*Original Research Article*

# Happiness across Age Groups: Findings Based on Three Measures

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## ABSTRACT

Happiness is considered to be an important component of well-being. The paradox of how happiness varies across age has attracted much attention from researchers in recent years. In the present study, levels of happiness across three age groups were examined on a sample of 180: late adolescents ($n$=60), young adults ($n$=60) and elderly ($n$=60). Three happiness measures- Oxford Happiness Questionnaire, Single Item Happiness Scale and Subjective Happiness Scale were employed. Perceived Stress Scale and Positive Relationship with others Scale was used to measure stress and social relationship respectively. Data were collected using convenience sampling. Findings showed that happiness significantly differed across the three age groups. In all the three measures, elderly reported higher happiness than young adults and late adolescents, but no significant differences were found between late adolescents and young adults. The research findings also revealed that happiness differ across age groups even after controlling stress and social relationships. Correlation analysis revealed negative, significant association between happiness and stress, and positive, significant association between happiness and social relationship. Further results showed that happiness was positively associated with age, residence, education, occupation and income, but negatively associated with gender, religion and marital status.

*Keywords:* Happiness; Age; Adolescents; Young Adults; Elderly; Well-being

## INTRODUCTION

The quest for happiness has received tremendous attention from researchers in recent years because everyone wants to be happy and work on ways to improve or maintain his/her happiness level. Existing literature showed that there are various conceptualizations of happiness. Some researchers termed happiness as optimum well-being. [1] Other researchers have defined happiness as high arousal positive affect, [2] in comparison to happiness as balance of positive to negative affect. [3] According to Veenhoven, happiness is a temperamental disposition reflecting a tendency to appraise events and situations in a particular way. He further adds that happiness is supposed to be seen as a lasting state of mind rather than as a passing mood. [4] He later defined *individual happiness* as the degree to which a person evaluates the overall quality of his present life-as-a-whole positively, reflecting how much a person likes the life he/she leads. In simpler terms, happiness may be defined as the subjective experience of being content and is linked with life satisfaction. [5]

Several theories have been advanced in the field of happiness research. The hedonistic theory of happiness claimed that happiness is a balance of pleasure over pain, [6] based on utilitarianism concept which

says that an action is morally right and useful as long as it promotes happiness. Another theory of happiness, based on life-satisfaction and desire-satisfaction, describe happiness as the satisfaction of certain central desires/goals. Shin and Johnson defined life satisfaction as a "global assessment of a person's quality of life according to his/her chosen criteria". [7] The set point theory of happiness, also called the dynamic equilibrium theory, [8] asserts that individuals are born with a predisposition to a certain level of happiness based on genetics and personality. According to Lykken, happiness can be formulated as comprising of the individual's set happiness point (S), the individual's circumstances (C) and voluntary factors that are under the individual's control (V); therefore, happiness could be the sum of S + C + V. [9] Some of the recent researches on happiness showed that happiness is 50% set point, 10% life circumstances and 40% intentional activity. [10] In his early theory of authentic happiness, Seligman [11] claimed that there are three paths to obtain happiness, which are the pleasant life (pleasures), the good life (engagement), and the meaningful life (meaningfulness) but the latest PERMA (*positive emotion, engagement, relationships, meaning and accomplishments*) model of happiness [12] consists five elements of happiness, which are feeling good, finding flow, authentic connections, purposeful existence, and a sense of accomplishment.

### Happiness and Well-being

Literature review reveals that there has been constant overlap between happiness, well-being, subjective well-being, psychological well-being and life satisfaction. [13-16,3] Happiness is considered to be an important component of well-being. [13,16-18] According to Diener, subjective well-being is defined as a person's cognitive and affective evaluations of his or her life. [13] This explains the multidimensional aspect of subjective well-being consisting life satisfaction (cognitive evaluation),

happiness (positive hedonic affect), and low negative affect. [19] According to Ryan and Deci, subjective well-being is made up of three components: life satisfaction, the presence of positive mood, and the absence of negative mood, together often summarized as happiness. [20] Kahneman and Krueger differentiated objective happiness (record of 'instant utility' over the relevant period) from subjective happiness (assessed by asking respondents to state how happy they are) claiming that objective happiness is the extent to which we want a momentary experience we find comfort in, to continue. Simply put, happiness is a state of mind, an emotional state of wellbeing. [21]

