EXPRESSIONS OF LIFE MEANING AMONG COLLEGE STUDENTS [1]

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Summary.—This study examined the views of 132 undergraduate students (35 men, 97 women) regarding what they considered to be contributing factors to a worthwhile or meaningful life. They rated, on a 5-point Likert scale, their agreement with each of 40 statements. Cluster analysis yielded three clusters which best described the data. One cluster comprised a religious group, and the other two clusters were nonreligious, with one having characteristics of both the religious and nonreligious cluster.

For millenia, people have wondered about the meaning of life and what factors contribute to a worthwhile or meaningful life. As the Canadian philosopher Peter Loptson (2001) pointed out, "[This] big question deserves to be addressed for its own sake, partly because it is one of the questions most often asked of philosophy by non-philosophers and most often evaded, by the professional philosophical practitioner" (p. 180). An assortment of perspectives have been expressed about what brings meaning to human lives. Metz (2001, 2002) attempted to outline the vast literature and cataloged various viewpoints into two overarching categories: the Supernaturalist perspective and the Naturalist perspective. These umbrella perspectives, for Metz, refine and process some of the unconnected notions about the meaning of life primarily in philosophy and psychology. Supernaturalism contends that without an all-knowing God (or the existence of a spiritual realm), there can be no ultimate, overall meaning for human beings in life (see Hill, 2002).

The second perspective, naturalism, which does not presuppose that one must be connected to the divine to find meaning and purpose, Metz

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divided into two subcategories. The first is the Objectivist position, which contends that human beings all share common values that 'enhance the significance of life' (Metz, 2001, p. 140). Many present-day evolutionary psychologists would, for example, share this perspective (see Rubin, 2002; Wilson, 2002). On the other hand, Subjectivism presumes that meaning of life can be established if the desires and needs surrounding *one's own* meaningfulness are met. Subjectivism is more consistent with postmodern views that eschew necessary commonalities across cultures and groups (see Hayes, 1998; Bridger, 2001).

However, the question of meaning in life cuts across several overlapping levels, including the everyday pursuits that give further meaning to lives, such as individual pursuits, family and friendships, cultural ties, and humanistic and religious beliefs that transcend individual concerns. For most advocates of both perspectives, the supernatural and the naturalistic, the categories are greatly overlapping and advocates of each would likely agree on a number of pursuits as contributing to a meaningful or worthwhile life.

Instead of starting from a particular theoretical perspective on the meaning of life, this study used a questionnaire encompassing statements believed central to a meaningful life from a variety of perspectives. The purpose of the study was to explore which of the statements given by psychologists and philosophers are actually considered important by college students in contributing to meaningful lives.

METHOD

This study used aggregate, primary data collected at the University of Saskatchewan, during the fall of 2002. The study was conducted by surveying 132 undergraduate students in education about their beliefs toward contributors to meaning in their lives. The mean age of the students was 23 yr. (2.3). The students (35 men, 97 women) were predominantly Euro-American. Item content was taken predominantly from recent prominent philosophical writings (Almond, 1999; Ames, 1999; Flew, 1999; Ivey & Ivey, 1999; Kirkham, 1999; Sharpe, 1999; Smart, 1999; Taylor, 1999; Klemke, 2000; Hill, 2002). Given the philosophical nature of the topic, the views of recent philosophers were given the central focus.

The differing views of the theorists were each summed in statements rated by participants on a Likert-like scale, with anchors for the items being 'Not at all–Very', 'Low priority–High priority', or 'Disagree–Agree'. The use of differing scale expressions has no relevance to the analysis and only becomes relevant when interpreting the meaning of individual items. The statements for the survey were drawn both from Metz (2001, 2002) and the above prominent philosophers' and theorists' writing. These expert judgments contributed to the face and content validity of the items used in this

study. Other surveys on the meaning of life were consulted, like Wong (1999)[2], but were considered to each have too narrow a focus.

