Association of Happiness, Perceived Stress and Academic Achievement in Kashan University of Medical Sciences Students

Abdollah Omidi, Hossein Akbari, Mehrdad Mahdian

Abstract- Happiness has been related with a domain of functions and health circumstances. The aim of this study was to examine the association between happiness, perceived stress and Academic achievement in Kashan University of Medical Sciences Students. We conducted a survey to examine the status of 250 students aged between 18 and 37 years old (mean age = 19.9; SD = 1.54). The demographic and academic indexes were gathered. We also included the assessment of perceived stress. The analyses showed that higher happiness was related to being female and lower age. Those who have felt stressed in normal situations and during tests circumstances showed a lower likelihood (0.73 and 0.82, respectively) of being "very happy". Also academic degree, was related to "subjective happiness" (OR = 0.62). The findings of this study mainly support the relationship between happiness and perceived stress and academic achievement.

Keywords— Academic achievement. Happiness, Perceived Stress, students.

I. INTRODUCTION

Research on happiness and positive psychology has demonstrated the how to positive psychological variables are effect in successful life, enhancing human functioning, and increasing happiness [1]. One of the most constructs related to positive well-being, is happiness. There is increasing study over the past forty years to now. Subjective well-being is defined as the evaluative reaction of a person to his/her life and it can be divided into a cognitive component (cognitive evaluation of life satisfaction) and an affective component (emotional aspects of the construct, such as happiness). There is a large accumulating evidence (cross-sectional, longitudinal and experimental research) that positive well-being and good life style is associated with many resources valued by society, such as healthy behaviors, lower dissocial activity, higher incomes, better mental health, a higher education, a long life, better performance indexes at work, an improved social and personal functioning, lower heavy Internet and game use, etc. [2]-[3].

Also, as regards stress, in general, experimental evidences suggest that there are noticeable associations between positive psychological states, well being, such as happiness, and perceived stress, indicating that there was an negative relationship between these variables [4].

Regarding healthy lifestyles and behaviors, previous studies have found that there is a significant association between optimism and health consequences, such as exercising regularly or higher levels of physical exercise, not drug or smoking use, higher sleep quality and quantity, and prudent diet [5]- [6]. Therefore, happy individuals are less may be to engage in a variety of harmful and unhealthy behaviors, including smoking, unhealthy eating, and abuse of drugs [7]. Therefore, positive mood might effect health by indirect relations to health promoting activities.

Thus, the main aim of this study was to demonstrate associations between subjective happiness and perceived stress and the relationship between happiness and academic achievement.

II. METHODS:

A. Participants

The sample consisted of 250 students, 206 (82%) females and 44(18%) males, aged between 18 and 37 years old (mean age = 19.9; SD = 1.54).

The questionnaires were typically administered in the classes. The inclusion criterion was to belong to formal academy courses of the Kashan of University Medical Sciences. And exclusion criteria were no severe mental disorders, no organic disorders, such as epilepsy. Students were informed that the survey measured activities relevant to health. We informed them written consent was voluntary, anonymous and confidential. Those questionnaires incomplete or inadequately answered were eliminated.

B. Measures

The demographic variables included age, gender, branch of knowledge. Beside perceived stress and academic scores. The Subjective Happiness Scale (SHS) and checklist for perceived stress was also used.

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Subjective Happiness was assessed with the SHS [5]. It consists of four items rated on a 7-point Likert scale, where students had to indicate whether they agreed or disagreed with statements. A single SHS score is computed by taking the mean of responses to the four items, so scores can range from 1 to 7. Previous studies have shown that the SHS has good-to-excellent internal consistency (0.80-0.88), test-retest reliability (0.79), and convergent and discriminant validity across different languages, countries and cultures [5]-[8]-[9]. Perceived stress was measured using two items: "How stressed are you during an ordinary week in the university?" and "How stressed are you during exam periods and ends of semester?" Responses were rated on a scale from 1 to 4, ranging from "not stressed at all" to "very stressed". The scores were become into a binary variable based on the 75th percentile score, with 0 meaning few or not stressed regarding the perceived stress in ordinary days (scores of 3 or above) and for the test situations-related stress (scores of 4).

C. Data Analysis

Data were analyzed using descriptive statistics and presented as mean and standard deviation (SD) for happiness and as percentages for independent categorical variables. Statistically significant results with a significance level ≤ 0.05 were considered. We used SPSS version 18.0 for statistical analysis.

