Prediction of general self-efficacy of Allameh Tabatabaei University students based on their life quality

Hayedeh Cheraghali Gol1, Maryam Zadbograf Seighalani2, Amir Masood Rostami1, Ali Asadbeigi3

1Young Researchers Club, Roudehen Branch, Islamic Azad University, Tehran, Iran; 2Department of Psychology, Tonekabon Branch, Islamic Azad University, Tonekabon, Iran; 3Clinical Psychology Department, Roudehen Branch, Islamic Azad University, Tehran, Iran

Received for publication: 25 July 2013. Accepted for publication: 05 September 2013.

Abstract

This study aims to predict general self-efficacy of Allameh Tabatabaei University students based on the quality of their lives. To achieve this purpose, 230 students were selected by multi-stage random sampling method among the students of Economics, Literature and Foreign Languages, Law, Political Science, Social Science, Management, Accounting, Psychology and Educational Sciences. The research method was based on correlation. Participants were tested using quality-of-life (SF-36) and general-self-efficacy (GSE) questionnaires. Statistical analysis was carried out employing multivariate regression. The results showed that there is a positive correlation between general self-efficacy and students’ quality of life components like public health, mental health, happiness-vitality and physical functioning, and there exists a negative correlation between bodily pain and general self-efficacy.

Keywords: quality of life, general self-efficacy, students

Introduction

Growth and development of any society is indebted to that society educational system. Accordingly, countries annually spend considerable amounts of their national income on education. However, there are some factors that may cause some of these investments to be wasted. To study the reasons for this phenomenon, studies have shown that, in order to understand this problem, psychological and social aspects of students should also be considered besides the educational, managerial and structural factors (Zeinalipoor et al., 2009). Students primarily due to their specific conditions including being far away from the family, entering to a big and stressful complex, economic problems and not having sufficient income, large volume of their courses, intensive competitions and etc. are susceptible to loss of mental health (Shariati et al., 2002). It has been known that stress can lead to occurrence of physical and psychological diseases, dysfunction in performance and adaptation ability, and finally decrement in quality of life for the students (Gammon, & Morgan-Samuel, 2005; Ryan, & Twibell, 2000).

“Quality of life” is one of the most fundamental concepts discussed in positive-oriented psychology. The change of belief from the viewpoint that says “only scientific, medical and technologic breakthroughs can improve lives”, to the believe that “the individual, family and social welfare can be obtained from combination of those breakthroughs and the individual values and perceptions about well-being and environmental conditions” can be of initial resources for orientation towards quality of life (Schalock et al., 2002). According to the World Health Organization, “quality of life” means the individuals’ understanding about their position in life in terms of culture, value systems, goals, expectations, standards and their priorities. This is a personal matter and not visible for the others, and is based on individuals’ understanding about various aspects of their lives (Bonomi et al.,...
quality of life generally includes 5 aspects as follows:

1. Physical: concepts such as power, energy, ability to perform daily activities, self-care and etc.
2. Psychological: anxiety, depression and fear are some of examples for this aspect.
3. Social: this aspect is associated with the relationship between individual and his/her family, friends, colleagues and finally the community.
4. Spiritual: this aspect involves the understanding of an individual about his/her life, goals and meaning of life (It has been proved that the spiritual aspect is not a subset of psychological aspect and is considered to exist as an important and independent aspect).
5. Disease-related symptoms or treatment-related changes: in this regard, cases such as pain, nausea and vomiting can be named (Nejat, 2008).

Quality of life correlates with issues such as self-perception, family relationships, the effects of stress and adaptation, having physical and mental healthiness, and self-efficacy (Glozman, 2004). Researchers suggest that there is a positive relationship between quality of life and self-efficacy (Luszczynska et al., 2005; Kuarme et al., 2009; Razavian et al., 2012). Self-efficacy is of key variables on the cognitive-social theory of Bandura (Bandura, 1977; 2000; 2001).

