The structure and predictors of subjective well-being among millennials in India

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Abstract: This study analyzes whether the four components of subjective well-being—satisfaction with life, flourishing, positive affect, and negative affect—are independent, form a hierarchical structure, a composite structure, or a causal structure. It also examines the social and personality factors that predict subjective well-being among millennials in India. One thousand seven hundred and seventy-nine millennials, aged 16–27, attending technical educational institutions in India, participated. Four components assessed subjective well-being. Factual and subjective indicators of income, education, health, and relationships were measured. An inventory assessed Big-Five personality factors. The hierarchical structure, having interrelated components, formed subjective well-being better than other structures. The most important positive social predictor of the hierarchical structure of subjective well-being was satisfaction with personal relationships and the personality predictor was emotional stability. Activities which promote personal relationships and emotional stability can improve the subjective well-being among millennials.

Subjects: Testing, Measurement and Assessment; Social Psychology; Personality

Keywords: Millennials; personality factors; subjective well-being; social factors; structures

1. Introduction

Individuals, born during 1982–1999, are millennials. The beginning of widespread use of information technology following globalization in India during the 1990s coincides with the early years of millennials. They are “digital natives” and almost always connected to the Internet through computers, cell phones, and online social networks. Technology has provided them with a platform from which they can explore new avenues of education, entrepreneurship, innovation, wealth creation, and work-life integration. They can achieve anything that promotes their self-
esteem and narcissism (Twenge & Campbell, 2008). This “great generation” is more educated, more cheerful, more authentic, more cooperative (Howe & Strauss, 2000), and more optimistic than other generations. They maintain relationships, value commitment and a supportive work environment (Hershatter & Epstein, 2010), and prefer clearly defined responsibilities (Graduate Management Admission Council, 2007). In the emerging adult phase of their life, they face physical, financial, social, and psychological challenges, and establish their social and economic identity, join peer groups, and develop mature thinking. They are the most stressed out generation among all generations at present with anxiety, depression, and insecurity (American Psychological Association, 2014).

Millennials are influencing the lives of others worldwide. Globally 62% of the working millennials are managers and in India 85% working millennials have moved to managerial positions in recent years (Karyn, 2015). In India, 52.2% of the population is under 25 years of age as per the 2011 census (The Registrar General and Census Commissioner, 2011). They are the millennials and the potential or actual workforce in India or elsewhere. Given these demographics, this study explores the structure of subjective well-being (SWB) of millennials in India as it assesses their contentment and good life (Park, 2004). Moreover, it aims to find out the social and personality predictors of SWB which can provide pointers for improving their quality of life in the face of transitions and stress.

1.1. Structure of SWB
In most large-scale national sample surveys, one item assesses SWB on the extent of overall satisfaction with life (SWL; Dolan, Peasgood, & White, 2008). Thus, SWL is central to SWB. Diener, Suh, Lucas, and Smith (1999) referred to SWB as people’s affective evaluations of their positive affect (PA) and negative affect (NA), and their cognitive judgment of SWL. While such hedonic well-being is premised on obtaining pleasure, avoiding pain, and having a satisfied life, the eudaimonic well-being is premised on cultivating virtues, relationships, and having a purpose and meaning in life (Ryan & Deci, 2001). Diener et al. (2010) further added a fourth component called flourishing (FL) to incorporate the eudaimonic well-being. A person with SWB is frequently cheerful, infrequently sad, generally satisfied with his or her life (Biswas-Diener, Diener, & Tamir, 2004), and constantly FL.

There is ambiguity concerning the structure of SWB. Structure refers to the configuration or arrangement of components of SWB. Busseri and Sadava (2011), based on tripartite components of SWL, PA, and NA, conceptualized five ways to configure the components of SWB. Later on, Busseri (2015) tested the four structures of SWB—independent components, hierarchical, composite, and causal—based on relatedness or independence of three components on US samples in a two-wave study. The structures were related to socio-demographics and personality variables. Findings supported more explanatory ability of the hierarchical structure where three components of SWB were related but also partially independent and the causal structure where PA and NA predicted SWL. There is no evidence whether such structures hold well in non-US samples. Furthermore, adding FL to the earlier tripartite components of SWB (Busseri, 2015), the concern is how the four components configure to produce SWB. The four structures of SWB are shown in Figure 1 and explained serially.

Diener and Biswas-Diener (2002) suggested that the components of SWB are separate and independent. Accordingly, SWB is measured with SWL, PA, and NA in most of the studies till date. The components of SWB do not share substantial co-variation among them (Westerhof, Thissen, Dittmann-Kohli, & Stevens, 2006). It is the “independent components structure.” If each component is independent of the other, SWB will be a broad assessment of the four components separately. The value of a component for an individual can be estimated by multiplying the standardized loading of an item, obtained from the first-order confirmatory factor analysis (CFA), with its observed value and summing over all items.