RESULTS

Data were analyzed by cluster analysis, multivariate analysis of variance, and discriminant function analysis, using SPSS (Landau & Everitt, 2004). Cluster analysis was applied to identify possible subpopulations within the data. Both hierarchical and partitioning method (*k*-means) approaches were used for the cluster analysis, with the assumption that each cluster would differ from other obtained clusters (Everitt, 1993). Using the hierarchical approach, clustering of participants (objects in Fig. 1) according to their answers to statements 1 to 40 is conducted by first constructing a dendrogram, Fig. 1, by using Ward's hierarchical procedure. From Fig. 1, by cutting across the dendrogram branches at a linkage distance of between 30 or 75, two or three clusters describe the data best.
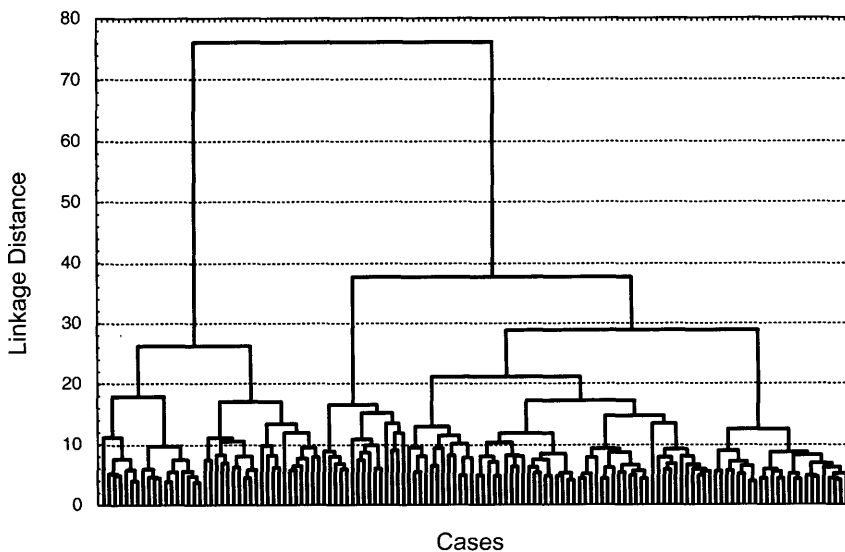

FIG. 1.   Dendrogram showing clustering using Ward's method of Euclidean distances

The *k*-means method was then used (with *k* = 2 and *k* = 3) to identify members of these clusters. Using the *k*-means procedure, two and three cluster models also fit the data best (attempts to use higher values of *k* resulted

[2]Wong, P. T. (1999) Toward an integrative model of meaning-centered counseling and therapy. (MCCT). Retrieved February 13, 2003 from the World Wide Web: http://www.meaning.ca/articles/print/integrative_model_meaning.htm)

TABLE 1
QUESTIONS AND DESCRIPTIVE STATISTICS BY CLUSTERS

Item	Cluster 1		Cluster 2		Cluster 3		p
	M	SD	M	SD	M	SD	
25. The meaning of life can be discovered through intentionally living a life that glorifies a Spiritual being.	2.4	0.9	4.4	0.8	1.3	0.5	.001
36. There is no one universal way of obtaining a meaningful life for all people.	4.6	0.7	2.6	1.5	4.6	1.0	.001
39. Lives can be meaningful even without the existence of a God or spiritual realm.	4.2	0.9	1.6	1.0	4.4	1.4	.001
40. Our lives have no significance, but we must live as if they do.	1.4	0.6	1.2	0.4	3.1	1.8	.001
22. To adhere to religious practices based on tradition or rituals.	2.3	1.1	3.4	1.1	1.4	0.7	.001
26. There is a reason for everything that happens.	4.0	0.9	4.3	0.9	2.3	1.6	.001
27. Obtaining things in life that are material and tangible is only part of discovering the meaning of life.	3.5	1.1	3.3	1.4	1.5	0.9	.001
1. How religious/spiritual would you say you are?	2.8	1.0	4.0	1.3	2.4	1.3	.001
38. What contributes to a meaningful life varies according to each person (or group).	4.8	0.4	3.9	1.1	4.5	0.8	.001
37. People passionately desire different things. Obtaining these things contributes to making life more meaningful for them.	4.2	0.9	3.2	1.3	3.2	1.3	.001
34. The meaning of life is found in realizing my potential.	4.0	0.7	3.3	1.1	2.9	1.2	.001
5. To share values/beliefs with others in your close circle or community.	3.9	0.8	4.3	0.6	3.2	1.1	.001
14. To act on your own personal beliefs, despite outside pressure.	4.3	0.6	4.6	0.5	4.9	0.3	.001
24. The meaning of life is found in understanding one's ultimate purpose for life.	3.5	0.9	3.8	1.1	2.4	1.4	.001
32. A meaningful life is one that contributes to the well-being of others.	4.4	0.6	4.4	0.7	3.6	1.4	.001
33. The meaning of life is the same as a happy life.	3.4	1.1	2.6	1.1	2.5	1.5	.001
35. Life has purpose only in the everyday details of living.	2.6	1.1	2.1	1.2	1.8	1.2	.001
28. People unearth the same basic values when attempting to find the meaning of life.	3.0	0.9	3.0	0.9	2.2	1.1	.003
7. To continually set short- and long-term, achievable goals for yourself.	3.9	0.9	4.3	0.9	3.4	1.2	.005
9. To live up to the expectations of family and close friends.	3.7	1.0	3.5	1.0	2.8	1.3	.007
17. To care about the state of the physical/natural environment.	3.6	0.8	3.9	0.9	4.3	1.1	.008
13. To be able to plan and take time for leisure.	4.3	0.7	4.1	0.9	4.7	0.8	.01
21. To keep up with media and popular-culture trends.	2.7	1.0	2.6	1.1	2.0	1.1	.02

