A Correlational Study of Positive Concomitants of Well-being

Roopa Mathur and Swati Sharma

Abstract

The present study was designed on correlation pattern to inspect contribution of sense of coherence and meaning in life to well-being of college students. The sample consisted of hundred first year undergraduate students. Measures used for assessment were General Well-Being Scale (Dupuy, 1978), Sense of Coherence Scale (Antonovsky, 1987), and Meaning in Life Questionnaire (Steger et al., 2006). Results demonstrated significant positive correlation of sense of coherence, while insignificant correlation of meaning in life to well-being. Linear regression analysis illustrated that both variables moderately predicted well-being. Further research is required for detailed investigation of practical implication of these results.

Keywords: Sense of coherence, meaning in life, well-being

Introduction

Since World War II psychologists have concentrated their focus primarily on the maladaptive behaviors and weaknesses of individuals which encouraged them to make substantial progress in the curing and diagnosis of mental illnesses (Seligman & Csikszentmihalyi, 2000). However this shift of attention towards negative aspects has led to psychologists underemphasizing positive purpose of research (Seligman & Csikszentmihalyi, 2000; Sheldon & King, 2001). Consequently this deficiency in research on the positive has promoted scholars to explore and emphasize the importance of well-being by focusing on the positive development of individuals. This shift of perspective led to the emergence of the field of positive psychology that is no longer exclusively focused on fixing the mental illnesses of individuals, but emphasize on development of positive traits and strengths of individuals which promote well-being.

In the course of life, an individual faces many challenges, especially while transiting milestones. A similar challenging transition is from high school to college or university life, which brings with it many stressors like increased demand of academic performance, adjustment to new psychosocial environment and dealing with life problems on their own without the support of family and friends (Tao et al., 2000). Reduced support in turn affects one's ability to handle external stressors and may lead to increased psychological distress and decreased academic performance (Dwyer & Cummings, 2001). Depending on the individual's character strengths and virtues, that person either becomes victim of external stressors or stands out victorious. According to Tinto (1993) those who adapt effectively to their new social and academic environment are much more likely to persist in college and ultimately earn a degree. As a result, a great deal of attention has been paid to improving college students' first-year experience (Upcraft et al., 2004).

Positive psychological functioning serves as a potentially important resource for successfully accomplishing this life transition, otherwise known as well-being. As Ryff (1989) has demonstrated, well-being induces skills and perceptions which are crucial for successfully dealing with life's challenges like navigating one's environment, engaging in meaningful relationships and realizing one's fullest potential throughout the life span.

Sense of coherence is individual's one's ability to employ cognitive, affective and instrumental strategies that help to improve the capacity to cope with stress. A strong sense of coherence positively influences how we see the world and enables us to cope successfully with the myriad of stressors that we are exposed to in the course of living (Antonovsky, 1993).

Sense of coherence determines the level of stress a person experiences, hence an individual with strong SOC is more likely to perceive stimuli as non-stressors and to assume that he or she will adapt automatically to the demand, even if the stimuli are appraised as stressors he is more likely to define them as comprehensible, manageable and meaningful. The ability to comprehend the problem also enables the management and identification/regulation of emotion.

The term meaning in life indicates that a person is committed to a concept, framework, or set of values that (a) makes life understandable, (b) offers goals to attain, and (c) provides fulfillment (Battista & Almond, 1973).

Reker and Wong (1988) define personal meaning as the "cognizance of order, coherence and purpose in one's existence, the pursuit and attainment of worthwhile goals, and an accompanying sense of fulfillment". Central to this definition of meaning in life, is seeing purpose in one's existence.

Wong (1989) defines meaning in terms of the PURE model (Wong, 2010, 2011), which emphasizes the four essential components: Purpose, Understanding, Responsible action, and Enjoyment/Evaluation. Life would not be meaningful in the absence of any of these ingredients.

Functionally, these components entail the four major psychological processes for living the good life: *motivational* (purpose, life goals, needs), *cognitive* (understanding, making sense of life), *social/moral* (responsibility, accountability, commitment), and *affective* (enjoyment/evaluation, positive emotions). The main goal of the construct of meaning is to help people find meaning or recover meaning in their lives.