### Happiness and Age

Past research indicated that there are three different trends for explaining the relationship between happiness and age. First, the relationship between happiness and age is in the form of U curve. Using a single item happiness scale Blanchflower and Oswald claimed that happiness is highest in late adolescents to early 20's, reaches the lowest in midlife and the pattern is universal. [22] Some researchers, by using different measures as indicators of well-being, reported that positive affect decreases and negative affect increases in older age groups. [23,24] Similarly there are many other studies that support this trend of finding. [25,26]

Secondly, inverted U curve relationship between happiness and age is reported by many other researchers. For example, Easterlin reported a mild inverted U-shaped happiness curve across life span, with lower level at age 18 and a high point around age 50, and then declining thereafter. [27] Similarly, Mroczerk and Kolarz found that an inverted U-shaped relation between age and life satisfaction with peak life satisfaction at around 65 years. [28] Thirdly, there is another trend that shows that the relationship between happiness and age is linear. Thomas et al. claimed that there is a linear improvement in various attributes of mental health despite

possible deterioration in physical and cognitive functioning in older age group. [29] Likewise, Cartensen et al. reported that as adult age, they are able to better regulate their emotions and thus experience increased happiness in later life. [30] In a meta-analysis of empirical studies on happiness, Myers and Diener reported that there is an even distribution of well-being over age, and that happiness does not depend significantly on external circumstances. [31] Deaton claimed that the relation between age and life satisfaction differ across countries and culture. [32] All such research studies highlight the increasing emphasis on well-being vis-à-vis happiness research.

## The Present Research

**Table 1: List of Popular Happiness Scales**

| Scale | Author (year of publication) | Happiness Concept | Item Nos | Subscale | Score Pattern |
|---|---|---|---|---|---|
| Bradburn Affect Balance Scale [33] | Bradburn, 1969 | Happiness is the difference between positive and negative affective states and measure psychological well-being | 10 | - | The scale is scored by subtracting the negative items (no) from the positive items (yes). |
| The Memorial University of Newfoundland Scale of Happiness [34] | Kozma & Stones, 1980 | Measures both short and long-term aspects of well-being. | 24 | - | The scale is scored by subtracting the negative items from positive items. |
| The Satisfaction with Life Scale [14] | Diener et al, 1985 | **"Happiness means pleasure, life satisfaction, positive emotions, a meaningful life, and a feeling of contentment." I**ntroduced the idea of subjective wellbeing | 5 | - | 7-point scale from 7(strongly agree) to1 (strongly disagree) |
| Fordyce's Happiness Measure [35] | Fordyce, 1988 | Happiness is nothing more than an emotion. A longer-term sense of emotional well-being and contentment - a general "feeling that one is happy." | 1 | - | 11-point scale from 0 (Extremely unhappy) to 10 (Extremely happy) |
| The Psychological well-being scale [3] | Ryff, 1989 | A good life is balanced and whole, engaging each of the different aspects of well-being, instead of being narrowly focused. | 14 items for each sub-scale | Autonomy, Environmental Mastery, Personal Growth, Positive Relations with others, Purpose in Life, and Self-Acceptance | Six-point format: strongly disagree (1), moderately disagree (2), slightly disagree (3), slightly agree (4), moderately agree (5), strongly agree (6). |
| Depression-Happiness Scale [36] | McGreal & Joseph, 1994 | This scale represents depression and happiness as opposite ends of a single continuum | 25 | - | Four-point scale ranging from 0 (never) to 3 (often) |
| Subjective Happiness Scale [37] | Lyubomirsky & Lepper, 1999 | A global subjective assessment of whether one is happy or unhappy | 4 | - | Seven-point scale ranging from 1 (not a very happy person) to 7 (a very happy person) |
| Oxford Happiness Questionnaire [38] | Hills & Argyle, 2002 | Measure one's happiness level | 29 | - | Six-point scale from 1 strongly disagree to 6 strongly agree |
| Orientation to Happiness Scale [39] | Peterson, Park & Seligman, 2005 | 'Authentic happiness' can be achieved by combining and balancing three approaches to life: the pleasant life, the good life (or the engaged life) and the meaningful life. | 6 items for each sub-scale | Pleasure Meaning Engagement | 5-point scale from 1(Much less like me) to 5 (Very much like me) |
| Single Item Happiness Scale [40] | Abdel-Khalek, 2006 | The degree to which one judges the quality of one's life favorably. | 1 | - | 11-point scale from 0(Minimum)-10 (Maximum) |
| Pemberton Happiness Index [41] | Hervás & Vásquez, 2013 | Measure integrative well-being that includes remembered and experienced well-being | 23 | - | 11-point scale from 0 (total disagreement) to 10 (total agreement) |