(continued on next page)

TABLE 1 (Cont'd)
Questions and Descriptive Statistics by Clusters

Item	Cluster 1		Cluster 2		Cluster 3		p
	M	SD	M	SD	M	SD	
30. Some aims or goals in life are more valuable than other goals.	4.5	0.8	4.5	0.8	4.0	1.4	.04
8. To feel satisfied with yourself (feel good about yourself).	4.5	0.6	4.7	0.5	4.8	0.4	.07
3. To have a fulfilling career.	4.6	0.6	4.3	0.8	4.5	0.6	.08
4. To be closely connected to family.	4.8	0.5	4.7	0.6	4.5	0.8	.10
23. To use your own creativity in a way that you believe is worthwhile.	3.8	0.9	4.1	0.8	4.2	0.9	.11
2. To have trustworthy and intimate friend(s).	4.8	0.5	4.5	0.6	4.5	1.1	.11
18. To take responsibility for your mistakes.	4.1	0.7	4.4	0.7	4.4	0.8	.11
19. To make restitution for your mistakes, if necessary.	4.2	0.7	4.4	0.7	4.2	0.8	.17
11. To be involved in an intimate relationship with a significant person.	4.7	0.7	4.5	0.8	4.3	1.1	.18
31. The purpose of life lies in promoting the ends of truth, beauty, and goodness.	3.4	0.9	3.3	1.0	3.0	1.2	.23
6. To have and raise children.	4.5	0.9	4.3	1.0	4.1	1.0	.26
12. To give of yourself to others.	4.0	0.9	4.2	0.7	4.1	0.8	.27
10. To contribute to world peace.	3.2	1.0	3.4	1.0	3.5	1.3	.27
20. To be involved with social or political causes.	2.7	0.9	2.9	1.1	2.6	1.0	.38
29. It is more important to cultivate character than to be consumed with outward rewards or awards.	4.4	0.7	4.3	1.0	4.1	1.2	.48
16. To feel confident in choosing new experiences to better yourself.	4.0	0.6	4.1	0.6	3.8	0.8	.50
15. To be seen as physically attractive.	3.7	0.8	3.6	0.9	3.5	1.1	.56

in clusters with only one case). An examination of the mean responses to the 40 statements in clusters indicated a religious group and a nonreligious group. However, the three-cluster model was more informative, indicating a religious group and two subgroups within the nonreligious group.

A one-way multivariate analysis of variance was then utilized to test for significant differences between the two main clusters (religious and nonreligious) and to identify the statements on which the differences between the two clusters were significant. Then a step-wise discriminant function analysis was done to predict cluster membership and to specify a minimal set of survey statements used to identify cluster separation for the 128 participants. Of Cluster 1 respondents 96% were correctly classified, 88% of Cluster 2 respondents, and 84% of Cluster 3 respondents. Of the 40 meaning-of-life statements, the standardized canonical discriminant function coefficients indicated that nine were sufficient for classification of respondents into the three clusters (see Table 2). In the case of both the multivariate analysis of

