficient for the mediator when predicting Y from both X and M must be statistically significant, thereby establishing a link between the mediator and the outcome variable, holding constant the distal variable. If all these conditions are met, then some mediation has occurred. The fourth step tests for partial mediation.
- (4) The regression coefficient for X must be statistically significant when Y is regressed onto both X and M . A statistically significant result implies partial mediation and a nonsignificant coefficient is consistent with complete mediation (p. 470).

In our study, X (the distal variable) was strength of faith, Y (the outcome variable) was perceived wellness, and M (the mediator) was life purpose. The results of our analyses are shown in Table 3. The regression coefficient for predicting perceived wellness from strength of faith was significant ($B=0.48$, $p < 0.05$), satisfying the first step of Baron and Kenny's (1986) mediation criteria. The regression coefficient predicting life purpose from strength of faith was also significant ($B=0.58$, $p < 0.01$), satisfying the second criteria for mediation. The regression coefficient for life purpose when predicting perceived wellness and controlling for strength of faith was significant ($B=1.16$, $p < 0.01$), indicating significant mediation. Furthermore, the regression coefficient for strength of faith predicting perceived wellness was no longer significant when life purpose was added ($B=-0.19$, $p=0.428$), suggesting complete mediation, rather than partial mediation by life purpose (see Figure 2). The effect size ($R^2=0.53$) was the largest for this third model, including both strength of faith and life purpose as predictors of

Table 3. Mediation regression analysis including faith, wellness, and life purpose.

Variable	B	SE B	β	95% CI (lower)	95% CI (upper)	R ²
1. Predicting wellness from faith	0.48	0.22	0.22*	0.03	0.92	0.05
2. Predicting life purpose from faith	0.58	0.14	0.40**	0.30	0.82	0.17
3. Predicting wellness from life purpose controlling for faith	1.16	0.12	0.76**	0.92	1.39	0.53
4. Predicting wellness from faith with life purpose added	-0.19	0.17	-0.09	-0.54	0.15	0.53

Notes: All analyses controlled for gender.

* β is significant at the 0.05 level (2-tailed).

** β is significant at the 0.01 level (2-tailed).

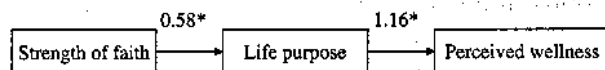


Figure 2. Model of mediation results with unstandardized coefficient values.

*B is significant at the 0.01 level (2-tailed).

perceived wellness, supporting the superiority of the model. The indirect effect was also analyzed using Sobel's test. This showed the effect of faith on well-being through the mediator of life purpose to be significant ($z = 3.90$, $p < 0.01$).

Discussion

The purpose of the current study was to examine the relationships between strength of faith, life purpose, and perceived wellness. Associations have been found between these constructs in previous research (e.g., Adams & Bezner, 2000; Kass et al., 1991), and this study confirmed those findings. Faith and life purpose were both found to significantly predict well-being. This suggests that faith and life purpose contribute to the development of well-being and may be important characteristics to foster in order to enhance one's personal sense of well-being.

In order to most comprehensively understand the construct of well-being, it would be important to also evaluate the interrelations among the variables of faith, well-being, and life purpose, thus aiming to determine the specific attributes that contribute to an individual's increased well-being. Because correlations have been found between faith and well-being, and life purpose has been linked to both faith and well-being, life purpose was hypothesized to be a mediator between faith and well-being. Results indicated that life purpose completely mediated the relationship between faith and well-being, confirming our hypothesis. This suggests that the impact of faith on well-being can be explained by life purpose. In other words, Ferris's (2002) conjecture that faith may foster life purpose, which in turn improves well-being, is supported by the results of the current study. While causation cannot be assumed,

the results can be interpreted as such: faith seems to foster life purpose, and life purpose seems to foster well-being. Faith also fosters well-being, but primarily through its contribution to a sense of life purpose.