There were two aims in the present study. The first aim was to examine the relationship between happiness and age groups by employing three commonly used multiple measures of happiness. The existing variations in the age-happiness link were re-examined in the present study by taking into account three age groups, namely, late adolescents, young adults and elderly. Measurement of happiness using various psychological tools has been popular method in social psychology researches. A brief compilation of existing predominant happiness measures is provided for further information. Out of compiled happiness scales (Table 1), three most suitable scales were selected after careful scrutiny.

Past studies used different happiness measure across age groups, such as single-item happiness scale, 5-items life satisfaction scale, 11-items positive and negative affect schedule, 11-item version of the life satisfaction inventory, 18-items general well-being schedule and results showed that there are three different trends of age-happiness relationship. The present study would use three happiness measures (Oxford Happiness Questionnaire, Single Item Happiness Scale and Subjective Happiness Scale) which are different from the scales used in the earlier studies on happiness across age group. The use of three different happiness measures in the present study for measuring happiness across age groups would provide a strong basis for the present findings.

**Happiness and Control Variables**

*Stress*: The association between stress and happiness reflect negative impact of stress, deteriorating one's level of happiness as evident in earlier research findings where participants who reported low perceived happiness were found to have higher stress level. [42]

*Social relationship*: Social relationship is considered one of the strongest and most important predictors of well-being. Positive social relationships contribute toward higher level of reported happiness of an individual, as research [43] has shown that people with strong social support report having higher happiness level.

Therefore, the present research was designed with the following objectives:

O1: To examine the relationship between happiness, stress and social relationship among late adolescents, young adults and elderly people.

O2: To explore the influence of socio-demographics of relationship between happiness, stress and social relationship among late adolescents, young adults and elderly people.

Hypotheses

Based on existing literature and objectives, the following hypotheses were framed for the present study.

H1: Elderly people would be happier than young adults and late adolescents.

H2: Happiness across age groups would remain statistically significant even after controlling for stress and social relationship.

H3: Demographic variables would play a significant role on study variables (i.e., happiness, stress and social relationship) of late adolescents, young adults and elderly people.

## MATERIALS AND METHODS
### Participants

A total number of 180 participants (60 late adolescents, 60 young adults and 60 elderly) were selected for the present study. The participants were categorized into three age groups based on Erikson's psychosocial developmental stages: [44] Late Adolescents (16-18 years), Young Adults (25-40 years) and Elderly (60-85 years). Data were collected from 60 late adolescents (30 males and 30 females) who were studying in 10th and 11th class in two different Senior Secondary Schools at Imphal, Manipur. Similarly, data were collected from sixty undergraduate young adults (30 males and 30 females) studying in two different Colleges as well as in Manipur University,

Manipur. Three pensioner's associations at Imphal, Manipur were also approached for collecting data from sixty elderly participants who were retired persons (30 males and 30 females), using convenience sampling.