College students face a barrage of challenges in their daily life. Aside from pressure of excelling in academic and extra-curricular activities, they also have responsibilities outside the campus, as a son or daughter, brother or sister and as a friend. These pressures make transition from high school to college a challenging task. Though college life brings with it many opportunities to flourish, the challenges it introduces in a students' life may drag him towards stress if not dealt properly. Thus, it is vital to understand factors influencing their well-being so as to enhance their academic competence, adjustment and coping skills and overall well-being.

The present study addressed itself to investigate the role of sense of coherence and meaning in life in relation to well being of first year college students in this population.

Objectives

1. To study the relationship between sense of coherence and well being.
2. To explore the relationship between meaning in life and well being.
3. To study the contribution of independent variables in predicting well being.

Hypotheses

To fulfill the above aims following hypotheses were formulated:

• Hypothesis 1: There will be positive relationship between sense of coherence and well being.

• Hypothesis 2: Meaning in life will be positively related to well being.

• Hypothesis 3: The independent variables will significantly contribute to predict well being.

Sample

The sample of study consisted of 100 first year undergraduate students (both girls and boys) of various streams (arts, science, commerce, engineering and medical; N = 20 each), studying under semester pattern from different universities across the city. All the participants were of age group 17 to 22 years. Non probability purposive sampling technique was employed to select the sample.

Design

To test the above mentioned hypotheses correlation research design was used.

Tools

General Well-Being Scale [GWBS] - The GWBS (Dupuy, 1978) is a brief questionnaire measuring an individual's subjective sense of well-being and distress over the preceding month. The GWBS addresses how individu-als feel about their 'inner personal state', exploring both positive and negative feelings and covering six dimen-sions: anxiety, depression, positive well-being, self con-trol, vitality, and general health. In regards to anxiety and depression, a lower score indicates a higher level of anxiety or depression. For the other categories, a higher score represents an increase in positive well-being, self control, vitality or general health, respectively. The GWBS total score ranges from 0 to 110. A score above 72 indicates positive well-being, while a score be-low 72 represents stress. Those who scored below 60 were considered to have severe stress. The 18-item version contains 14 items that are rated on a 6-point scale, and four items

that are rated on a 10-point scale. Total scale scores and subscale scores can be derived, with cut-offs defining scores as indicating severe distress, moderate distress, or positive well-being.

Sense of Coherence Scale [SOC-13] - The SOC-13 scale (Antonovsky, 1987): Orientation to Life Questionnaire, short form measures the three components of comprehensibility, manageability and meaningfulness in its three subscales in a seven part Likert -scale (always/ very often-never). High score indicates a high position on the SOC continuum (min =13, max=91). The SOC-13 formula is thoroughly tested and high in reliability in terms of a Cronbach's alpha which for the total scale is in this study is 0.78. It is also validated across cultures, social class, ethnical background, age and sex (Antonovsky, 1987 cited in Eriksson & Lindström, 2006). Scoring was done by adding points marked on likert scale, except reversing the scores for item number 1,2,3,5,7,10 and 12.

Meaning in Life Questionnaire [MLQ] - The MLQ (Steger et al., 2006) consists of two subscales, assessing the Presence of meaning and the Search for meaning in life, each containing five items rated from 1 (Absolutely True) to 7 (Absolutely Untrue). The MLQ has demonstrated good reliability and stability, as well as robust structural validity (Steger et al., 2006). A multitrait-multimethod matrix indicated excellent convergent and discriminant validity. The internal consistency in the present sample was good at both Time 1 (a = 0.83, MLQ-Presence; a = 0.84, MLQ-Search) and Time 2 (a = 0.88, MLQ-Presence; a = 0.83, MLQ-Search). Scoring is kept continuous. Item 9 is reverse scored. Items 1, 4, 5, 6, & 9 make up the Presence of Meaning subscale and Items 2, 3, 7, 8, & 10 make up the Search for Meaning subscale.

Procedure

The proposed study was conducted in two phases with the following procedure:

I. **Phase I**: A sample of 100 first year undergraduates (both girls and boys) was selected on the basis of certain required criteria of inclusion and exclusion for the purpose of conduction of study.

II. **Phase II**: It was administration phase. Variables of the study were evaluated with reference to well being, by administering respective measurement tools. Scores obtained in various test measures were statistically analyzed to serve the purpose of the study. Relationship between variables as predicted in hypothesis was confirmed by interpreting the result.