An exploratory factor-analytic study has shown that the SWL, PA, and NA components load into a single latent construct (Sheldon & Hoon, 2007). In the second-order CFA, the loading of a component
of SWB will emerge from first-order loadings of items of that component. Because the four components emerge from SWB, the components are interdependent. It is the “hierarchical structure” of SWB. The SWB for each individual will be the summated score of first-order value of a component multiplied by its standardized loading of the second-order CFA and summated over four components.

In the “composite structure”, the four latent components will predict the latent construct of SWB in the second-order CFA. The components are non-interchangeable, precursors to, and predictors of SWB. The SWB for an individual can be estimated similarly as above.

In the “causal structure”, four latent components of SWB are causally related. SWL and FL are ultimate goals of SWB and their precursors are PA and NA. The latent component of PA can predict the latent component of SWL and FL directly and the latent component of NA will predict the same inversely (Schimmack, Schupp, & Wagner, 2008).

In light of the above discussion, replicating the earlier structures of Busseri (2015) with an additional component of SWB, in a different cultural context, among millennials, and finding out a parsimonious structure can specify the arrangements of components of SWB. Also, it will rebuild the confidence of researchers on earlier findings.

1.2. Social and personality predictors of SWB
Research on SWB and its linkage with the social factors of gender, money, education, and health have produced inconclusive findings. In some studies, women tend to report more NA than men (Costa, Terracciano, & McCrae, 2001); in others, men and women do not differ on NA (Louis & Zhao, 2002). However, women are found to experience higher SWB (Arrosa & Gandelman, 2013) than men. The Gallup World Survey of 73 countries found that women in all countries are either happier or on par with men. Given the same life circumstances, women tend to report more happiness than men do (Zweig, 2014).

Income relates positively to quality of life. However, past studies in the Western culture have found that there is a ceiling beyond which income can no longer influence levels of SWB (Diener & Biswas-Diener, 2002). With increasing income, money ceases to increase SWB, resulting in a curvilinear relationship between income and happiness. This is called the “Easterlin paradox” (Easterlin, 1995). Also, the positive relationship between the two is found to be high in poorer countries. Studying college students across 31 nations, economic status is found to correlate more with life satisfaction in poorer nations than in wealthier ones (Diener & Diener, 2009).
Research posits that education is a positive predictor of SWB (Cuñado & de Gracia, 2012). Educated people are more mature cognitively and likely to have a better life, as they have improved skills and make better choices (Kingston, Hubbard, Lapp, Schroeder, & Wilson, 2003). Though evidence supports a positive relationship between each additional level of education and SWB (Blanchflower & Oswald, 2004), the middle level of education has been found to be associated with the highest level of life satisfaction (Stutzer, 2004). A high level of education leads to higher aspirations, which can become difficult to fulfill, producing lower satisfaction (Clark & Oswald, 1996). In addition, being highly educated can make one “overqualified” for a job, which may lower SWB.

Psychological health appears to be more correlated with SWB than physical health. However, special conditions such as heart attacks and strokes reduce SWB (Shields & Price, 2005). Physical illness leads to an increased experience of NA by impairing PA and life satisfaction (Ryan & Deci, 2001). A meta-analytic study found that self-reported health satisfaction was the most accurate predictor of SWB (DeNeve & Cooper, 1998). When others evaluate individuals’ health, such as doctors, the correlation between health and SWB weakens.

Social factors, individually and collectively, cannot explain the variance of SWB among people by more than 3% and 15%, respectively (Campbell, Converse, & Rodgers, 1976). Personality sets the standard to experience life in positive or negative manners and to restore equilibrium following the most dramatic life events, such as winning a lottery, being paralyzed by a car accident, or death of a spouse. Among the personality factors, extraversion and neuroticism are the important predictors for PA and NA respectively, and accordingly are related to life satisfaction (Diener & Lucas, 1999). In another meta-analytic study (DeNeve & Cooper, 1998), among the Big-Five personality factors, neuroticism or emotional instability was the strongest negative predictor of life satisfaction and happiness, and a positive predictor of NA, suggesting the possibility that emotional stability can be the strongest positive predictor of SWL, FL, and PA and the negative predictor of NA. In collectivistic societies, where interpersonal sensitivity, sharing of resources, and conformity to social norms are valued (Suar, 2013), agreeableness may also positively predict SWB.

The relations of social and personality factors to SWB are proposed (Figure 2) on the basis of research on US or European samples. Conceptualizing the social predictors factually and subjectively, it examines whether the relationships have equivalence outside of US or European samples.

In gist, first, the study examines the four structures of SWB to rationalize a structure that best explains SWB. Second, it tests the social and personality predictors of that structure in millennials of India.

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**Figure 2. Predictors of SWB**

Note. “+” indicates positive relations and “-” indicates negative relations.
2. Method

2.1. Participants

One thousand seven hundred and seventy-nine students from engineering and management educational institutions were selected from West Bengal and Odisha in India. Their gender composition and annual income were similar in the two locations. Most of the participants were male and from forward castes. The participants had an annual family income from all sources between (Indian Rupees) 28,000 and 800,000. They aged 16–27, had studied in formal educational institutions for 11–24 years, and were predominately Hindu in both the locations. The participants from West Bengal were slightly older and had more years of study in formal educational institutions than the participants from Odisha (Table 1).

