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Meaning in Life in Emerging Adulthood: A Person-Oriented Approach

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Abstract

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1.Based on the suggestion of a reviewer, we reanalyzed the replicability of the cluster solution with a bootstrap approach. Results pointed to a stable and replicable five-cluster solution (1,000 bootstrap draws; Adjusted Rand Index between .967 and .982).

2.Generalizability of the five clusters across ethnicity was tested as well. However, due to the small percentage of individuals in the South Asian (3%) and Middle Eastern (1%) groups, these groups were left out of the analyses by ethnicity. Furthermore, because the sample was predominantly White, this group was used as the reference group. Cohen's kappa was .86 for the Black group, .62 for the East Asian group, and .49 for the Hispanic group.

The present study investigated naturally occurring profiles based on two dimensions of meaning in life: Presence of Meaning and Search for Meaning. Cluster analysis was used to examine meaning-in-life profiles, and subsequent analyses identified different patterns in psychosocial functioning for each profile. A sample of 8,492 American emerging adults (72.5% women) from 30 colleges and universities completed measures on meaning in life, and positive and negative psychosocial functioning. Results provided support for five meaningful yet distinguishable profiles. A strong generalizability of the cluster solution was found across age, and partial generalizability was found across gender and ethnicity. Furthermore, the five profiles showed specific patterns in relation to positive and negative psychosocial functioning. Specifically, respondents with profiles high on Presence of Meaning showed the most adaptive psychosocial functioning, whereas respondents with profiles where meaning was largely absent showed maladaptive psychosocial functioning. The present study provided additional evidence for prior research concerning the complex relationship between Presence of Meaning and Search for Meaning, and their relation with psychosocial functioning. Our results offer a partial clarification of the nature of the Search for Meaning process by distinguishing between adaptive and maladaptive searching for meaning in life.

Experiencing meaning in life is an important component of optimal psychological functioning (e.g., Baumeister, 1991; Frankl, 1963). Meaning in life has been defined in terms of coherence, understanding of life, understanding of the world, and purposefulness (e.g., King, Hicks, Krull, & Del Gaiso, 2006; Reker & Wong, 1988). It involves forming a sense of coherence in life and investing in important lifelong aspirations (Steger, 2012). Research has indicated that higher levels of meaning in life are associated with more positive emotions and vitality (Brassai, Piko, & Steger, 2011), increased self-esteem (Kiang & Fuligni, 2010), less depressive symptoms (Steger, Mann, Michels, & Cooper, 2009), and lower health-risk behavior (Brassai et al., 2011).

Presence of Meaning and Search for Meaning

Meaning in life is often approached as a broad concept containing cognitive components (e.g., the understanding of who we are), motivational goal-directed components (e.g., identification and pursuit of purpose), and affective components (e.g., feeling that life makes sense; see Reker & Wong, 1988). Steger, Frazier, Oishi, and Kaler (2006) further developed this conceptual idea into a clear distinction between two dimensions of meaning in life. The first aspect, Presence of Meaning, encompasses whether individuals perceive their lives as significant, purposeful, and valuable. It refers to the comprehension of oneself and the surrounding world, the understanding of how one fits into the world, and the clarity of one's goals and desires (King et al., 2006). Presence of Meaning can be regarded as a highly desired psychological *quality* ("my life is meaningful"; Steger, Kawabata, Shimai, & Otake, 2008). The second dimension, Search for Meaning, refers to the strength, intensity, and activity of people's efforts to establish or increase their understanding of the meaning and purpose of their lives. It refers to the *process* of how individuals develop their sense of meaning in life ("how can I make my life more meaningful?"; Steger, Kawabata, et al., 2008).

Empirical studies have found distinct patterns of correlates associated with these two dimensions. Positive associations between Presence of Meaning and psychological well-being have been found across the life span, including adolescence (Brassai et al., 2011), emerging adulthood (Steger, Kawabata, et al., 2008), and midlife and later adulthood (Zika & Chamberlain, 1992). The links between Search for Meaning and psychosocial functioning are less clear. Theorists have disagreed about the beneficial or detrimental character of this dimension. Frankl (1963), for example, approached Search for Meaning as a natural, healthy part of life. Baumeister (1991), on the other hand, regarded searching for meaning as a dysfunctional process. He assumed that searching only occurs when individuals' needs for meaning have been frustrated. A compromise position has been offered by Reker (2000), who assumed that Search for Meaning can take healthy as well as unhealthy forms depending on the motivational root of the search (see also Steger, Kashdan, et al., 2008). The empirical literature has been similarly complex. Some studies have found that Search for Meaning is related to lower well-being (e.g., Schwartz et al., 2011). Studies that examined cognitive correlates of Search for Meaning have yielded mixed results. For example, Steger, Kashdan, et al. (2008) found that Search for Meaning is positively related to rumination and depression, but also to open-mindedness and curiosity.

A novel direction in this research domain explores the interaction between the Presence of Meaning and Search for Meaning. Steger, Oishi, and Kesebir (2011) recently found in a sample of undergraduate students that Presence of Meaning was more strongly related to life satisfaction for those who were actively searching for meaning than for those who were not. Cohen and Cairns (2012) further highlighted the moderating role of Presence of Meaning on Searching for Meaning in life, especially for feelings of happiness and depression in a sample of Australian adults. These preliminary results might suggest that there may be different ways people experience and pursue meaning in life, and these results are in need of further investigation.

A Person-Oriented Approach Toward Meaning in Life

Until now, studies addressing the relation between Presence of Meaning and Search for Meaning, and their links to well-being (Cohen & Cairns, 2012; Kiang & Fuligni, 2010; Steger et al., 2011), have utilized a variable-oriented approach. Variable-oriented approaches concentrate on the relationships among variables through correlational associations and modeling (Schnabel, Asendorpf, & Ostendorf, 2002). Such approaches are not able to investigate the ways in which multiple variables are configured *within* individuals (De Fruyt, Mervielde, & Van Leeuwen, 2002). The person-oriented approach is conceptually different, focusing on identifying groups of individuals within a sample, each group composed of respondents who score similarly on the variables of interest, and whose pattern differs from other groups identified (Scholte, van Lieshout, de Wit, & van Aken, 2005).

Unlike the variable-oriented approach, in which only statements about the direction and strength of associations between variables can be made, the person-centered approach allows investigators to make statements regarding how categories of individuals typically function, as well as about the similarities and differences in those categories. These two approaches

are complementary in that both lines of research add to our understanding of human functioning.