Measures

Besides correlation analysis, regression analysis was carried out to find predictive value of independent variable for dependent variable. Also, analysis of variance was done to find intergroup differences in prevalence of variables of the study among student from arts, science, commerce, engineering and medical field.

Results

Following results were obtained on statistical evaluation:

Table 1 : Descriptive statistics showing mean and standard deviation of dependent and independent variables

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Well-being	100	21.00	97.00	65.21	15.29197
Sense of coherence	100	31.00	91.00	54.13	10.42012
Meaningfulness	100	9.00	28.00	18.32	3.52159
Comprehensibility	100	10.00	35.00	19.54	5.29040
Manageability	100	7.00	28.00	16.27	4.13865
Meaning in life	100	31.00	70.00	48.63	7.73246
Presence of meaning	100	12.00	35.00	25.05	5.41486
Search for meaning	100	6.00	35.00	23.58	7.14946

Table 1 shows mean and standard deviation of well-being, sense of coherence and meaning in life. The results depict that all the constructs have mean score in average range concluding that sample under study was average in well-being and both independent variables (sense of coherence and meaning in life). The mean score of students on General Well-being scale was 65.21 (SD = 15.29). The score of individuals for sense of coherence was 54.13 (SD = 10.4) which was also average. The individual components of sense of coherence were also in average range with scores as mentioned: meaningfulness 18.32 (SD = 3.52), comprehensibility 19.54 (SD = 5.29), and manageability 16.27 (SD = 4.13). Individuals were slightly above average in "meaning in life" factor as they scored a mean of 49.62 (SD = 8.5).

Table 2 : Correlation matrix showing coefficient of correlation between independent variables and dependent variable

DEPENDENT VARIABLE ⇒	Well- being
INDEPENDENT VARIABLES ⬇	
Sense of coherence	0.389**
Meaningfulness	0.303**
Comprehensibility	0.323**
Manageability	0.307**
Meaning in life	0.115
Presence of Meaning	0.364**
Search for Meaning	-0.152

**Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

Table 2 shows existence of significant positive correlation of well-being with sense of coherence (r = 0.389) showing its momentous contribution towards promoting well-being among incoming college students. The coefficient of

correlation observed for individual components of sense of coherence were, r = 0.303 for meaningfulness, r = 0.323 for comprehensibility, and r = 0.0307 for manageability. Meaning in life was moderately related to well-being (r = 0.115) due to contrasting result of its two dimensions (presence of meaning, r = 0.364; search for meaning, r = -0.152).

Table 3 : Regression analysis showing well-being as dependent variable

DEPENDENT VARIABLE	Well- being			
INDEPENDENT VARIABLES	B (unstandardized coef?cients)	β (standardized coef?cients)	t	Sig.
Sense of coherence	*	*	*	*
Meaningfulness	0.387	0.089	1.019	0.311
Comprehensibility	-0.006	-0.002	-0.020	0.984
Manageability	0.253	0.069	0.660	0.511
Meaning in life	0.123	0.062	0.647	0.519
Presence of Meaning	0.367	0.130	1.348	0.181
Search for Meaning	*	*	*	*

* Excluded Variables

Table 4 : Model Summary

Dependent variable	R	R Square	Adjusted R Square	Std. error of estimate	R Square change	F Change	df1	df2	Sig. F Change
Well- being	0.681	0.464	0.411	11.74001	0.464	8.663	9	90	0.000

Table 3 and table 4 shows the results of linear regression analysis which reveals that the beta value of meaning in life (â = 0.104) and sense of coherence were moderate, showing that these are not noteworthy predictors of well-being.

Table 5 : Analysis of variance among students of different fields

VARIABLES	F	Signi?cance
Well-being	0.550	0.700
Sense of coherence	1.185	0.323
Meaningfulness	1.141	0.342
Comprehensibility	1.746	0.146
Manageability	0.471	0.757
Meaning in life	2.687	0.036
Presence of Meaning	1.251	0.295
Search for Meaning	2.097	0.087

Table 5 shows that all the variables were unvaryingly present in all groups, irrespective of the faculty to which students belonged. The analysis of variance

showed inconsequential difference between groups (arts, science, commerce, engineering, and medical; N = 20 in each group), except for variable, search for meaning dimension of meaning in life.