2.2. Measures

Each participant was asked to report his or her demographic information and respond to inventories in a questionnaire. All questions were in English, which is the medium of instruction in the technical institutions in India. Except for socio-demographics, the scores of a multi-item inventory were added and divided by the number of items to keep the value within the range of the response scale.

2.2.1. SWB

SWB was assessed using four components. Five items assessed SWL (Diener, Emmons, Larsen, & Griffin, 1985) and eight items assessed FL (Diener et al., 2010). For both these components, each participant was asked to report his or her level of agreement with each item on a 7-point scale from 1 (Strongly disagree) to 7 (Strongly agree). Twelve items from the Scale of Positive and Negative Experience (Diener et al., 2010) assessed PA and NA. Each participant was asked to report on a 5-point scale from 1 (Very rarely or never) to 5 (Very often or always) how often he or she experienced each feeling.

CFA was carried out using SPSS AMOS 22 on the responses to the four components of SWB. Items belonging to a specific component had significant loading on that component. Items had standardized loadings ($\lambda$) at or above .25. The average variance extracted [AVE = ($\sum\lambda^2$/No. of items) ≥ .50] for each component was estimated for convergent validity. The composite reliability of each component of SWB was ≥ .70 (Table 2).

2.2.2. Social factor

Each social factor was assessed through factual and subjective indicators except gender. Sex, coded as a dichotomous indicator (1 = Female, 0 = Male), was a surrogate measure for gender ($M = .28, SD = .45$). Incorporating factual questions, income was assessed by a participant’s annual

| Characteristics          | DS | West Bengal | Odisha | $\chi^2$ | t     |
|--------------------------|----|-------------|--------|---------|-------|
| Gender                   |    |             |        |         |       |
| Male (%)                 | 448 (71.3) | 833(72.4)  | .22    |
| Female (%)               | 180 (28.7) | 318(27.6)  |        |
| Age                      |    |             |        |         |       |
| M (SD)                   | 20.60 (2.38) | 19.52 (1.5) | 11.72*** |
| Years of study           |    |             |        |         |       |
| M (SD)                   | 15.40 (2.16) | 14.94 (1.66) | 5.37*** |
| Annual income (in lakh, Indian Rupees) |    |             |        |         |       |
| M (SD)                   | 5.98 (6.00) | 5.55 (4.79) | 1.67    |
| Social category          |    |             |        |         |       |
| Backward (%)             | 302 (48.1) | 361 (31.4) | 48.61*** |
| Forward (%)              | 326 (51.9) | 790 (68.6) |        |
| Religion                 |    |             |        |         |       |
| Hinduism (%)             | 550 (87.6) | 1094 (95)  | 51.32*** |
| Islam (%)                | 21 (3.3) | 36 (3.1)  |        |
| Christianity (%)         | 32 (5.1) | 11 (1.0)  |        |
| Others (%)               | 25 (4.0) | 10 (0.9)  |        |

Note. DS = Descriptive statistics.

*p < .05, **p < .01, ***p < .001.
### Table 2. Descriptive statistics of items, validity, and reliability of SWB components and personality factors

| Item                                                                 | M    | SD   | λ^a | AVE^b | CR^c/TRR | χ^2/df | CFI   | RMSEA |
|----------------------------------------------------------------------|------|------|-----|-------|----------|--------|-------|-------|
| **SWL**                                                              |      |      |     |       |          |        |       |       |
| 1. In most ways my life is close to my ideal.                       | 4.39 | 1.72 | .44 | .70   | 6.19     | .98    | .05   |
| 2. The conditions of my life are excellent.                        | 4.59 | 1.63 | .69 |       |          |        |       |       |
| 3. I am satisfied with life.                                       | 4.83 | 1.70 | .77 |       |          |        |       |       |
| 4. So far I have gotten the important things I want in life.        | 4.66 | 1.75 | .53 |       |          |        |       |       |
| 5. If I could live my life over, I would change almost nothing.     | 3.65 | 1.95 | .36 |       |          |        |       |       |
| **FL**                                                              |      |      |     |       |          |        |       |       |
| 1. I lead a purposeful and meaningful life.                         | 5.44 | 1.54 | .58 |       |          |        |       |       |
| 2. I am engaged and interested in my daily activities.              | 5.33 | 1.36 | .51 |       |          |        |       |       |
| 3. My social relationships are supportive and rewarding.            | 5.24 | 1.52 | .47 |       |          |        |       |       |
| 4. I actively contribute to the happiness and well-being of others. | 5.67 | 1.29 | .48 |       |          |        |       |       |
| 5. I am competent and capable in activities that are important to me.| 5.70 | 1.26 | .49 |       |          |        |       |       |
| 6. I am a good person and live a good life.                         | 5.71 | 1.34 | .59 |       |          |        |       |       |
| 7. I am optimistic about my future.                                 | 5.68 | 1.39 | .58 |       |          |        |       |       |
| 8. People respect me.                                               | 5.29 | 1.27 | .52 |       |          |        |       |       |
| **PA**                                                              |      |      |     |       |          |        |       |       |
| 1. Positive                                                         | 3.79 | .99  | .58 |       |          |        |       |       |
| 2. Good                                                             | 3.76 | .91  | .60 |       |          |        |       |       |
| 3. Pleasont                                                         | 3.59 | .99  | .59 |       |          |        |       |       |
| 4. Happy                                                            | 3.80 | .93  | .74 |       |          |        |       |       |
| 5. Joyful                                                           | 3.69 | .96  | .65 |       |          |        |       |       |
| 6. Contented                                                        | 3.11 | 1.07 | .27 |       |          |        |       |       |
| **NA**                                                              |      |      |     |       |          |        |       |       |
| 1. Negative                                                         | 2.34 | .64  | .31 | .71   | 1.96     | .99    | .02   |