TABLE 2
STANDARDIZED CANONICAL DISCRIMINANT FUNCTION COEFFICIENTS

Question	Function	
	1	2
13. To be able to plan and take time for leisure.	.339	−.069
14. To act on your own personal beliefs, despite outside pressure.	.012	−.351
25. The meaning of life can be discovered through intentionally living a life that glorifies a Spiritual being.	−.501	.118
26. There is a reason for everything that happens.	−.336	.368
27. Obtaining things in life that are material and tangible is only part of discovering the meaning of life.	−.234	.287
34. The meaning of life is found in realizing my potential.	−.042	.444
36. There is no one universal way of obtaining a meaningful life for all people.	.258	.319
39. Lives can be meaningful even without the existence of a God or spiritual realm.	.469	.468
40. Our lives have no significance, but we must live as if they do.	.268	−.637

variance and the discriminant function analyses (Table 3), significance tests were conducted on clusters preselected by the *k*-means procedure. Hence, the tests may overestimate the significance of the actual differences. The dis-

TABLE 3
FUNCTIONS AT GROUP CENTROIDS

Cluster	Function	
	1	2
Semireligious	.638	1.104
Religious	−2.537	−. 838
Humanistic	3.055	−2.376

TABLE 4
CROSS-TABULATION BY SEX WITH CLUSTER

Sex	Cluster			Total
	Semireligious	Religious	Humanistic	
Men	13	12	10	35
Women	59	29	9	97
Total	72	41	19	132

tribution by sex is described in Table 4. It may be noted that, while the men are relatively evenly distributed across the three clusters, the majority of women (61%) were in Cluster 1 (Semireligious); see Fig. 2.
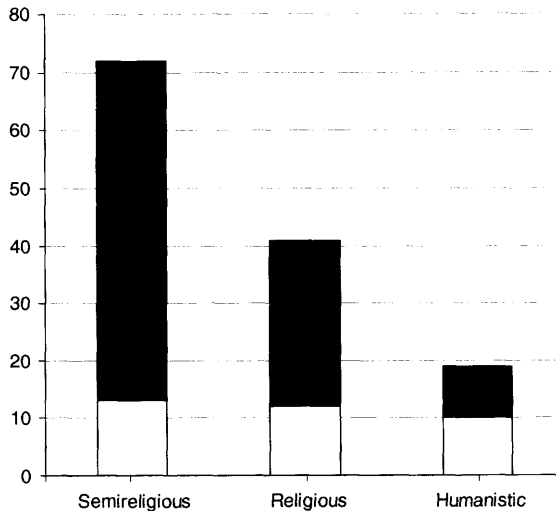

FIG. 2. Sex by cluster groups: men (□), women (■)

DISCUSSION

An examination of the figures and tables provides interesting information on the three clusters. The first cluster can be characterized as a strongly religious cluster. Table 1 indicates that the average rating for Item 1, 'How religious/spiritual would you say you are?', was 4.0 out of 5.0. The average rating of this item was significantly ($p = .001$) lower for the other two clusters (2.8 and 2.4, respectively). The responses for the religious cluster were also quite different from the other two clusters on Items 25 ('The meaning of life can be discovered through intentionally living a life that glorifies a Spiritual being'), 36 ('There is no one universal way of discovering a meaningful life for all people'), 39 ('Lives can be meaningful even without the

existence of a God or spiritual values'), and 22 ('To adhere to religious practices based on tradition or rituals').

The two relatively nonreligious groups overlap on Items such as 25 ('The meaning of life can be discovered through intentionally living a life that glorifies a Spiritual being'), 36 ('There is no one universal way of discovering a meaningful life for all people'), 1 ('How religious/spiritual would you say you are?'), and 38 ('What contributes to a meaningful life varies according to each person or group'). As Fig. 3 indicates, the two relatively nonreligious groups have scores indicating a low belief or a disinterest in a spiritual being or spiritual aspects to life, and a higher agreement with the view that people can find meaningful lives in many different ways.
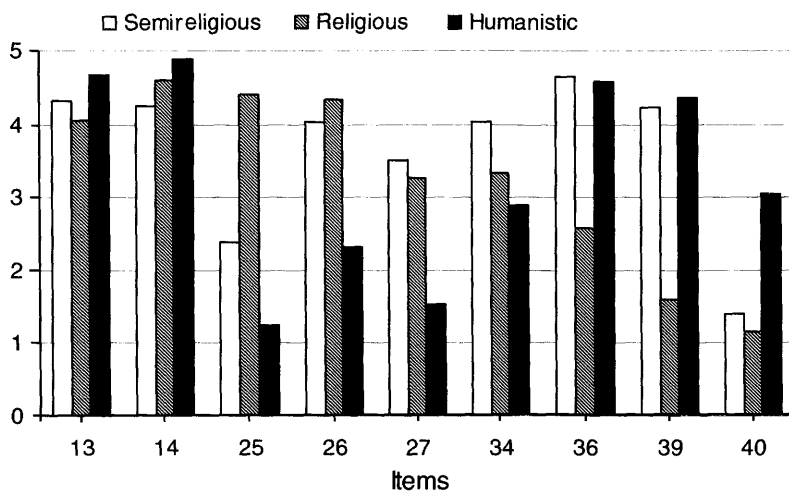