Discussion

College life is a transitional period, offering opportunities for cementing healthy lifestyle behaviors in students. The transition that young people make between school and university is for many an exciting, yet challenging, time. On the one hand, the university experience provides the opportunity to widen their knowledge base and perspective, to discover self and establish aspects of personal identity and to achieve personal growth (Giovazolias, et al., 2008). On the other hand, this period also poses many difficulties which are novel, practical, academic as well as social, emotional and psychological (Leontopoulou, 2006). The range and degree to which individuals perceive and experience these difficulties also varies. Developing new social and romantic relationships, problems with living accommodation, difficulties with coping with new-found independence, separation anxiety that may be experienced by being away from one's family, financial worries, health care concerns and coping with the demands of academic work are just some of the typical problems that many students will face (Halamandaris & Power, 1997). Individuals vary with the degree to which they cope with these difficulties or faces stress, and the impact it leaves on their well-being.

This study was planned on the confidence that well being offers a fresh and groundbreaking understanding of how psychologists can help students to flourish as human beings by cultivating their best selves. This study aimed to expand horizontally as well as vertically the scope these variables influencing well being.

The first hypothesis of the study was confirmed as results demonstrated significant Pearson coefficient of correlation at 0.01 levels between sense of coherence and well-being (r = 0.389). The individual scores of fundamental concepts of sense of coherence as measured in the study were also significant at 0.01 levels. The results exhibit significant relationship of sense of coherence and its components with well-being.

The relations found in the present study extend the knowledge from the previous findings in showing that SOC is an important salutary resource in association with well-being in college students.

A strong SOC is found to be associated with positive perceived health (Eriksson & Lindström, 2006; Honkinen, et al., 2005), and is found to be inversely and strongly related to psychological symptoms like anxiety and depression (Blom, et al., 2010; Buddeberg-Fischer, et al., 2001; Myrin & Lagerström, 2006; Ristakari, et al., 2008). Moskens, et al. (2011) found that SOC is strongly and positively associated with life satisfaction in students. Researches also support Antonovsky's theory that SOC influences well-being of college students (Togari, et al., 2007).

Thus, the results of present study, supporting the contribution of SOC in promoting well being are in line with previous researches and can help to

promote well-being of college students by identifying and enhancing the SOC of students at intrapersonal as well as environment levels.

The results for second hypothesis were not in line with previous researches (Ryff & Singer, 1998; Wong, 1998; Mascaro & Rosen, 2006; Reker, et al., 1987; Ryff, 1989; Steger & Frazier, 2005; Zika & Chamberlain, 1987, 1992) as no significant relationship was found between meaning in life and well-being (r = 0.115). The "Presence of Meaning" dimension correlated significantly with well-being at 0.01 levels (r = 0.364), and was congruent to "meaningfulness" component of sense of coherence, which measures the extent to which an individual feels that life events make sense emotionally and cognitively (Ryff and Singer 1998) and that demands and difficulties of life situations are worth investing energy in, and are worth engaging with and committing to, which was also significantly related to well-being (r = 0.323). The paradoxical results of present study for insignificant results for relationship between meaning in life and well-being may be due to negative correlation of "Search for Meaning" dimension (r = -0.152). The Meaning in Life Questionnaire (Steger, et al., 2006) collectively measures two dimensions of meaning in life: (1) Presence of Meaning (how much respondents feel their lives have meaning), and (2) Search for Meaning (how much respondents strive to find meaning and understanding in their lives). The negative correlation of 'search for meaning' dimension may have diminished the overall scores on meaning in life factor.

Research has consistently demonstrated relations between measures of meaning and well-being. Those who feel their lives are meaningful are more optimistic and self-actualized (Compton, et al., 1996), experience more self-esteem (Steger, et al., 2006), and positive affect (King, et al., 2006), as well as less depression and anxiety (Steger, et al., 2006) and less suicidal ideation (Harlow, et al., 1986). In addition, clinical populations also report lower meaning in life (Crumbaugh and Maholick, 1964; Frenz, et al., 1993; Nicholson, et al., 1994). The scientific and clinical relevance of the personal meaning construct has been demonstrated in the adjustment literature, in which indicators of meaningfulness (e.g., purpose in life, a sense of coherence) predict positive functioning (French & Joseph, 1999), whereas indicators of meaninglessness (e.g., anomie, alienation) are regularly associated with psychological distress and pathology (Baumeister, 1991; Keyes, 1998; Seeman, 1991).