Recent insights by Steger et al. (2011) and Cohen and Cairns (2012) concerning the potentially intertwined relation of the two meaning dimensions call for an in-depth exploration in which a person-oriented approach can be valuable. The first research question in this study, therefore, involves the identification of the naturally occurring meaning profiles. Can specific meaning profiles be distinguished and, furthermore, can specific groups of individuals who have similar configurations or profiles be delineated? Further, if specific meaning profiles occur in the population, are they generalizable across different demographic groups? For example, can the same meaning-in-life profiles be found for young women and young men and for groups differing in age, namely younger and older emerging adults? Finally, if these meaning-in-life profiles are indeed distinctive from each other, do these profiles then differ with respect to the quality of their psychosocial functioning? More precisely, are some meaning profiles closer to “optimal” with regard to psychosocial functioning in comparison with other meaning profiles?

Parallels With Identity Clusters

From a life span perspective, meaning-related issues can be of importance in every life stage. However, meaning in life might be particularly salient during adolescence and emerging adulthood (Erikson, 1950; Steger, Oishi, & Kashdan, 2009). During these periods of life, the question “Who am I?” becomes central and refers both to exploring a philosophical set of questions concerning meaning in life as well as to the more narrow domain of identity. Emerging adulthood was proposed by Arnett (2000) as a new conception of development for the period from the late teens through the twenties. Arnett stated that sociocultural changes in the timing of marriage and parenthood, increases in postsecondary education, and the postponement of workforce entry created the emerging adult life stage in industrialized countries. Studies seem to affirm the idea that emerging adulthood is a distinct period in the life course, characterized by identity change and exploration of possible life directions (Arnett, 2004; Luyckx, Schwartz, Berzonsky, et al., 2008).

Steger, Oishi, et al. (2009) noted that meaning creation is likely to unfold in conjunction with the development of identity. In this vein, parallels can be drawn between the meaning-in-life dimensions as developed by Steger et al. (2006) and the identity dimensions as formulated by Marcia (1966). According to Marcia (1966), identity formation can be conceptualized along two dimensions: exploration (active questioning and considering alternatives) and commitment (strength of choice). Steger, Oishi, et al. (2009) suggested that Search for Meaning might function along the lines of identity exploration and that Presence of Meaning may function along the lines of identity commitment. However, although dimensions of identity and of meaning in life appear to evidence considerable similarities, they differ in that identity formation is predominantly situated in the field of day-to-day life choices, whereas meaning in life concerns broader existential questions.

Recent identity research (Luyckx, Schwartz, Berzonsky, et al., 2008; Schwartz et al., 2011) used a person-oriented approach to examine different patterns of identity formation in

emerging adults. Luyckx, Goossens, Soenens, Beyers, and Vansteenkiste (2005), for example, identified five identity statuses (i.e., achievement, foreclosure, moratorium, troubled diffusion, and carefree diffusion) that each had theoretically relevant associations with psychosocial functioning. If meaning and identity development are indeed intertwined (e.g., Kiang & Fuligni, 2010), we might assume that a similar pattern of profiles might emerge when focusing on aspects of meaning in life. Furthermore, Burrow, O'Dell, and Hill (2010) explored the existence of possible profiles on aspects of life purpose, a concept that overlaps considerably with the meaning dimensions. They distinguished between purpose exploration and purpose commitment and identified four distinct clusters that were labeled achieved, foreclosed, uncommitted, and diffused, in parallel with identity research.

The Present Study

The aim of this study was to identify distinct profile patterns based on the dimensions of Presence of Meaning and Search for Meaning in a sample of emerging adults. The use of a person-oriented approach offers the possibility of exploring specific configurations of the meaning dimensions within individuals. Based on earlier research in the field of identity (Luyckx et al., 2005) and taking into account the possible parallels between identity (commitment and exploration) and meaning (presence and search), we might assume that specific meaning profiles (patterns of both presence and search within an individual) will emerge. Furthermore, the present study was designed to determine the extent of generalizability of the profiles across age, gender, and ethnicity. Finally, we explored the relationship between the meaning profiles and the quality of psychosocial functioning as a way of distinguishing more "optimal" profiles of meaning.

In the present study, we included a broad array of indices of positive and negative psychosocial functioning, thus offering the potential for a more expansive evaluation of the meaning-in-life clusters. First, positive psychosocial functioning carries the implication that an individual has been able to successfully address life stressors or developmental tasks (e.g., Havighurst, 1952; Schwartz et al., 2011). A core concept in positive psychosocial functioning is well-being, referring to optimal functioning (Ryan & Deci, 2001). Well-being, however, is a multifaceted construct consisting of motivational, cognitive, and affective aspects.

Because earlier studies have demonstrated that, for example, various identity statuses differ in terms of the different types of well-being (Schwartz et al., 2011), we examined multiple forms of well-being across meaning-in-life clusters. We examined three facets of well-being (cf. Waterman, 2008): (a) subjective well-being, which refers to the level of balance between positive and negative affective states, and to a cognitive assessment of life satisfaction (Diener, 1984); (b) psychological well-being, which can be defined in terms of the person's ability to address and master life tasks such as creating satisfying interpersonal relationships (Ryff, 1989); and (c) eudaimonic wellbeing, which can be defined in terms of the extent to which individuals have been able to identify and develop their potentials (Waterman, 2008). Although the three conceptions have been found to relate moderately to strongly with each other, the non-overlap among them leaves open the possibility that they may be differentially mapping onto the meaning-in-life profiles (Schwartz et al., 2011). In addition to these three

dimensions of well-being, we also included self-esteem as an important correlate of positive psychosocial functioning.

We also examined negative psychosocial functioning as a correlate of the meaning-in-life clusters. Presence of Meaning has been seen as having a major role in maintaining mental health, and the absence of meaning may drive young adults to experience internalizing behaviors (e.g., depressive symptoms, anxiety) and engage in externalizing behaviors (e.g., rule breaking, aggression). There is substantial support for an empirical link between meaning in life and depressive symptoms (Debats, 1996; Steger, Mann, et al., 2009), as well as some support for the link between meaning in life and externalizing behaviors (Brassai et al., 2011; Shek, 1997).