(Continued)
### Table 2. (Continued)

| Item | M     | SD    | $\lambda$ | AVE   | CR   | TRR | $\chi^2$/df | CFI   | RMSEA |
|------|-------|-------|------------|-------|------|-----|-------------|------|-------|
| 2.Bad | 2.28  | .98   | .65        |       |      |     |             |      |       |
| 3.Unpleasant | 2.20  | .99   | .62        |       |      |     |             |      |       |
| 4.Sad | 2.45  | .94   | .62        |       |      |     |             |      |       |
| 5.Afraid | 2.25  | 1.11  | .34        |       |      |     |             |      |       |
| 6.Angry | 2.55  | 1.32  | .34        |       |      |     |             |      |       |
| Ten-Item Personality Inventory (TIP) |       |       |            |       |      |     |             |      |       |
| Extraversion | 4.27  | 1.42  | 84.        | .72   |      |     |             |      | .08   |
| Reserved, quiet. | 5.00  | 1.60  | 84.        |       |      |     |             |      |       |
| Agreeableness | 4.45  | 1.89  | 37.        | .72   |      |     |             |      |       |
| Critical, quarrelsome. | 3.12  | 1.78  | 55.        | .72   |      |     |             |      |       |
| Conscientiousness | 4.52  | 1.37  | 48.        | .72   |      |     |             |      |       |
| Dependable, self-disciplined. | 5.08  | 1.92  | 68.        |       |      |     |             |      |       |
| Emotional stability | 4.23  | 1.34  | 29.        | .72   |      |     |             |      |       |
| Aroused, emotional. | 5.13  | 1.37  | 48.        |       |      |     |             |      |       |
| Openness to experience | 5.22  | 1.78  | 55.        | .72   |      |     |             |      |       |
| Conventional, uncreative. | 3.05  | 1.34  | 29.        |       |      |     |             |      |       |

Note. *$\lambda$* = Standardized factor loadings, *AVE* = Average variance extracted, *CR* = Composite reliability, *TRR* = Test-retest reliability for personality factors only.
family income from all sources in the preceding year ($M = 5.70$ lakh Indian Rupees, $SD = 5.25$),
education by his or her years of study in formal educational institutions ($M = 15.11$, $SD = 1.87$),
health by the number of hospital visits in the last year ($M = 1.39$, $SD = 1.03$), and
personal relationships by the number of hours of interaction with others in a week ($M = 31.87$, $SD = 29.76$).
A higher number of hospital visits implied poor health and more hours of interaction with others indicated better relationships. Incorporating subjective questions, each participant was asked to report his or her satisfaction with standard of living ($M = 3.02$, $SD = .80$), educational achievement ($M = 2.66$, $SD = .80$), health ($M = 2.73$, $SD = .90$), and personal relationships ($M = 3.10$, $SD = .91$), which reflected the extent to which his or her needs were met in each social indicator. The subjective assessment was on a 4-point scale from 1 (Not at all satisfied) to 4 (Highly satisfied).

2.2.3. Personality factor
The Ten-Item Personality Inventory (Gosling, Rentfrow, & Swann, 2003) was used to assess the five personality factors. Each factor was assessed by two items, one positively keyed and another negatively keyed. Each participant was asked to report how each item applied to him or her using a 7-point scale from 1 (Disagree strongly) to 7 (Agree strongly).

CFA was carried out on the five factors of personality. The square root of each factor’s AVE was greater than its correlations with the other four factors. The 10 items were re-administered to 50 participants after three weeks. The differences in the scores of the five factors after a gap of three weeks were nonsignificant and paired sample $t$-values ranged from $-0.08$ for openness to experience to $1.62$ for extraversion. The test-retest reliability of five factors was $.60$ $-.72$ (Table 2).