**Inclusion criteria for three age groups:**

1. *Age Range:*
   a. Late Adolescents in the age range of 16-18 years
   b. Young Adults in the age range of 25-40 years
   c. Elderly in the age range of 60-85 years
2. *Gender:* Male and Female
3. Individuals who gave informed consent
4. Individuals who were educated (tenth standard and above)
5. Late adolescents and young adults who were regularly getting pocket money
6. Elderly who were retired from any service
7. Elderly who were having any source of income
8. Elderly who were living with their spouse at home

**Exclusion criteria for three age groups:**

Individuals with any major physical or mental illness

Elderly with cognitive deficits

**Measures**

The present study employed the following measures:

1. *Oxford Happiness Questionnaire (OHQ):* Originally developed by Hills and Argyle, [38] it is a 29 items happiness measure using 6-point rating scale ranging from (1) *strongly disagree* to (6) *strongly agree* and has been widely used with research demonstrating good internal consistency (α=0.91).The Cronbach's alpha reliability value of OHQ in the present study was found to be α = 0.81. Score ranged from 29 to 174.
2. *Single Item Happiness Scale (SIHS)*: Developed by Abdel-Khalek [40] to assess happiness on a single question (Do you feel happy in general?) based on 11-point rating scale ranging from

lowest (0) to highest (10). The reported temporal stability of the single item happiness measure is 0.86. [40]

3. *Subjective Happiness Scale (SHS):* It was developed by Lyubomirsky and Lepper. [37] It is also known as General Happiness Scale, consisting of four items, with good reliability value of 0.86 as reported in the original scale construction. It uses 7-point rating scale ranging from (1) *less happy* to (7) *more happy,* and(1) *not at all* to(7) *a great deal*. Cronbach's alpha reliability value of SHS used in the present study (α = 0.81) indicate good internal consistency. Score ranged from 8 to 28.
4. *Perceived Stress Scale (PSS):* It was developed by Cohen et al. [45] to measure the degree to which situations in one's life are appraised as stressful. It has fourteen items and each item is scored on five-point scale ranging from 0 (*almost never*) to 4 (*very often*). High score indicates high level of perceived stress and score ranged from 0 to 56.
5. *Positive Relation with Others Scale (PROS):* It was developed by Ryff [3] as one of the sub-scales of Psychological Well-Being Scale. The internal consistency (Cronbach's alpha) of Positive Relationship with Others scale is 0.88 and its correlation with the 20-item parent scale is 0.98. [3] It has fourteen items based on six-point format of 1(*strongly disagree*) to 6 (*strongly agree*) and score ranged from 14 to 84.

**Procedure for Data Collection**

The present study used cross-sectional research design and includes three age groups of late adolescents, young adults and elderly. Prior permissions were sought from the concerned authority (School/College Principals, Heads of various departments at Manipur University and President/General Secretary of Pensioner Associations) for collection of data. Participants for three age groups were randomly selected on the basis of inclusion and exclusion criteria. Thereafter, brief instructions were given before

administration and informed consent was sought from every participant before taking part in the present study. Participants completed a set of five paper-pencil measures in approximately 30-35 minutes. Responses were collected from students at two higher secondary schools for late adolescent age group, students at two teacher-training colleges, and research scholars at Manipur University for young adult age group, and retired employees or pensioners for elderly age group.

## Statistical Analysis

Data collected were statistically analyzed using SPSS 21. Mean (M) and Standard Deviation (SD) were calculated for the three happiness scales, as well as for the two-control variables (stress and social relationship) used in the present study. One-way ANOVA was used to find the significant differences in happiness across the three age groups, i.e., late adolescents, young adults, and elderly. Pearson's product moment correlation was also used to find out the relationship between happiness and control variables. Further, MANCOVA was used to see if happiness across age groups remains significant, even after using control variables.

## RESULTS AND DISCUSSION

Socio-demographic profile of the participants (Table 2) reveals that 44.44% were female and 55.55% were male. In terms of religion, 73.33% of the participants were Hindu, 22.22% were Christian and 4.44% were Muslim. 53.88% of the participants belonged to rural residence and 46.11% belonged to urban residence. The marital status of the participants reveals that 60% were unmarried and 40% were married. In terms of family structure, 50.55% were from joint family set-up and 49.44% were from nuclear family set-up. In terms of education, 48.33% of the participants have formal education till high school, 26.66% had a college degree and 25% had post-graduate degree. Students comprised 57.22% of the participants whereas 33.33% were retired/ pensioners and 9.40% were employed/self-employed. The average monthly income as reported by the participants were Rs. 5,844.00/- and Rs.15,181.00/- for late adolescents age group and young adult age group respectively. The reported average monthly income for elderly age group was Rs. 24,341.00/-.