Linking the meaning profiles with psychosocial functioning, we anticipated that clusters characterized by higher levels of Presence of Meaning would provide evidence of more successful psychosocial functioning, marked by higher scores on measures of positive functioning and lower scores on measures of negative functioning (Burrow et al., 2010; Steger, Kashdan, et al., 2008). The opposite pattern was expected for clusters characterized by lower levels of Presence of Meaning. In line with the findings of Steger et al. (2011) regarding life satisfaction, we hypothesized that low presence combined with high search might indicate a high level of stress with relatively unhealthy outcomes (Baumeister, 1991; Klinger, 1998), reflected in lower levels of positive psychosocial functioning and higher levels of negative psychosocial functioning. On the other hand, high levels of Search for Meaning combined with high levels of Presence of Meaning might indicate an adaptive search pattern (Frankl, 1963) and be accompanied by relatively high levels of positive psychosocial functioning and low levels of negative psychosocial functioning.

METHOD

Participants

The present sample consisted of 8,492 students (72.5% women) from 30 U.S. colleges and universities (three private colleges, 17 large and six smaller state universities, and four major private universities), representing 20 U.S. states. At all sites, the study was approved by the site's Institutional Review Board. The overrepresentation of women in the sample is consistent with the disproportionate representation of women among American students in general (http://www.prb.org/Articles/2011/gender-gap-in-education.aspx). The mean participant age was 19.98 years (SD = 2.08), and students had been in college for an average of 2.34 years (SD = 1.38). Sixty-one percent of the students self-identified as White, 15% as Hispanic, 10% as East Asian, 9% as Black, 3% as South Asian, 1% as Middle Eastern, and less than 1% as another ethnicity. Eighty-eight percent of the students were born in the United States. Concerning religion, 33% self-identified as Protestant, 27% as Catholic, 15% as atheist or nonbeliever, 7% as agnostic, 3% as Jewish, 2% as Buddhist, 1% as Muslim, 1% as Hindu, and the remaining as having another religious preference. Concerning the annual family income, 20% situated the income as below 30K, 18% as between 30K and 50K, 31% as between 50K and 100K, 28% above 100K, and 3% did not know their family income.

Classes were surveyed in the disciplines of psychology, sociology, business, family studies, education, and human nutrition. Participants were directed through printed or emailed announcements to a Web site developed specifically for the present study. Students participated as part of the course research requirement or received extra course credit for their participation. Of participants who logged on to the study Web site, 85% completed all six survey pages. Data were collected between September 2008 and October 2009.

Measures

Meaning in Life.—Participants rated the 10 items of the Meaning in Life Questionnaire (MLQ; Steger et al., 2006) on a 6-point Likert scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). One subscale taps into Presence of Meaning (Cronbach's alpha = .87 in the current sample) and one into Search for Meaning (Cronbach's alpha = .88 in the current sample). Sample items include "I understand my life's meaning" (Presence) and "I am always looking to find my life's purpose" (Search).

Positive Psychosocial Functioning.—Four scales were used as indicators of positive psychosocial functioning: Life Satisfaction (subjective well-being), Psychological Well-Being, Eudaimonic Well-Being, and Self-Esteem (Cronbach's alphas are reported in Table 1). The five items from the Satisfaction With Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985) were rated on a 7-point scale (1 = *strongly disagree*, 7 = *strongly agree*). A sample item is "If I could live my life over again, I would change almost nothing." The Scales for Psychological Well-Being (SPWB; Ryff & Keyes, 1995) assess six aspects of well-being (autonomy, environmental mastery, growth, purpose in life, relationships, and self-acceptance) on a 5-point Likert scale. A total score was obtained by summing participants' responses across all 18 items. A sample item is "I like most aspects of my personality." The 21 items from the Questionnaire for Eudaimonic Well-Being (QEWB; Waterman et al., 2010) were rated on a 5-point Likert scale, gauging the extent to which one was oriented toward discovering one's life purpose and exploring one's potential. A sample item is "I feel that I have discovered who I really am." The 10 items from the Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965) were rated on a 5-point scale (1 = *strongly disagree,* 5 = *strongly agree*). A sample item is "On the whole, I am satisfied with myself."

To avoid conceptual overlap with meaning in life, we removed the three items from the Psychological Well-Being Scale that refer to purpose of life and the five items from the Eudaimonic Well-Being Scale that refer to the concept of meaning.

Negative Psychosocial Functioning.—We assessed internalizing symptoms (depressive and anxious symptoms) and externalizing behavior as aspects of negative psychosocial functioning. The Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977) assesses depressive symptoms during the week prior to assessment. Participants rated the 20 items on a 5-point Likert scale, and a sample item was "I felt sad this week." General anxiety symptoms were measured using an adapted version of the Beck Anxiety Inventory (Beck, Brown, Epstein, & Steer, 1988), which assesses anxiety symptoms during the week prior to assessment. Eighteen items are rated on a 5-point Likert scale, and a sample item was "I have been worrying a lot this week." The Adult Self-Report (ASR;

Achenbach & Rescorla, 2003), as adapted by Burt and Donnellan (2008), assesses rule breaking, social aggression, and physical aggression. Items asked how often (1 = *never*, 5 = *all the time*) participants engaged in a number of behaviors during the last six months. The Social Aggression subscale consists of 11 items (e.g., "Made negative comments about someone else's appearance"), the Physical Aggression subscale consists of 10 items (e.g., "Got into physical fights"), and the Rule Breaking subscale consists of 11 items (e.g., "Broke into a store, mall, or warehouse").

RESULTS

Exploring Meaning-in-Life Profiles

Cluster analyses were conducted on the Presence of Meaning and Search for Meaning dimensions using SPSS 20.0 and the Ginkgo software (Bouxin, 2005). Scores were standardized within the total sample, and these standardized scores served as the input variables for the analyses.

Primary Cluster Analysis.—In the first step, a hierarchical cluster analysis was carried out using Ward's method and squared Euclidian distances (Steinley & Brusco, 2007). Ward's minimum variance procedure (1963) was chosen because this algorithm is intended to recover well-separated, minimum variance clusters (Breckenridge, 1989).

In the second step, the cluster centers from this hierarchical analysis were used as nonrandom starting points in a noniterative *k*-means clustering procedure (Breckenridge, 2000). This two-step procedure remedies one of the major shortcomings of the hierarchical method, namely that once a case is clustered, it cannot be reassigned to another cluster at a subsequent stage. *K*-means clustering, however, minimizes within-cluster variability and maximizes between-cluster variability, allowing reassignments to "better-fitting" clusters and thus optimizing cluster membership (Gore, 2000). In sum, in the first step, hierarchical clustering is used in order to define the clusters, and in the second step, the *k*-means clustering assigns individuals to their "best-fitting" clusters.