FIG. 3. Cluster mean scores for discriminating questions

However, one of the relatively nonreligious groups has large overlap with the religious group on several questions: 40 ('Our lives have no significance, but we must live as if they do'), 26 ('There is a reason for everything that happens'), and 27 ('Obtaining things that are material and tangible is only part of discovering the meaning of life'). Both these groups believe that our lives have significance, although the religious group would attach this to a Supreme Being, while the relatively nonreligious overlapping group would attach this to other aspects of life. The other nonreligious group is more likely than these groups to deny that life has any significance. Both these overlapping groups also showed higher agreement (over the stronger nonreligious group) that there is a reason for everything, and that material things are not strong contributors to living a meaningful life. Fig. 4 provides a
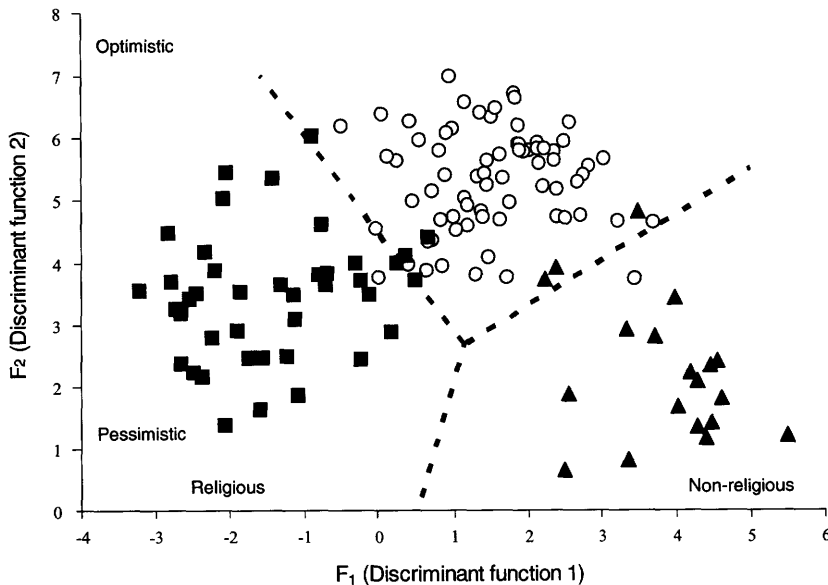
FIG. 4. Cluster map: Semireligious (o), Religious (■), Humanistic (▲)

graphic illustration of the three distinct groups. From Table 2, discriminant function 1 indicates religiosity (with a high positive loading (.47) on Item 39 ('Lives can be meaningful even without the existence of a God or spiritual realm') and a high negative loading (–.50) on Item 25 ('The meaning of life can be discovered through intentionally living a life that glorifies a Spiritual being.'). Discriminant function 2, on the other hand, portrays a pessimistic–optimistic dimension with a high negative loading (–.64) on the pessimistic Item 40, ('Our lives have no significance, but we must live as if they do') and high positive loadings (.47, .44) on the optimistic Items 39 ('Lives can be meaningful even without the existence of a God or spiritual realm') and 34 ('The meaning of life is found in realizing my potential').

The statistically nonsignificant items (see Table 1) indicate that there is much mutual agreement among people in the three clusters as to what is relevant to a meaningful life. It is of interest to note that these statements tend to be related to the importance of friends, family, and career in one's life.

Researchers might focus on the dimension of optimism–pessimism in relating to questions regarding the meaning of life. The quesionnaire should also be examined with populations encompassing wider age groups and socioeconomic strata.

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