**Table 2: Socio-demographic profile of three different age groups (N=180)**

| Socio-Demographic Profile | | Frequency and Percentage of Three Age Groups | | | |
|---|---|---|---|---|---|
| | | Late Adolescent (n=60) | Young Adult (n=60) | Elderly (n=60) | Total (n=180) |
| Gender | Female | 30(16.66%) | 30(16.66%) | 20(11.11%) | 80(44.44%) |
| | Male | 30(16.66%) | 30(16.66%) | 40(22.22%) | 100(55.55%) |
| Religion | Hindu | 37(20.55%) | 35(19.44%) | 60(33.33%) | 132(73.33%) |
| | Christian | 17(9.44%) | 23(12.77%) | 0(0%) | 40(22.22%) |
| | Muslim | 6(3.33%) | 2(1.11%) | 0(0%) | 8(4.44%) |
| Residence | Rural | 36(20%) | 35(19.44%) | 26(14.44%) | 97(53.88%) |
| | Urban | 24(13.33%) | 25(13.88%) | 34(18.88%) | 83(46.11%) |
| Marital Status | Married | 0(0%) | 12(6.66%) | 60(33.33%) | 72(40%) |
| | Unmarried | 60(33.33%) | 48(26.66%) | 0(0%) | 108(60%) |
| Type of Family | Joint | 12(6.66%) | 32(17.77%) | 47(26.11%) | 91(50.55%) |
| | Nuclear | 48(26.66%) | 28(15.55%) | 13(7.22%) | 89(49.44%) |
| Education | High School | 60(33.33%) | 10(5.55%) | 17(9.44%) | 87(48.33%) |
| | Graduate | 0(0%) | 20(11.11%) | 28(15.55%) | 48(26.66%) |
| | Post Graduate | 0(0%) | 30(16.66%) | 15(8.33%) | 45(25%) |
| Occupation | Pensioner/Retired | 0(0%) | 0(0%) | 60(33.33%) | 60(33.33%) |
| | Govt. Employee | 0(0%) | 3(%) | 0(0%) | 3(1.66%) |
| | Self employed | 0(0%) | 14(7.77%) | 0(0%) | 14(7.77%) |
| | Student | 60(33.33%) | 43(23.88%) | 0(0%) | 103(57.22%) |
| Average monthly income (Rs.) | | 5,844.00/- | 15,181.00/- | 24,341.00/- | 18,079.00/- |

Descriptive statistics (means and standard deviations) were calculated for

each of the happiness measure scores across the age groups (late adolescents, young

adults and elderly).The data were subjected to normal probability curve and found to be normally distributed. One-way ANOVA showed that OHQ happiness score significantly differs across age. Tukey HSD *post hoc* tests were computed for each of the three happiness scores to examine the effect of age groups on happiness. Post hoc analysis indicated happiness of elderly was significantly greater late adolescents (*p*=.005). Happiness did not differ significantly across young adults and elderly (*p*=.441), and similar result was observed across late adolescents and young adults (*p*=.129).

One-way ANOVA showed that there was significant difference in SIHS happiness score across age groups. Post-hoc analysis indicated that the mean happiness score for elderly was significantly greater than young adults (*p*=.001) and late adolescents (*p*=.001). Medium effect size ($\eta^2$ = .09) was observed. There was no statistically significant difference in mean

scores between young adults and elderly (*p*=.914) on SIHS.

ANOVA revealed that the three age groups differ significantly on SHS happiness score. Post-hoc analysis showed that the mean happiness score of elderly was significantly greater than young adults (*p*=.001) and late adolescents (*p*=.001). Medium effect size ($\eta^2$ = .09) was observed. There was no statistically significant difference in mean happiness score between young adults and elderly (*p*=.980) on SHS.

Pearson's correlation was conducted to examine if there were significant association between the scores of the three happiness measures. Results revealed moderate, significant positive correlation between OHQ score and SIHS score, OHQ score and SHS score and SIHS score and SHS score indicating that all the three happiness measures, used in the present study, are significantly related to each other, but different from each other (Table 4).