III. Results

Significant association was found between age and gender (p = 0.003). The 206 respondents (82%) were female and 44 (18%) were male with a mean age of 19.9 (SD = 1.54, ranging from 17 to 37 years). Although the distribution by age was relatively homogeneous, females with a mean age of 19.98 ± 1.73 years by comparison with 19.81 ± 1.73 years in males (p = 0.003).

The scores of happiness ratings across gender, age, perceived stress and health behaviors are shown in Table I. There were significant differences between happiness score across age group (p = 0.019), stress in ordinary situations (p = 0.001), stress in test circumstances (p = 0.001) The rest of the comparisons were not significant (see table I). Thus, although effect sizes were small, higher scores on happiness were found among those participants who were younger; felt non-stressed.

Also, the mean total score on "subjective happiness" was 5.23 ± 1.10 (range = 1-7). kurtosis was -0.59 and 0.12. Kolmogorov-Smirnov’s test showed that happiness total score distribution was non normal (p <.001). Those students with higher subjective happiness were more likely to be younger than those with lower happiness (OR = 0.83, p = 0.01). This association was still present when we controlled for the interrelations between the variables in the multivariate analyses (OR = 0.84, p = 0.03). The gender did showed as a significant predictor in the multivariate analysis, it emerged as a significant independent predictor for happiness (OR = 1.45, p = 0.001).

The proportion of students who reported feeling very happy was more common among those participants who reported feeling few or not stressed as well in ordinary as in test/exam situations (OR = 0.65 and 0.68, respectively, p = 0.001). The adjusted ORs were also significant (0.73 and 0.82 with p = 0.001 and p = 0.041, respectively). Also there is a significant correlation between happiness and academic achievement (OR = 1.65, p = 0.001) and perceived stress anticipate significantly low academic grade in students (OR = 0.78, p = 0.05).

<table>
<thead>
<tr>
<th>Variables</th>
<th>Variable categories</th>
<th>% of total sample</th>
<th>Happiness score (mean; SD)</th>
<th>p-value</th>
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<td>Gender</td>
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<td></td>
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<td>20-24</td>
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<td>5.24; 1.10</td>
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<td>Daily circumstances</td>
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<td>Stressed</td>
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<td>5.3; 1.12</td>
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</table>

IV. Discussion

The main objective of the study was to study associations between subjective happiness and academic achievement of Kashan University of Medical Sciences students. A few number of young students in this study reported very high happiness. Even more, if we regarded participants over the mean score, the rate was higher, approximately 53%. These findings are similar to those indicating that 23% (range = 12-27%) of young persons reports being very satisfied with their life as a whole (very positive well-being) across culture [10] or other study showing an average level of "very happy" people of 23.5% (range = 8-35%).
Our results demonstrated that being very happy was more current among female students. It appears that women tend to report higher happiness levels than men [9,10]. Some studies indicate that there is a specific difference in the gender distribution of well-being across world [11]-[12].

Considering to the relationship between age and happiness, we found that happiness was higher in the younger students. This data is comparable with those by Dear et al. [11] that found that life satisfaction was higher in young adults than in the middle-aged or elderly or Bartels et al. [10] who reported a small but significant negative effect of age on mean levels of subjective well-being. Although some studies have found the opposite age effect, demonstrating that aging is a preventative factor of depressive state and/or unhappiness [9], or have not showed any age effect [13], this apparent contradiction has been clarified recently. The hypothesis related to the association between happiness and perceived stress was largely demonstrated, showing that participants who perceived higher levels of stress in ordinary circumstances and during tests situations reported being less happy than those with lower levels of stress. These results are consistent with previous evidence showing that there is an negative relationship between happiness with perceived stress by means of self-reported measures [14]. This study is consistent with previous studies [14] suggesting that one of the main practical implications of this finding is that interventions designed to increase happiness might benefit from the inclusion of activities to manage and cope with stress and that this sort of interventions should also utilize state measures of happiness that are sensitive to increases in happiness that may occur as a result of the intervention.

Our university students sample are not representative of Iranian young adults in general, and the rate of happiness may be different in other sector of the population. Students were tested here by means of self-report items and scales, and more refined assessments with objective verification would have been desirable. Also there is relationship between happiness and academic achievement and perceived stress is negatively correlated with academic achievement in students. These findings are similar to previous studies [6].

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**REFERENCES**