2.3. Procedure
Data were collected during September-November, 2015. The participants were contacted during class hours with prior permission from the institutions and the teachers of the classes. The purpose of the study was explained to participants. They were assured that their identity and responses will be kept confidential, and the data will be used in an aggregate manner for the research purpose only. Participation was voluntary. Those who agreed to participate signed a written consent form. An investigator of the study gave specific instructions and was present in the classroom during the administration of the questionnaire to answer participants’ queries.

3. Results

3.1. Structures of SWB
Each component of SWB lacked convergent validity because each component’s AVE was $<.50$. All four components of SWB had acceptable composite reliability $\geq .70$ (Table 2). For the concurrent validity, the latent components of SWB were correlated. The correlations of SWL with FL, PA, and NA were $.60$, $.50$, and $-0.41$ respectively, FL with PA and NA were $.60$ and $-0.43$ respectively, and the correlations of PA with NA was $-0.74$. All correlations were significant, $p < .001$. High SWL was associated with high FL, high PA, and low NA; high FL was associated with high PA and low NA; high PA was associated with low NA. Thus, the components had concurrent validity. The average values of the components of SWB suggested that millennials were near the two-third level of the response scale on SWL, FL, and PA, and below the midpoint of the scale on NA (Table 2).

To test the four competing structures for explaining SWB, covariance-based structural equation modeling was applied using SPSS AMOS 22. In the first-order CFA of independent components structure, each component of SWB was a latent construct with its indicators. In the second-order hierarchical structure, all components emerged from SWB and each latent component had a disturbance term; in the third composite structure, the four components of SWL, FL, PA, and NA were constrained to 1, 1, 1, and $-1$ respectively and they predicted the latent construct of SWB; in the fourth causal structure, the latent components of PA and NA predicted SWL and FL. SWL and FL had disturbance terms. The results are shown in Table 3.
| Structure          | SLRI/STPC     | Chi-square ($\chi^2$) | df  | CFI $\geq$ .90 | GFI $\geq$ .90 | RMSEA $\leq$ .08 | PNFI | BIC    | ECVI |
|--------------------|---------------|------------------------|-----|----------------|----------------|------------------|------|--------|------|
| 1. Independent components |               | 2743.82                | 275 | .75            | .88            | .07              | .67  | 3118.01 | 1.60 |
| SWL                | .36***-.77    |                        |     |                |                |                  |      |         |      |
| FL                 | .47***-.59    |                        |     |                |                |                  |      |         |      |
| PA                 | .27***-.74    |                        |     |                |                |                  |      |         |      |
| NA                 | .33***-.65    |                        |     |                |                |                  |      |         |      |
| 2. Hierarchical   |               | 1260.05                | 271 | .90            | .95            | .05              | .79  | 1664.18 | .77  |
| SWL-SWB            | .59***        |                        |     |                |                |                  |      |         |      |
| FL-SWB             | .67***        |                        |     |                |                |                  |      |         |      |
| PA-SWB             | .92***        |                        |     |                |                |                  |      |         |      |
| NA-SWB             | -.76***       |                        |     |                |                |                  |      |         |      |
| 3. Composite      |               | 2743.82                | 275 | .75            | .88            | .07              | .67  | 3118.01 | 1.60 |
| SWL-SWB            | .60***        |                        |     |                |                |                  |      |         |      |
| FL-SWB             | .71***        |                        |     |                |                |                  |      |         |      |
| PA-SWB             | .24***        |                        |     |                |                |                  |      |         |      |
| NA-SWB             | -.28***       |                        |     |                |                |                  |      |         |      |
| 4. Causal         |               | 1955.11                | 271 | .83            | .92            | .06              | .73  | 2359.23 | 1.16 |
| PA-SWL             | .47***        |                        |     |                |                |                  |      |         |      |
| PA-FL              | .59***        |                        |     |                |                |                  |      |         |      |
| NA-SWL             | -.16***       |                        |     |                |                |                  |      |         |      |
| NA-FL              | -.12***       |                        |     |                |                |                  |      |         |      |

Note. SLRI = Standardized factor loading range of items for the first structure, STPC = Standardized path estimate for the second, third, and fourth structures. ***p < .001.
In all models, items had significant loadings ($p \leq .001$) on each component of SWB as shown in independent components structure (Table 3). For the independent components and the composite structure, the standardized loadings from a latent component of SWB to its items were identical to the loadings reported in Table 2. In the hierarchical structure, the standardized path estimates of SWL to its items, FL to its items, PA to its items, and NA to its items ranged from .35-.76, .47-.59, .30-.70, and .31-.64 respectively, and in the causal model ranged from .34-.77, .47-.58, .31-.70, and .33-.64 respectively. The standardized loadings from a latent component to its items were similar across four structures. Table 3 shows the significant path values of components in the second-order CFA in hierarchical and composite structures, and of predictors in the causal structure.