**Table 3: Mean, Standard Deviation and F value of happiness and control variables across age groups i.e., late adolescents, young adults and elderly (N=180)**

| Scale | Late Adolescents | | Young Adults | | Elderly | | |
|---|---|---|---|---|---|---|---|
| | Mean | SD | Mean | SD | Mean | SD | *F* |
| OHQ | 116.37 | 15.55 | 122.47 | 17.11 | 126.30 | 18.65 | 5.11*** |
| SIHS | 5.45 | 1.76 | 6.63 | 1.91 | 6.77 | 1.75 | 9.62*** |
| SHS | 35.83 | 7.36 | 40.52 | 6.91 | 40.77 | 6.91 | 9.27*** |
| PSS | 27.15 | 5.13 | 27.23 | 6.29 | 23.38 | 6.21 | 8.34*** |
| PROS | 55.63 | 6.84 | 56.62 | 10.79 | 60.30 | 10.51 | 3.97*** |

N=180 (60 for each age groups), ***$p$<.001
OHQ=Oxford Happiness Questionnaire, SIHS=Single Item Happiness Scale, SHS=Subjective Happiness Scale, PSS=Perceived Stress Scale; PROS=Positive Relation with Others Scale

The first part of the study deals with the cross-examination of happiness across age groups. Results showed that older people (elderly) reported being more happy than younger people (young adults and late adolescents) as observed in the higher happiness score of elderly on all the three happiness measures used in the present study. Correlation analysis also revealed same trend with positive significant correlation between age groups and happiness score. Hence H1 is accepted and it can be said that elderly people are happier than younger people. This is supported by previous research findings that well-being improves with age. [46,47] The finding of the

present study is supported by previous study [29] of linear improvement in mental health beginning in young adulthood. Likewise, Cartensen et al. [30] reported that as adult age, they are able to better regulate their emotions and thus experience increased happiness in later life. The linear improvement of happiness across age groups as elderly reported higher happiness than young adults and late adolescents may be attributed to several factors such as good healthcare, improved social relationship and better life experiences to effectively deal with stressors. It may be inferred that older people are indeed happier than the younger

people according to the present research findings.

It may also be inferred that the present research findings is contradictory to the non-linear age-happiness relationship where it has been previously reported that age affects happiness in a U-shaped curve; young and old people are happier than middle-aged people [25,26] and also contradicts the mild inverted-U curve in happiness across life. [27,28]

Control variables were used to examine whether happiness across age groups is controlled by stress, and social relationship. Table 4 shows that the strength of relationship between happiness and the two control variables is predominantly moderate with correlation($r$) value ranging from 0.23 to 0.51. Also, the correlation between stress and social relationship was significant and negative. Correlation

analysis showed that scores on different happiness scales were significantly associated with the control variables (stress and social relationship). Therefore, MANCOVA was conducted by controlling these variables. Multivariate analysis using MANCOVA with age groups as independent variable and stress as control variable showed that the MANCOVA for happiness measures yielded a Wilk's Lambda value of .83 and a corresponding F $(3,174) = 11.48$, $p<.001$. Further analysis revealed MANCOVA for the three happiness measures using age groups as independent variable and social relationship as control variable yielded a Wilk's Lambda value of .75 and a corresponding F $(3,174) = 18.92$, $p<.001$. It was found that happiness score remains statistically significantly across age groups even after controlling for stress.

**Table 4: Pearson's product moment correlation between happiness, control variables and socio-demographic variables across three age groups- late adolescents, young adults and elderly**