We considered two- to six-cluster solutions, first comparing these various solutions using the Calinski-Harabasz index (CH; Steinley, 2006). This index indicated that the five- or six-cluster solution provides the best fit (CH index, respectively, is 4194.04, 5044.70, 4619.87, 5483.25, and 5581.47 for the two- to six-cluster solutions). However, inspection of the six-cluster solution revealed that two clusters were virtually identical to one another (two clusters representing High Presence–Low Search), suggesting that a five-cluster solution would provide a more parsimonious and meaningful representation of the data. Furthermore, we examined the percentage of variance in the clustering variables that is explained by the cluster solution (Milligan & Cooper, 1985). Inspection of the explained variance (adjusted R^2) in both the Presence of Meaning and Search for Meaning construct in each of these solutions indicated that in the two- and three-cluster solutions, at least one of the meaning dimensions explained less than half of the variability and can therefore be considered as not optimal fitting cluster solutions. Finally, the proportions of the variance explained by the cluster solution (η^2) for the two- to six-cluster solutions were .61 for the two-cluster solution, .55 for the three-cluster solution, .62 for the four-cluster solution, .72 for the five-

cluster solution, and .77 for the six-cluster solution. The explained variance (partial η^2) in both Presence of Meaning and Search for Meaning increased by 7% when moving from three to four clusters, by 10% when moving from four to five clusters, and by 5% when moving from five to six clusters, pointing to a five-cluster solution as most optimal.

Validation and Generalization of the Cluster Solution.—To examine the stability of this cluster solution, a double cross-validation procedure was used as described by Breckenridge (1989). The sample was randomly split into two halves and the full two-step procedure was applied within each subsample. Next, participants within each half-sample were assigned to new clusters on the basis of the final centroids from the other half-sample. We compared the two solutions within each half-sample using Cohen's kappa (Breckenridge, 2000) and the Hubert-Arabie Adjusted Rand Index (Hubert & Arabie, 1985; Rand, 1971). Both kappa (.94) and Hubert-Arabie Adjusted Rand Index (.98) pointed to a stable and replicable five-cluster solution.[1]

Figure 1 presents the final cluster solution, with *z*-scores plotted on the y-axis. Because the clusters were defined using *z*-scores for the total sample, each cluster's mean *z*-scores indicate how far that cluster deviates from the total sample mean score and from the means of the other four clusters (Scholte et al., 2005). The distances, in standard-deviation units, among the clusters' means (and between each cluster mean and the total sample mean, which is standardized to zero) may be interpreted as an index of effect size. Analogous to Cohen's *d*, 0.2 standard deviation represents a small effect, 0.5 standard deviation represents a moderate effect, and 0.8 standard deviation represents a large effect. The clusters that we found were characterized by *z*-scores reflecting moderate to strong deviations from the overall sample mean, suggesting that the five clusters differed considerably in terms of their scores on Presence of Meaning and Search for Meaning. The five clusters found were labeled "High Presence–High Search" (n = 1,957), "Undifferentiated" (n = 2,968), "High Presence–Low Search" (n = 1,253), "Low Presence–High Search" (n = 1,537), and "Low Presence–Low Search" (n = 777).

Generalizability of the five clusters across age, gender, and ethnicity was again tested using the cross-validation procedure (Breckenridge, 1989). For age, we split the sample into two groups (18–25 years old and 26–30 years old). The kappa of .84 indicated that the five-cluster solution was generalizable across the two age groups. A similar procedure was performed in order to test the generalizability across gender, and the kappa was .47. Figure 2 displays the distinct cluster solutions for men and women. Results indicated partial generalizability across gender involving at least three similar clusters (High Presence–High Search, High Presence–Low Search, Low Presence–High Search) in both females and males, one similar cluster with differences in effect sizes (Undifferentiated), and one cluster with a different pattern (Low Presence–Low Search in the males and total sample vs. High Presence–Moderate Search in the female sample).[2]

Meaning Profiles and Psychosocial Functioning

Total Sample.—To test the relationship between the meaning clusters and the quality of psychosocial functioning, two sets of MANOVAs were conducted: one set for the positive

functioning and one set for the negative functioning variables. Results indicated significant cluster differences for positive psychosocial functioning (i.e., life satisfaction, psychological well-being, eudaimonic well-being, self-esteem, and life satisfaction) and negative psychosocial functioning (i.e., depressive symptoms, anxiety, rule breaking, social aggression, and physical aggression) variables. The univariate *F*-values, with multiple pairwise combinations conducted using the Tukey's Honestly Significant Difference (HSD) test, are displayed in Table 1. Each of the five clusters was associated with a unique profile in terms of psychosocial functioning. Effect sizes for positive psychosocial functioning variables were large (more than 13.8% of variance explained; Cohen, 1988). Effect sizes for the negative psychosocial functioning variables were small to medium (less than 13.8% variance explained).

Individuals in the High Presence–Low Search cluster reported the highest levels of positive psychosocial functioning, as well as the lowest levels of negative psychosocial functioning. Individuals in the High Presence–High Search cluster reported lower levels of positive psychosocial functioning, and higher levels of negative psychosocial functioning, compared to individuals in the High Presence–Low Search cluster, but the pattern of functioning of individuals in the High Presence–High Search cluster was still significantly more favorable than the remaining clusters. This seems to indicate that individuals who experience high levels of meaning in their lives are better adapted compared to those individuals who experience low levels of meaning. Individuals in the Low Presence–Low Search cluster seemed to be the most poorly adapted group, with the lowest levels of positive psychosocial functioning and the highest levels of negative psychosocial functioning. The individuals in the Low Presence–High Search cluster were characterized by a profile similar to that for individuals in the Low Presence–Low Search cluster, although they reported somewhat higher levels of eudaimonic and psychological wellbeing, and lower levels of rule breaking, social aggression, and physical aggression. Thus, both of these clusters that were characterized by a lack of experiencing meaning tended to report low psychosocial functioning—though individuals in the Low Presence–Low Search cluster exhibited the most maladaptive profile. The individuals in the Undifferentiated cluster reported intermediate levels on all of the psychosocial variables.