The purpose of the current study was to isolate the construct of life purpose from life meaning, as past research has often equated the two constructs (e.g., Thompson et al., 2003). Exploratory factor analysis demonstrated that the General Life Purpose Scale represents one life purpose factor. This finding suggests that the General Life Purpose Scale assesses a unitary construct centered around life goals and self-understanding. Subsequent research examining both the reliability and construct validity of the General Life Purpose Scale suggests that the scale is psychometrically sound. In an unpublished study conducted by the second author (personal communication, September 15, 2007), test-retest reliability was determined in a sample of 100 college students (75% female, 25% male). Students were administered the General Life Purpose Scale twice, approximately 6 months apart. The test-retest correlation was significant, $r = 0.62$, $p < 0.001$. In another study conducted by the second author (personal communication, 30 November, 2007), the construct validity of the General Life Purpose Scale was assessed using a sample of 110 college students (74% female, 26% male). Students were administered the General Life Purpose Scale in addition to the Purpose-in-Life Test which is a measure that assesses respondents' experiences of both a sense of meaning as well as purpose in life (Crumbaugh, 1968; Crumbaugh & Maholick, 1964). The correlation between the two measures was significant ($r = 0.92$, $p < 0.001$). Although these findings provide support for the reliability and construct validity of the General Purpose in Life Scale, they do not address whether or not life purpose is distinct from life meaning. Further research is necessary to determine whether life purpose, operationalized as life goals, is a construct distinct from life meaning.

There are several limitations to the current study that should be noted. First, the present study is limited as our sample was relatively small (103 participants), and consisted of college students attending a small, private, Christian university. Further research using

a larger more diverse sample would increase the generalizability of the current findings. Additionally, the General Life Purpose Scale was created for this study and, while preliminary evidence suggests that the scale is both valid and reliable, further research is necessary to determine additional psychometric properties of the scale. Another potential limitation of the current study may be the use of the Santa Clara Strength of Religious Faith Questionnaire to measure faith. Although this is an empirically validated scale, it is a relatively limited approach to measuring the construct of faith. It may be beneficial for future research to examine other aspects of religion and spirituality (e.g., faith maturity, spiritual transcendence) in an attempt to understand further the relationship between faith and life purpose. Previous research examining spiritual aspects of faith, for example, has shown that spirituality is associated with life purpose (e.g., Mahoney & Graci, 1999). Similarly, well-being was measured using the Perceived Wellness Scale and while this is a six-dimension scale that provides a holistic view of wellness, future research could be improved by including a non self-report measure of well-being.

The current study has implications for professionals who work with college-aged adults such as educators, counselors, and student affairs personnel. For one, it is important to encourage college students to develop a sense of life purpose in order to increase their sense of well-being. Counseling that focuses on the development of life goals and self-awareness of perceived strengths should be an important priority. Furthermore, it is useful to know that faith fosters a sense of life purpose. Individuals struggling with their sense of life purpose might benefit from interventions that encourage the exploration of religious or spiritual beliefs and convictions. Until recently, the topics of faith and spirituality have largely been ignored by professionals within the field of student affairs and have been absent from theories attempting to explain how student development unfolds (Love & Talbot, 1999). The role of faith and spiritual development is not only an important part of the mission of higher education to address the whole person (Stamm, 2004), but recent surveys also suggest that the majority of college students have a strong interest in religious and spiritual matters (Young, 2003). Encouraging deeper faith and spiritual development in individuals should enhance one's sense of life purpose and contribute to one's overall sense of well-being.