Previous researches which support the results elucidate Meaning in life as an established indictor of well-being and a contributor to optimal human functioning (Ryff & Singer, 1998) which is conceptualized across two dimensions: the presence of meaning and the search for meaning (Steger, et al., 2008). The presence of life meaning relates to the extent to which individuals consider their lives as significant, meaningful, and purposeful, whereas the search for meaning in life represents individuals' active pursuit to find a sense of significance, meaning, and purpose in life. In college student and adult samples, self-reported life meaning has been correlated positively with well-being (Zika & Chamberlain, 1987) and specifically with life satisfaction, while the search for life meaning has been associated with lower overall well-being (Steger, et al., 2006; Steger, et al., 2008). Thus, the

presence of life meaning and the search for life meaning are distinct dimensions that may potentially impact life satisfaction in different ways.

In the present study, it is observed that higher levels of presence of life meaning correlated with higher levels of well-being and that higher levels of the search for meaning correlated with lower levels of well-being.

Another explanation for incongruity of results of present study with previous researches can be that several researches point out that there are individual differences in how meaning in life is to one's sense of wellbeing. The determinants of well-being and life satisfaction are highly individualized or personalized. It is to each his own, depending on their value orientations (Emmons, 1991). For hedonistic people, they evaluate their daily well-being based heavily on hedonic markers of well being such as avoiding pain and seeking pleasure (Oishi, et al., 1999) and the experience of excitement (Oishi, et al., 2003). On the otherhand, this differs from the 'eudiamonic' perspective which, as Waterman stated, is where one lives in accordance with one's 'true self'. This perspective places emphasis on meaning in life and self-realization, and the extent to which a person fully integrates this into his or her life. In connection with this, it is pertinent to note that Frankl (1963) and Maddi (1970) discussed individual differences in the degree to which people search for meaning in life. When SWB is being measured, what is being measured is how people think and feel about their lives where as psychological well-being is related to fully functioning individual.

In the current study general well-being of individuals was measured, which neither measured components of subjective well-being, nor of psychological well-being. The General Well-being Scale used in the study aimed to estimate the level of psychological distress and positive functioning of an individual, and was oriented towards stress coping abilities of individual so as to adjust well and show healthy psychological state. Thus, the "meaningfulness" component of sense of coherence oriented towards stress coping potential, showed significant result in accordance with hypothesis, while the meaning in life variable which has existential approach was insignificantly related to well being.

College students can become engaged and motivated in their efforts to find meaning in life especially during their graduating years when they tend to be more reflective of their career pathing. Career counseling in schools may focus on improving the subjective well-being of college students by assisting them in exploring their life's meaning in terms of career exploration and career pathing as well. Further researches can contribute in recognizing the experience of meaning in life as an important contributor to health and well-being of college students.

The results of linear regression analysis showed that meaning in life (â = 0.104) and sense of coherence are not noteworthy predictors of well-being. Hence, the results did not support the hypothesis that these independent variables will appreciably predict well-being. Thus, in spite of high correlation with well-being, these variables failed to significantly predict well-being individually.

Finally, the results revealed that sense of coherence was unvaryingly present in all groups, irrespective of the faculty to which students belonged. The analysis

of variance showed inconsequential difference between groups (arts, science, commerce, engineering, and medical; N = 20 in each group), except for variable meaning in life and its search for meaning dimension.

Conclusion

The study aimed to scrutinize the well-being of first year students of college/ universities from various streams (arts, science, commerce, medical and engineering) and to investigate the relationship of sense of coherence and meaning in life with well-being. The results were in accordance with hypothesis for sense of coherence but incongruent for meaning in life. The results were also not in favor of hypothesis, assuming significant predictive value of independent variable for dependent variables.

Implications

The effects of sense of coherence and meaning in life on well-being, pillared on the foundation of enriched empirical review of literature, were evaluated in incoming college students by administering standardized psychological tests. The results of the present study were in congruence with hypotheses and have good practical implication in educational settings, especially colleges. Enriching the trait of sense of coherence and encouraging towards gaining meaning in life can help the teachers, counselors, and administration in developing coping skills, effective and productive functioning, healthy adjustment, better academic performance, in all, promoting well-being of students.

The current research throws light on factors which have a remarkable contribution in promotion and maintenance of well-being in college students and hence the results can contribute towards developing of an efficient health care and enhance program.

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