Gender.—Given the partial generalizability across gender for the five-cluster solution, separate sets of MANOVAs were conducted for men and women. The univariate *F*-values, and multiple pairwise combinations conducted using the Tukey's HSD test, are displayed in Table 2. Both men and women in the High Presence–Low Search cluster exhibited the highest levels of positive psychosocial functioning, as well as the lowest levels of negative psychosocial functioning, similar to the total sample. Both men and women in the High Presence–High Search cluster reported lower levels of positive psychosocial functioning and higher levels of negative psychosocial functioning compared to men and women, respectively, in the High Presence–Low Search cluster, but the pattern of functioning in the High Presence–High Search cluster was still significantly more favorable than the remaining clusters.

For women in the High Presence–Moderate Search cluster, a similar pattern of optimal functioning appeared, with levels between those of the individuals in the High Presence–

High Search and High Presence–Low Search cluster. For men, the Low Presence–Low Search cluster seemed to be the least optimal cluster, resulting in very low levels of positive functioning and high levels of negative functioning. For women, the Low Presence–Low Search cluster did not emerge in the five-cluster solution, and the Low Presence–High Search cluster turned out to be the least optimal cluster for them. Also for men, this cluster is linked to less optimal functioning. For both men and women in the Undifferentiated cluster, intermediate levels of psychosocial functioning are reported.

DISCUSSION

The purpose of the present study was to gain more insight in the complex relation between Presence of Meaning and Search for Meaning and the person-centered patterns formed by combining these dimensions in terms of psychosocial functioning. Therefore, we aimed to complement prior variable-oriented approaches by delineating meaning-in-life profiles encompassing both experiencing meaning as well as searching for meaning. This person-oriented strategy allowed us to group respondents on the basis of meaning similarities and to make statements about how individuals with a specific meaning profile are functioning. Furthermore, we aimed to explore the generalizability of the profiles across specific demographic factors. Our study focused on emerging adulthood as a life period in which meaning might be especially salient (Erikson, 1950), although we realize that meaning-related issues are of importance during the whole life span (Frankl, 1963).

Meaning Clusters

The obtained clusters suggested five profiles of Search for Meaning and Presence of Meaning in life. Four clusters parallel earlier research on purpose (Burrow et al., 2010), and one additional cluster (Undifferentiated) parallels earlier results in identity research (Luyckx et al., 2005; Luyckx, Schwartz, Berzonsky, et al., 2008). Both the High Presence–Low Search cluster as well as its conceptual opposite (Low Presence–High Search) fit very well in the current meaning literature and reflect the Presence-to-Search model. These clusters are in line with Kashdan and Steger's (2007) findings, suggesting that, in the absence of meaning, individuals are driven toward seeking meaning or, furthermore, that the search for meaning is a natural reaction to the absence of meaning.

In addition, the High Presence–High Search cluster fits with the theorizing of Frankl (1963), in that searching for meaning creates higher levels of meaning in life. Additionally, the opposing cluster (Low Presence–Low Search) was found to characterize a group of individuals who have a very negative stance toward meaning-related topics. Finally, the Undifferentiated cluster was near the midpoint with respect to both Presence and Search. It is possible that this cluster consists of emerging adults who are only mildly interested in meaning-related questions. These individuals differ from the Low Presence–Low Search cluster in that the latter group appears to actively avoid meaning-related questions and thus holds a negative, instead of an undifferentiated, attitude toward meaning in life.

A strong generalizability of the cluster solution was found across age, and partial generalizability was found across gender involving at least three of the five clusters. In addition, partial generalizability was found across ethnicity, especially for Black and East

Asian individuals in comparison to White individuals, and to a lesser extent for Hispanic individuals. These findings appear to indicate that gender and ethnicity might play a moderating role with respect to the naturally occurring groups when considering the presence and search for meaning simultaneously. If these effects are replicable, future research may be helpful in establishing a better understanding of the nature of the moderating effects observed in this study.

Meaning Clusters and Psychosocial Functioning

Comparison of the meaning clusters vis-à-vis positive and negative psychosocial functioning yielded clear distinctions among the five clusters. Individuals in the two clusters where meaning in life is present (i.e., High Presence–High Search and High Presence–Low Search) reported the most adaptive psychosocial functioning. This finding is consistent with the contention that meaning in life is a vital ingredient for optimal functioning (e.g., Ryff & Singer, 1998; Steger, 2012). The most adaptive profile for optimal psychosocial functioning seems to be the combination of high levels of Presence of Meaning and low levels of Search for Meaning (High Presence–Low Search). Individuals in this cluster reported favorable psychosocial functioning, with high scores on all three forms of well-being (subjective, psychological, and eudaimonic well-being) and on self-esteem, and with low scores on depressive symptoms, anxiety, aggression, and rule breaking.

The High Presence–High Search profile was characterized by only slightly lower scores on positive psychosocial functioning and slightly higher scores on negative functioning. This finding is consistent with those of Cohen and Cairns (2012), who found that individuals who reported high levels of Search for Meaning are protected from the negative outcomes of this process (on happiness) by holding high levels of Presence of Meaning. Our findings extend Cohen and Cairns's conclusions by including a more extensive range of dimensions of psychosocial functioning, both positive and negative.

However, searching for meaning in the absence of a sense of meaning seems to be associated with maladjustment—individuals in the Low Presence–High Search cluster scored very low on positive psychosocial functioning and very high on negative psychosocial functioning. These individuals do not appear to feel happy or satisfied in their lives (low well-being and low life satisfaction) or with themselves (low self-esteem), and they report externalizing symptoms. These findings confirm the conclusions stated by Steger and colleagues (2011), who found an interaction effect of Presence and Search in the prediction of life satisfaction and concluded that "people were very satisfied with their lives if they were actively searching for meaning and had already found meaning, whereas people were not satisfied if they were actively searching for meaning and had not yet found meaning" (p. 7). Indeed, our results indicate that individuals with a High Presence–High Search profile report more optimal functioning in comparison to individuals with a Low Presence–High Search profile.

However, Steger et al. (2011) also suggest that individuals low in meaning in life might be better adjusted if they are not actively searching for meaning. Our findings, in contrast, suggest that individuals with a Low Presence–Low Search profile are the most poorly adapted group, closely followed by individuals with a Low Presence–High Search profile. The lack of experiencing meaning in life again appears related to problematic functioning,

and the lack of search for meaning may exacerbate this maladaptive pattern for some of the psychosocial functioning measures. Specifically, the Low Presence–Low Search cluster scored highest on externalizing problems, as well as lowest on eudaimonic and psychological well-being— perhaps indicating that these individuals experience the greatest degree of difficulty with the transition to adulthood. This pattern of findings suggests that lack of interest in one's life purpose is linked with compromised psychosocial functioning.