The fit indices of CFI (Comparative fit index), GFI (Goodness of fit index), RMSEA (Root mean square error of approximation), and PNFI (Parsimony normed fit index) suggested that the hierarchical structure had better fit than other structures. Chi-square measures the difference between the sample and model-implied covariance matrices. The lower the difference, the better is the model. In comparison of models, it favors a model with lowest value. Bayesian information criterion (BIC), a parsimony fit index, penalizes a complex model, and favors a model with lower value. When choosing among several models, a model with smallest Expected cross-validation index (ECVI) is the consistent model that is expected to fit the data in other samples (Whittaker & Stapleton, 2006). Model comparisons can be made on the basis of differences in $\chi^2$ (Kline, 2011), lowest BIC (Merkle, You, & Preacher, 2016), and smallest ECVI. Observation suggested that the hierarchical structure had the lowest $\chi^2$, BIC, and ECVI. On $\chi^2$ difference, the hierarchical structure was better than the causal structure with same degrees of freedom, $\chi^2_{\text{diff}} (df = 0) = 695.06$. It was also better than the composite and the independent components structure, $\chi^2_{\text{diff}} (df = 4) = 1483.77, p < .001$. On BIC difference, the hierarchical structure had lowest BIC and better than the causal structure, BIC_{diff} (df = 0) = 695.05. The lowest ECVI of the hierarchical structure reaffirmed it as the most consistent model. The parsimonious hierarchical structure of SWB is shown in Figure 3.

Figure 3. The hierarchical structure of SWB
3.2. Predictors of SWB

Univariate normality of predictors was tested. Among the predictors, only the data on income and visits to the hospital had positive skewness of 4.93 and 3.76 respectively. The square roots of the values of the two predictors were taken (Hair, Black, Babin, Anderson, & Tatham, 2006) and that reduced the skewness of data on income to 1.63 and on visits to the hospital to .87. Such transformations achieved normalization (skewness ≤ 2) of the data for applying the covariance-based structural equation modeling. The SPSS AMOS 22 was used. Structural regression with the maximum likelihood estimation method was adopted to examine the social and personality predictors of the hierarchical structure of SWB (Table 4).

The factual and the subjective indicator of each social predictor were correlated in AMOS because those were the two measures of the same variable. The correlations were significant between hours of interaction and satisfaction with personal relationships \((r = .06, p \leq .05)\) and between number of visits to the hospital and satisfaction with health \((r = -.22, p \leq .001)\), and were nonsignificant between income and satisfaction with standard of living \((r = .02)\) and between years of study and satisfaction with educational achievement \((r = .03)\).

The authors of the “Ten-item personality inventory” (Gosling et al., 2003) mentioned that the test is designed to measure broad domains with only two items per factor, and not to achieve the validity and the reliability of factors. However, the square root of each factor’s AVE was greater than its correlations with the other four factors and each factor of personality had discriminant validity but it lacked convergent validity because each factor’s AVE was ≤.50. Moreover, the scores of 50 participants on five factors after a gap of three weeks did not change, suggesting the temporal stability of five factors. All the factors had the test-retest reliability ≥ .60 (Table 2).

The five factors of personality were correlated because those represented the personality traits. All positive correlations were found between extraversion and openness to experience \((r = .18, p \leq .001)\), agreeableness and conscientiousness \((r = .15, p \leq .001)\), agreeableness and emotional stability \((r = .21, p \leq .001)\), agreeableness and openness to experience \((r = .20, p \leq .001)\), conscientiousness and emotional stability \((r = .13, p \leq .001)\), conscientiousness and openness to experience \((r = .19, p \leq .001)\), and between emotional stability and openness to experience \((r = .11, p \leq .001)\). However, the correlations were nonsignificant between extraversion and agreeableness \((r = .02)\), extraversion and conscientiousness \((r = .02)\), and between extraversion and emotional stability \((r = .03)\).

The results of the structural regression (Table 4) revealed that females had higher SWB than males. The factual social indicators of high (low) income and more (fewer) hours of interaction with others per week were associated with high (low) SWB, and more (fewer) visits to the hospital were associated with low (high) SWB. Only years of study did not relate to SWB. The subjective social indicators of high (low) satisfaction with standard of living, education, health, and personal relationships were associated with high (low) SWB. Among the personality variables, high (low) extraversion, agreeableness, conscientiousness, emotional stability, and openness to experience were associated with high (low) SWB.

The standardized path coefficients, shown in Table 4, suggested that among social factors, satisfaction with personal relations was the most important predictor of SWB and among personality factors, emotional stability was the most important predictor of SWB. Compared to factual indicators, subjective indicators were robust predictors of the SWB.