| Scales | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.OHQ | 1 | | | | | | | | | | | | | |
| 2.SIHS | .38** | 1 | | | | | | | | | | | | |
| 3.SHS | .41** | .37** | 1 | | | | | | | | | | | |
| 4.PSS | -.41** | -.23** | -.29** | 1 | | | | | | | | | | |
| 5.PROS | .51** | .23** | .28** | -.37** | 1 | | | | | | | | | |
| 6.Age | .21** | .23** | .23** | -.26** | .20** | 1 | | | | | | | | |
| 7.Gender | -.18* | -.07 | .03 | .15* | -.11 | -.10 | 1 | | | | | | | |
| 8.Religion | -.19* | -.04 | -.12 | .13 | -.12 | -.39** | .01 | 1 | | | | | | |
| 9.Residence | .19* | .23** | .11 | -.14 | .27** | .15* | .07 | -.18* | 1 | | | | | |
| 10.Marital Status | -.20** | -.24** | -.13 | .24** | -.10 | -.88** | .10 | .39** | -.09 | 1 | | | | |
| 11.Family Type | .07 | .13 | .09 | -.08 | .08 | .44** | -.08 | -.27** | .01 | -.43** | 1 | | | |
| 12.Education | .28** | .23** | .19** | -.17* | .26** | .29** | -.05 | -.15* | .17* | -.14 | .17* | 1 | | |
| 13.Occupation | .18* | .18* | .17* | -.27** | .18* | .96** | -.13 | -.37** | .14 | -.89** | .38** | .19** | 1 | |
| 14.Income | .52** | .33** | .30** | -.50** | .40** | .45** | -.29** | -.22* | .29** | -.41** | .23** | .60** | .44** | 1 |

N=180, **$p<.01$, *$p<.05$

1. OHQ=Oxford Happiness Questionnaire, 2. SIHS=Single Item Happiness Scale, 3. SHS=Subjective Happiness Scale, 4. PSS=Perceived Stress Scale; 5. PROS=Positive Relation with Others Scale

Negative significant correlation between stress and happiness score reveals an inverse relationship between happiness and stress. This is supported by earlier research findings that participants who perceived higher levels of stress reported being less happy than those with lower levels of stress. [48] Happiness differs significantly across age groups even after

controlling for social relationship. Thus, H2 is accepted and it can be said that happiness across age groups remains significant even after controlling stress and social relationship. Correlation analysis revealed a positive, significant correlation between social relationship scores and happiness scores indicating a direct relationship between happiness and social relationship as

evident in previous research findings that positive relation with others is one of the best predictors of happiness. [10]

Findings also revealed that there was significant, negative, moderate correlation between stress and social relationship across the age groups, which indicates that they have negative association with each other. In other word, if an individual experiences greater perceived stress, then he/she may experience poor interpersonal relationship with others. Likewise, strong interpersonal relationships may act as buffer against perceived stress.

Pearson's product moment correlation revealed that happiness has significant, positive moderate association with age, and *r* value ranged from 0.21 to 0.23. Happiness has negative association with gender, *r* ranging from -0.07 to -0.18. Negative association was found between happiness and religion with *r* value within -0.04 to -0.19. Happiness has significant, positive association with location of residence, with *r* ranging from 0.11 to 0.23. Interestingly, it was observed that being married is negatively associated with happiness, significant *r* value ranging from -0.13 to -.024. However, type of family structure as in joint/nuclear family set-up was found to have weak, insignificant association with happiness (*r* within 0.07 to 0.13). Education, occupation and income were found to be positively associated with happiness as results showed that happiness and education have significant, positive association (*r* ranging from 0.19 to 0.28), happiness and occupation have significant, positive association (*r* within 0.17 to 0.18) and, income and happiness have strong, significant association with *r* ranging from 0.30 to 0.52. Hence, it can be said that socio-demographic variables such as age, gender, religion, residence, marital status, education, occupation and income play a significant role in happiness.

### Limitations

The present study used small sample size, thus the findings may not be generalized. This may be further explored using larger sample size. Also, use of self-reported test measures is subjected to response bias. This would suggest the use of other measurement tools such as open-end questionnaire and interview technique for future research.

### CONCLUSION

Based on findings of the present study, it can be concluded that there is significant difference in happiness score across the three age groups; older people are happier than the younger people (young adults and late adolescents), even after controlling for perceived stress and social relationship. Across age groups, happiness and perceived stress were negatively associated, and happiness and social relationships were positively associated. Correlational analysis revealed that happiness has significant, positive association with age, gender, residence, education, occupation and income; however it was found that happiness has significant, negative association with religion and marital status.

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