Parallels Between Meaning in Life and Identity

Reviewing the clusters and their relations with psychosocial functioning suggests parallels with the identity status literature, as mentioned in the introduction. Recent findings in identity research have identified distinct identity status clusters (e.g., Luyckx et al., 2005; Luyckx, Schwartz, Goossens, et al., 2008; Schwartz et al., 2011). Steger, Oishi, et al. (2009) pointed to the similarities between the dimensions underlying the identity status model—commitment and exploration—and the Presence and Search dimensions of meaning.

The five-cluster solution that we found for meaning in life is highly consistent with research on identity formation (Luyckx et al., 2005). We can, for example, see parallels between the Low Presence–High Search cluster and the moratorium status. Person-oriented identity research has suggested that moratorium individuals, in particular, tend to report high levels of maladaptive or ruminative exploration (Luyckx, Schwartz, Berzonsky, et al., 2008). Rumination might represent a (partial) explanation for the negative psychosocial functioning found in the Low Presence–High Search individuals.

Furthermore, the High Presence–Low Search cluster shows similarities with the foreclosed status in describing individuals who accept and internalize ascribed meanings without searching for alternative meaning systems. However, because the wording of all items in the Meaning in Life Questionnaire is in the present tense, we do not know whether individuals reporting low Search for Meaning may have engaged in such searching in the past. Individuals who develop a sense of meaning without searching bear theoretical resemblance to the foreclosed status, whereas those who adopt a meaning system following a period of searching resemble the achieved status. The High Presence–Low Search cluster can thus be a mix of identity achievers and foreclosures.

The Low Presence–Low Search cluster seems similar to the diffusion status (Luyckx et al., 2005; Luyckx, Schwartz, Berzonsky, et al., 2008; Schwartz et al., 2011), which is also characterized by a lack of interest in identity issues. The maladaptive functioning related to our Low Presence–Low Search cluster parallels the elevated levels of illegal drug use, sexual risk behavior, and drunk driving observed in the carefree diffusion cluster (Schwartz et al., 2011). The High Presence–High Search cluster can be a mix of (a) moratorium individuals who are further along the process of resolving their search but are not finished yet and (b) achievers who established meaning in their life but continue to search and refine their sense of meaning. Finally, the undifferentiated cluster is also found in identity research describing individuals very close to the sample mean of identity dimensions. These emerging adults might not engage substantially with existential meaning in life.

Burrow and colleagues (2010) have also noted this correspondence between meaning in life and identity processes, stating that “the process of resolving who one is may provide an essential context for identifying and pursuing goals that are meaningful to the self” (p. 1266). We can assume that, during adolescence and emerging adulthood, the meaning system that one has internalized from one’s parents likely needs to be revised to some extent. Young people are tasked with defining who they are and determining the set of values and beliefs to which they should dedicate their lives. Such a conclusion is in line with the research of Kiang and Fuligni (2010), who found that meaning and identity development appear to coincide and are jointly relevant to young people.

LIMITATIONS

The present results should be interpreted in light of several limitations. First, the present sample, although large and heterogeneous, was not randomly selected. Participants entered the study of their own volition in exchange for extra course credit or to satisfy a research requirement. Moreover, college samples are also likely to be disproportionately female, as was the case in the present study. Because cluster analysis is a data-driven procedure, the nature of the sample is of paramount importance and limits the generalizations that can be drawn. Replication of the current findings with a gender-balanced sample is an important future step. Furthermore, replication of the cluster solution in other age groups is necessary as well. Some preliminary results are available on Flemish adult chronic pain patients confirming our present results, but further research is needed. Second, the cross-sectional design that we used limits the conclusions regarding the directionality of the relationships between meaning in life and psychosocial functioning. Adaptive psychosocial functioning may stimulate, as well as be stimulated by, feelings of Presence of Meaning (cf. Luyckx, Schwartz, Soenens, Vansteenkiste, & Goossens, 2010). Hence, longitudinal studies are necessary to clarify the direction of the relations between meaning and psychosocial functioning.

Furthermore, future research should focus more explicitly (and longitudinally) on identity formation to clarify the overlap versus independence of identity and meaning in life. If, for example, presence of meaning helps to promote identity consolidation (or vice versa), profiles of meaning in life should empirically parallel the developmental structure of identity statuses; and the two categorical schemes should be associated with similar sets of psychosocial correlates. A final limitation is the use of questionnaires. Although questionnaires are appropriate to gather information about subjective and internal concepts such as meaning in life, the sole reliance on self-report measures may have led to an overestimation of some of the correlations among variables due to shared method variance (Podsakoff, McKenzie, Lee, & Podsakoff, 2003). Furthermore, we do not know the extent to which questionnaires with Likert-type scales are able to accurately tap into existential aspects of life. The present findings might be followed up by narrative or mixed-method studies in order to obtain more detailed information on the experiences of meaning and the search for meaning in individuals’ lives.

CONCLUSION

Despite these limitations, the present study has provided some additional insight into the complex interplay between Presence of Meaning and Search for Meaning, and how these constructs may play a role in emerging adult psychosocial functioning. The present findings affirm the important role of Presence of Meaning for optimal psychosocial functioning during the transition to adulthood. In addition, our results offer (a partial) clarification of the nature of the Search for Meaning process by distinguishing between adaptive (High Presence–High Search) and maladaptive (Low Presence–High Search) searching for meaning in one's life. However, further research in this field is necessary in order to replicate the clustering solution in distinct samples and to clarify further the role of meaning in the context of developmental stressors and processes.