The measurement model suggested that high SWB of millennials was generated from frequent PA, constant FL, high SWL and infrequent NA (Table 4). The important trigger for SWB was the PA.
| Path                                          | SWB | θ  | B  | SE | CR  | P    | Relation          |
|-----------------------------------------------|-----|----|----|----|-----|------|------------------|
| Gender                                       |     | −.05 | −.05 | .03 | −1.99 | .047 | Male <Female     |
| Income1                                       |     | .05  | .03 | .01 | 2.20  | .028 | Positive         |
| Satisfaction with standard of living         |     | .16  | .09 | .02 | 5.86  | .001 | Positive         |
| Years of study                               |     | −.02 | −.01 | .01 | −.74  | .458 | No relation      |
| Satisfaction with educational achievement    |     | .21  | .13 | .02 | 7.40  | .001 | Positive         |
| Visits to hospital in last year¹             |     | −.10 | −.05 | .01 | −3.86 | .001 | Negative         |
| Satisfaction with health                     |     | .11  | .06 | .01 | 4.12  | .001 | Positive         |
| Hours of interaction per week                |     | .10  | .00 | .00 | 4.08  | .001 | Positive         |
| Satisfaction with personal relations         |     | .26  | .14 | .02 | 8.62  | .001 | Positive         |
| Extraversion                                 |     | .11  | .04 | .01 | 4.08  | .001 | Positive         |
| Agreeableness                                |     | .13  | .05 | .01 | 4.68  | .001 | Positive         |
| Conscientiousness                            |     | .14  | .05 | .01 | 5.07  | .001 | Positive         |
| Emotional Stability                          |     | .24  | .09 | .01 | 8.11  | .001 | Positive         |
| Openness to Experience                       |     | .14  | .06 | .01 | 5.16  | .001 | Positive         |
| SWB                                           |     | .65  | 1.00 |   |       |      |                  |
| SWB                                           |     | .73  | 1.29 | .11 | 11.53 | .001 |                  |
| SWB                                           |     | .78  | .50 | .06 | 8.61  | .001 |                  |
| SWB                                           |     | −.68 | −.83 | .07 | −11.55 | .001 |                  |

¹Square root of item values; θ = Standardized path coefficients; χ²/df = 4.47; GFI = .91, CFI = .81, RMSEA = .04.
The structural model had acceptable fit indices. On the absolute fit, relative Chi-square was below the cutoff value of \( \leq 5 \), the GFI was above the cutoff value of \( \geq .90 \), and the RMSEA was below the threshold value of \( \leq .08 \); on the incremental fit, the CFI was below the cutoff value of \( \geq .90 \). The CFI of .81 indicated that the model was 81% better than the independent model. On the parsimony fit index, the Consistent Akaike Information Criterion (CAIC), which adjusts for the sample size, suggested that the structural model (CAIC = 3873.20) was more parsimonious than the saturated model (CAIC = 6617.37) (Hooper, Coughlan, & Mullen, 2008).

4. Discussion
The hierarchical structure, having interdependence among four components, explains millennials' SWB better than other structures. The positive social predictors of the hierarchical structure of SWB are female gender, income, education, health, and personal relations, and the positive personality predictors are emotional stability, extraversion, agreeableness, conscientiousness, and openness to experience. Only years of study did not predict SWB. The subjective indicator of satisfaction with personal relationships and the personality factor of emotional stability are the potent predictors of SWB.

Dienner's (1984) landmark review and the subsequent research (Diener et al., 2010) had conceptualized SWB with four independent components. Not supporting such a structure, Busseri's (2015) study suggests that both the hierarchical and causal structures better explain the socio-demographic and personality factors. This study reaffirms Busseri's (2015) findings in millennials of India that the hierarchical structure explains the data on four components of SWB better than other structures. The four components are interdependent or related. Accordingly, SWB is a second-order construct and is the sum of SWL, FL, and PA minus the NA.

Millennials were near the two-thirds of the scale on all measures of SWB except NA. They were below the midpoint of the scale on NA. This indicates their positivity. Also, PA reflects strongly the SWB compared to other components.

Like a conventional psychological construct with multiple dimensions, SWB can be used as a hierarchical latent construct with four components when relating it to other constructs or finding its difference across participants' attributes or socio-demographics. However, the score of each component can help in interpreting the SWB of sample participants.

In accordance with earlier research, females are found to be happier than males owing to the possibility of satisfying their aspirations (Zweig, 2014). Traditionally, Indian women are homemakers and men are bread earners (Suar, 1994). These roles are changing. More females are entering into higher education than ever before (Ministry of Human Resource Development, 2014) and into professional jobs, which were male bastions. Consequently, both males and females are sharing responsibilities for homemaking and bread-earning. These changes have been bringing about the economic independence among females, their recognition in the educational, social, and organizational context, and consequently improving their SWB.