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References

- Adams, T.B. (1995). The conceptualization and measurement of wellness (Doctoral dissertation, University of Texas at Austin, 1995). *Dissertation Abstracts International*, 56(6-B), 3111.
- Adams, T.B., & Bezner, J.R. (2000). Conceptualization and measurement of the spiritual and psychological dimensions of wellness in a college population. *Journal of American College Health*, 48, 165-174.
- Adams, T., Bezner, J., & Steinhardt, M. (1997). The conceptualization and measurement of wellness: Integrating balance across and within dimensions. *American Journal of Health Promotion*, 11, 208-218.
- 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.
- Chamberlain, K., & Zika, S. (1988). Religiosity, life meaning and wellbeing: Some relationships in a sample of women. *Journal for the Scientific Study of Religion*, 27, 411-420.
- Crumbaugh, J.C. (1968). Cross-validation of Purpose-in-Life Test based on Frankl's concepts. *Journal of Individual Psychology*, 24, 74-81.
- Crumbaugh, J.C., & Maholick, L.T. (1964). An experimental study in existentialism: The psychometric approach to Frankl's concept of noogenic neurosis. *Journal of Clinical Psychology*, 20, 200-207.
- Emmons, R.A. (2005). Striving for the sacred: Personal goals, life meaning, and religion. *Journal of Social Issues*, 61, 731-745.
- Ferris, A.L. (2002). Religion and the quality of life. *Journal of Happiness Studies*, 3, 199-215.
- Gerwood, J.B., LeBlanc, M., & Piazza, N. (1998). The Purpose-in-Life Test and religious denomination: Protestant and Catholic scores in an elderly population. *Journal of Clinical Psychology*, 54, 49-53.
- Jaccard, J., Guilamo-Ramos, V., Johansson, M., & Bouris, A. (2006). Multiple regression analyses in clinical child and adolescent psychology. *Journal of Clinical Child and Adolescent Psychology*, 35, 456-479.
- Kass, J., Friedman, R., Leserman, J., Zuttermeister, P., & Benson, H. (1991). Health outcomes and a new index of spiritual experience. *Journal for the Scientific Study of Religion*, 30, 203-212.
- Lewis, C.A., Shevlin, M., McGuckin, C., & Navratil, M. (2001). The Santa Clara Strength of Religious Faith Questionnaire: Confirmatory factor analysis. *Pastoral Psychology*, 49, 379-384.
- Love, P., & Talbot, D. (1999). Defining spiritual development: A missing consideration for student affairs. *NASPA Journal*, 37, 361-375.
- Mahoney, M.J., & Graci, G.M. (1999). The meanings and correlates of spirituality: Suggestions from an exploratory survey of experts. *Death Studies*, 23, 521-528.

- McGregor, I., & Little, B.R. (1998). Personal projects, happiness, and meaning: On doing well and being yourself. *Journal of Personality and Social Psychology*, 74, 494-512.
- Moomal, Z. (1999). The relationship between meaning in life and mental well-being. *South African Journal of Psychology*, 29, 36-41.
- Paloutzian, R.F., Richardson, J.T., & Rambo, L.R. (1999). Religious conversion and spirituality change. *Journal of Personality*, 67, 1047-1079.
- Pett, M.A., Lackey, N.R., & John, J. (2003). *Making sense of factor analysis: The use of factor analysis for instrument development in health care research*. Thousand Oaks, CA: Sage.
- Plante, T.G., & Boccaccini, M.T. (1997). The Santa Clara Strength of Religious Faith Questionnaire. *Pastoral Psychology*, 45, 375-387.
- Seligman, M.E. (2004). *Authentic happiness: Using the new positive psychology to realize your potential for lasting fulfillment*. New York: Free Press.
- Stamm, L. (2004). Can we bring spirituality back to campus? Higher education's re-engagement with values and spirituality. *Journal of College and Character*, 2, 1-11.
- Thompson, N.J., Coker, J., Krause, J.S., & Else, H. (2003). Purpose in life as a mediator of adjustment after spinal cord injury. *Rehabilitation Psychology*, 48, 100-108.
- Young, J.R. (2003). Most students care strongly about religion or spirituality, survey finds. *The Chronicle of Higher Education*, 50, 1-2.

Appendix 1. General life purpose scale

Instructions: Please use the following scale to indicate how much you agree with each statement. Write the correct number from the following scale on the blank provided by each item.

1	2	3	4	5	6	7
Strongly disagree		Slightly disagree	Neither agree nor disagree	Slightly agree		Strongly agree

- (1) ☐ I have goals that I am working toward.
- (2) ☐ I am confident about who I am.
- (3) ☐ I am confident about where I am going in life.
- (4) ☐ I have a well-developed understanding of my gifts and talents.
- (5) ☐ I have no sense of direction in life.
- (6) ☐ I know how I should be using my gifts and talents.
- (7) ☐ I have a good sense of purpose in life.
- (8) ☐ I am unsure about what I should do with my life.
- (9) ☐ I make a difference in the lives of those around me.
- (10) ☐ My life is valuable and worthwhile.
- (11) ☐ I have a strong sense of the reasons for my living.
- (12) ☐ I have identified my mission in life.
- (13) ☐ My life does not serve any purpose.
- (14) ☐ I am making a contribution to society.
- (15) ☐ I am taking actions now that are moving toward my mission in life.