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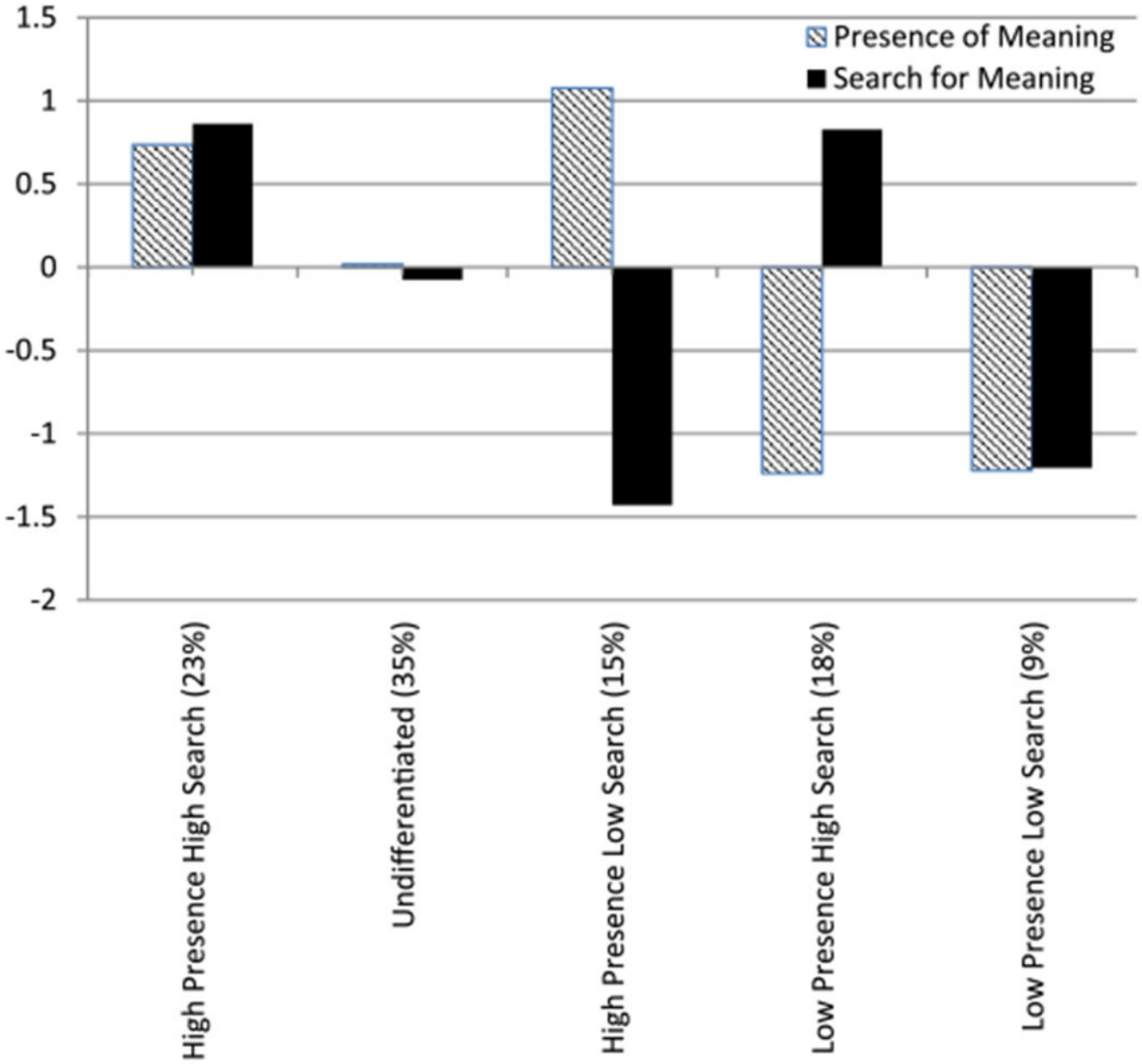

Figure 1.
Z-scores of Presence of Meaning and Search for Meaning for the five clusters.