In the context of the developing country of India, the findings on millennials reaffirm the direct linear relationship between income and SWB as observed earlier in Pakistan (Suhail & Chaudhary, 2004), Taiwan (Tsou & Liu, 2001), Russia (Schyns, 2001), and India (Agrawal et al., 2011). Money allows access to material possessions and entertainment, and enhances images of millennials in peer groups. At the emerging adult stage of life, money partially fulfills the independence in decision making and the material comforts. Accordingly, high satisfaction with the standard of living is associated with high SWB.
High aspirations, borne out of more years of study, are often difficult to meet (Clark & Oswald, 1996), therefore, no relation was found between years of education and SWB. With the increasing enrollment of millennials in professional courses (Ministry of Human Resource Development, 2014), access to higher education is no longer a distant dream. Eventually, this creates a larger pool of emerging adults for the workforce, leading to scarcity of jobs and increasing economic and social pressures on them. Despite more years of study, the lack of tangible returns in the form of job opportunities might make higher education irrelevant to SWB. In contrast, it is the subjective satisfaction with educational achievement which garners self-confidence, social respect, and promotes SWB. Moreover, time horizon of millennials is shorter; they want to achieve everything in a shorter span of time. Possibly, after a point of time, their interest in education shifts to monetary return in the form of a stable professional life, which is likely to be obtained through educational achievement.

Supporting the extant literature, fewer (more) hospital visits and higher (lower) satisfaction with health increase (decrease) SWB (Caporale, Georgellis, Tsitsianis, & Yin, 2009; DeNeve & Cooper, 1998). Healthier individuals being physically fit, can avail more opportunities, fulfill their expectations, and do better than unhealthier ones. Ill health creates hindrances to achieve life goals, induces NA and lowers SWB.

Millennials have higher need for social affiliation and are highly socialized (Hart, 2006). They tend to have meaningful interactions and spend less time alone. More interactions and higher satisfaction with personal relationships associates with higher SWB. Such findings are consistent with Maslow's (1943) theory of needs and Baumeister and Leary's (1995) theory of the need to belong. The former includes the satisfaction of belongingness needs following the satisfaction of physiological and safety needs while the later conceptualizes belongingness as the most fundamental motivating force for humans. When survival needs are adequately met in the residential campuses of the technical institutions in India, satisfaction with relationship becomes important. It is founded on quality of social relations, interpersonal support, and decreased vulnerability to distress. Individuals cultivate sympathy and harmony with others which bring a sense of fulfillment. A satisfying relationship is about reciprocal transactions. More of these transactions yield a never-ending, positive ripple effect. Living in the collective society of India, where the culture stresses cultivating social relationships (Singh, Misra, & De Raad, 2013), the interpersonal relationships of millennials reinforce the social values and beliefs with which they grew up.

Personal relationships are the main ingredient of happiness in eastern and western cultures (Delle Fave, Brdar, Freire, Vella-Brodrick, & Wissing, 2011). Satisfaction with relationship has emerged as the most important social predictor of SWB among millennials. The authorities of technical residential institutions can provide parent care rooms in hostels to facilitate the interaction of parents, guardians, and relatives with their wards. Also, they can implement co-curricular activities involving team work, group discussion, games, and outings to satisfy the relationship needs of millennials.

SWB occurs within a person's experience. Accordingly, the subjective satisfaction with social factors better predicts millennials' SWB than the factual indicators of social factors.

Individuals having extrovert attributes, being outgoing and sociable, experience a sense of belongingness, security, and ward off negative emotions. Individuals having agreeable qualities, being trustworthy, warm, and considerate, are widely cherished in the collectivistic society of India. These attributes contribute to satisfactory relationships, PA, and a positive self-image. Millennials in this study live in environments where planning, diligence, self-discipline, and hard work are required to execute their responsibilities. Those who are conscientious tend to experience SWB because they manage their responsibilities well. The attribute of openness to experience, being
unconventional and intellectually curious, brings laurels and uniqueness to millennials, because these are highly sought after in the technical education of India.

Consistent with previous studies (DeNeve & Cooper, 1998; Hills & Argyle, 2001), emotional stability most potently predicts SWB. Emotional stability builds internal resources for resilience, FL, and SWL (Cohn, Fredrickson, Brown, Mikels, & Conway, 2009), and positively associates with happiness and self-esteem (Hills & Argyle, 2001). Individuals with this trait cultivate calmness, complain rarely about their worries, and easily cope with stressful events. Self-control, equanimity, and tranquility complement emotional stability (Prabhupada, 1986). Cultivating this trait can shield millennials from anxiety, frustration, and stress, build their resilience, further social acceptance, and improve SWB. The practice of culturally accepted yoga and meditation in India can nurture emotional stability and improve quality of life of millennials (Woodyard, 2011).

This study is not free from limitations. First, the study used the sample of educated millennials. Replicating the study with a heterogeneous sample may revalidate the findings. Second, despite the large sample size, it was difficult to disentangle the socially desirable responses from the self-reported responses. Moreover, the social and personality predictors of SWB in this cross-sectional design suggest bi-directional causality rather than cause-effect relationships.

4.1. Conclusion

Following a positivist paradigm of research, the four components of SWB are found to be interdependent. In analysis of data, SWB can be used as a hierarchical structure. The salient predictors of SWB among millennials are: (a) satisfaction with personal relationships for fulfilling their affiliation needs, and (b) emotional stability for their calmness. Considering the past literature, such findings are consistent for millennials and non-millennials, and across western and Indian societies.

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