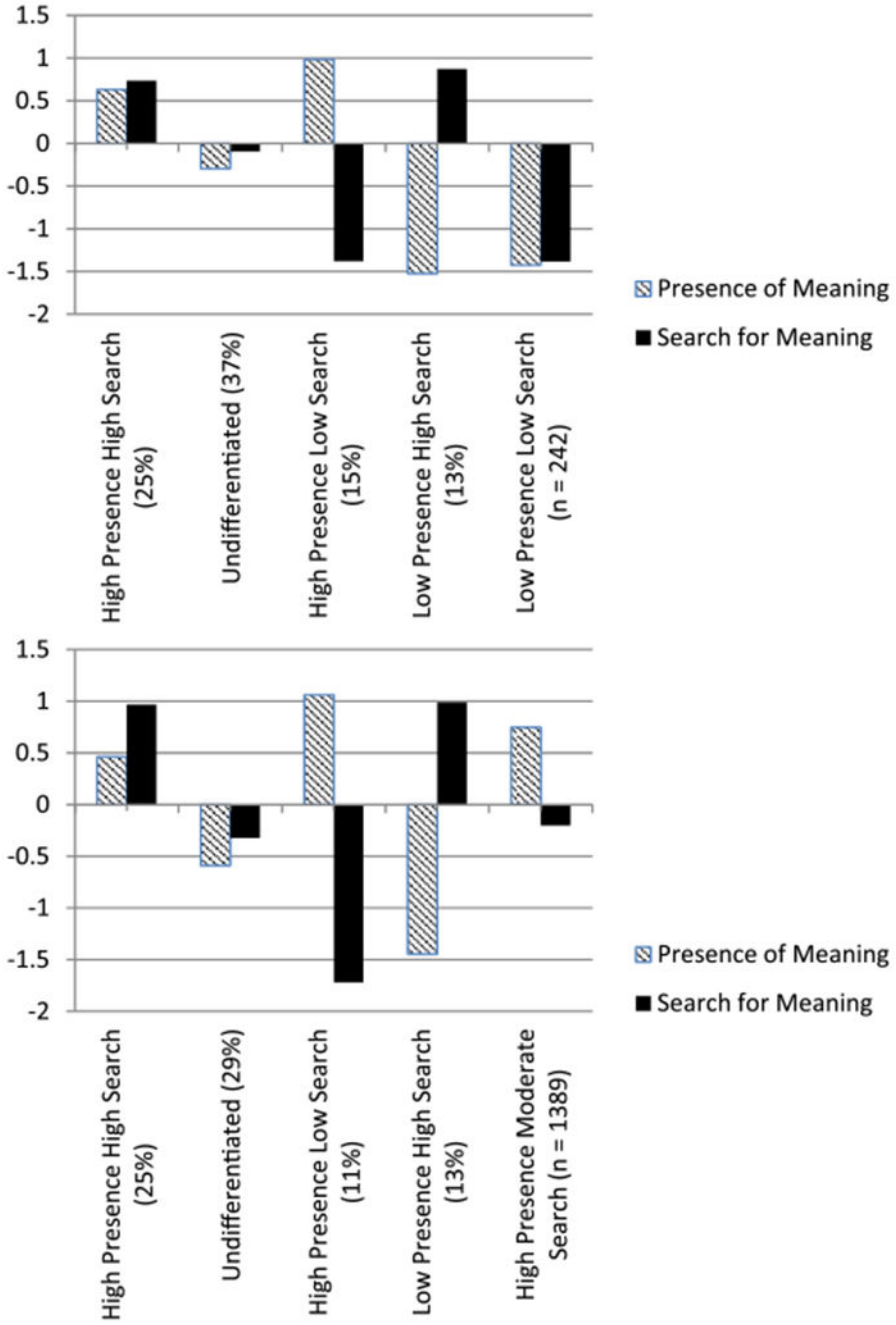

Figure 2.

Z-scores of Presence of Meaning and Search for Meaning for the five clusters in the male subsample (above) and female subsample (below).

Table 1

Univariate ANOVAs and Post Hoc Cluster Comparisons Based Upon Tukey HSD Tests for Aspects of Psychosocial Functioning

	Total	High Presence High Search	Undifferentiated	High Presence Low Search	Low Presence High Search	Low Presence Low Search	*F*(4,7093)	Eta^2	Cronbach' AlphaH
Sample size (*n*)	8,492	23%	35%	15%	18%	9%			
Self-esteem		39.87^a [6.48]	37.67^b [6.46]	42.39^c [6.11]	32.85^d [7.14]	33.16^d [6.50]	431.54**	.20	.89
Eudaimonic well-being		61.79^a [7.93]	57.44^b [7.49]	63.01^c [7.75]	55.02^d [7.40]	51.50^e [8.51]	332.36**	.17	.84
Life satisfaction		22.34^a [4.84]	20.71^b [4.71]	23.35^c [4.80]	17.34^d [5.41]	16.85^d [5.94]	390.88**	.17	.87
Psychological well-being		69.31^a [8.91]	65.30^b [9.41]	71.45^c [8.34]	62.20^d [8.88]	56.60^8 [11.95]	321.98**	.17	.81
Depressive symptoms		54.21^a [12.98]	54.32^a [11.91]	48.90^b [10.85]	58.40^c [11.57]	57.50^c [13.79]	102.61**	.05	.86
Anxiety		40.36^a [16.69]	41.40^b [15.60]	33.68^c [13.80]	46.83^d [15.74]	47.81^d [16.37]	134.90**	.07	.95
Rule breaking		16.89^a [6.57]	18.49^b [8.01]	15.60^c [5.57]	18.58^b [6.94]	24.27^d [10.43]	160.76**	.08	.88
Social aggression		24.41^a [8.12]	25.37^b [8.07]	22.40^c [7.62]	27.04^d [8.00]	28.58^e [9.01]	83.29**	.04	.87
Physical aggression		18.51^a [7.00]	19.82^b [7.70]	17.01^c [6.45]	20.37^d [7.24]	24.08^e [8.92]	108.89**	.06	.84

Note. HSD = honestly significant difference.A cluster mean is significantly different from another mean if they have different superscripts. Standard deviations are noted between brackets.

Table 2

Univariate ANOVAs and Post Hoc Cluster Comparisons Based Upon Tukey HSD Tests for Aspects of Psychosocial Functioning for Men and Women

	Total	High Presence High Search	Undifferentiated	High Presence Low Search	Low Presence High Search	Low Presence Low Search/ High Presence Moderate Search	*F*(4, 7093)	Eta^2
Sample size (*n*)	27%/ 73%	25%/25%	37%/29%	15%/11%	13%/13%	10%/22%		
Self-esteem		39.56^{a}/38.66^{a}	35.88^{b}/35.57^{b}	42.09^{c}/42.43^{c}	32.45^{d}/ 31.89^{d}	32.89^{d}/40.83^{e}	103.97*/ 280.98*	.20/.20
Eudaimonic well-being		60.68^{a}/60.67^{a}	54.94^{b}/54.95^{b}	62.09^{c}/63.07^{c}	54.24^{b}/ 54.81^{b}	50.57^{d}/61.72^{d}	96.42*/ 212.32*	.19/.16
Life satisfaction		21.70^{a}/21.72^{a}	19.48^{b}/19.14^{b}	23.04^{c}/23.33^{c}	16.30^{d}/ 16.93^{d}	15.68^{d}/22.79^{e}	114.71*/ 209.38*	.21/.15
Psychological well-being		67.99^{a}/68.37^{a}	61.66^{b}/62.23^{b}	70.55^{c}/71.37^{c}	60.99^{b}/ 62.23^{b}	54.13^{d}/69.97^{d}	110.09*/ 189.52*	.21/.14
Depressive symptoms		52.91^{a}/55.60^{a}	55.17^{b}/56.44^{a}	48.05^{c}/49.32^{b}	58.09^{d}/59.33^{c}	56.98^{bd}/51.57^{d}	28.26*/ 87.90*	.05/.06
Anxiety		37.76^{a}/42.59^{a}	42.58^{b}/45.03^{b}	32.36^{c}/34.32^{c}	46.27^{d}/ 47.97^{d}	48.39^{d}/37.35^{e}	48.67*/ 102.30*	.09/.07
Rule breaking		18.66^{a}/16.83^{a}	21.72^{b}/19.73^{b}	17.23^{c}/15.07^{c}	20.65^{b}/ 17.66^{d}	26.70^{d}/15.75^{e}	45.15*/ 85.50*	.08/.06
Social aggression		25.21^{a}/24.86^{a}	27.08^{b}/26.28^{b}	23.49^{c}/22.07^{c}	28.24^{bd}/ 26.91^{b}	29.65^{d}/23.30^{d}	22.49*/ 54.91*	.04/.04
Physical aggression		20.50^{a}/18.43^{a}	23.12^{b}/20.63^{b}	18.83^{c}/16.50^{c}	22.35^{b}/ 19.52^{d}	26.12^{d}/17.11^{c}	31.71*/ 65.15*	.06/.05

Note. HSD = honestly significant difference. Male is indicated before the slash;female is indicated after the slash.A cluster mean is significantly different from another mean if they have different superscripts.

* $p < .001$.