Self-efficacy means an individual’s belief about his ability to cope in special situations, and it affects the rational, behavioral and emotional patterns in different levels of human experience, and determines whether a behavior would be initiated or not, and if it initiates, how much an individual will try to do it and will demonstrate how much effort and stamina to face with the problem (Bandura, 2006). Bandura has presented the issue of “self-efficacy” as a central concept. In this view, the individual’s behavior is under the influence of social forces. So, as much as the environmental conditions form the human, person chooses different situations, affects other people and is affected by them (Kadivar, 2006). The self-efficacy-based beliefs will affect the individuals’ behavior, manner of dealing with problems, emotional health, decision making, and coping with stress and depression (Bandura, & Locke, 2003). People with high self-efficacy choose more difficult goals. They focus on situations and circumstances rather than barriers (Schwarzer, & Luszczynska, 2007). People who have a clear, well-defined, consistent and relatively stable sense of self-efficacy have a better psychological health (Bandura, 1997; Zeidner, & Mattews, 2002; Najafi, & Fooladchang, 2007; Mohammadadamini et al., 2007). Studies show that self-efficacy has relationships with more healthiness, higher success and social integration. This concept has a number of applications in various areas such as academic success, health, career choice and social-political changes (Schwarzer, & Fuchs, 1996). Researches (Chen et al., 1998; Bandura, 2001; Markman, Balkin and Baron, 2002; Zhao et al., 2005; Markman, et al., 2005; Aviram, 2006; Luthans, & Ibrayeva, 2006; Rauch, & Frese, 2007; Hmieski, & Corbett, 2008) state that self-efficacy has impact on the quality of life, job opportunity and entrepreneurship.

Self-efficacy can be an effective factor in educational and instructional situations as a predicting personal trait (Caprara et al., 2005; Salami, & Ogundokun, 2009). Greene et al. (2004) considered self-efficacy as a significant factor in predicting educational performance in specific areas. Wolters (2004) showed in a study that self-efficacy has a significant relationship with high levels of utilization of cognitive and meta-cognitive strategies and also with stability in educational homework completion. Researches demonstrate that the sense of self-efficacy has a relationship with the responsibility about homework completion, the high average scores in final exams (Zimmerman et al., 2005), and in educational improvements and achievements of the pupils and students (Gian et al., 2006; Zychowski, 2007; Carroll et al., 2009; Chang, & Solomon, 2010). In educational environment, the self-efficacy refers to student’s beliefs about his/her ability to accomplish determined learning tasks. Students who have higher self-efficacy use more intention, effort and perseverance to do their determined learning tasks and they are confident in their abilities (Bong, 2001). Self-efficient people mostly try to understand the learning course materials, to think more deeply about the learning materials and to plan for completing their academic tasks (Linnebrink, & Pintrich, 2003). Therefore, self-efficacy is a strong determinant and predictor of the progress level to which students can achieve. Moreover, studies have shown that the quality of life is also associated with the students’ educational performance (Bahmani et al., 2004). Considering the important role of students in the country’s future and also the importance of self-efficacy and life quality in students’ educational performance, the present study was designed and carried out to predict the general self-efficacy of Allameh Tabatabaee University’s students based on quality of their lives, whose results can be used in order to improve the quality of students’ lives and to train and develop self-efficient students for the future.
Methodology

The study method was based on correlations. For data analysis, due to the measurement level of subjected variables, descriptive statistics (central tendency and dispersion indices) and inferential statistics (multivariable regression) were used, and all data processing operations were carried out employing SPSS software.

Statistical Population, Sample and Sampling Method

The subjected population of this study was all the students at Allameh Tabatabaei University. Among this population, 230 students were chosen using multi-stage random sampling method from the faculties of Economics, Literature and Foreign Languages, Law, Political Science, Social Science, Management, Accounting, Psychology and Educational Sciences, and were tested using general-self-efficacy and quality-of-life (SF-36) questionnaires.

Instruments

Schwarzer General Self-Efficacy Test (GSE)

This test was developed in 1995 by Schwarzer and Jerusalem and includes ten questions that measure the self-efficacy based on subjects’ tendencies. Subjected participants indicate the degree of their agreement with each item on the basis of a 4-rank Likert graded from “I totally disagree” with a score of 1 to “I totally agree” with a score of 4. The reliability of this test has been obtained to be ranged between 0.75 to 0.90 using Cranach’s alpha (Schwarzer and Jerusalem, 1995) and a high score on this scale indicates a strong self-efficacy in a person (Ogunyemi, & Mabekoje, 2007; Khoshnevisan, & Afrooz, 2010). In the study of Rajabi (2006) on a student group, Cronbach’s alpha has been reported as 0.82, which demonstrates that this scale is a one dimensional tool by which 69.39% of items can be defined, hence has an acceptable validity.

Quality-of-life Questionnaire SF-36

Health-related quality of life questionnaire (SF-36) has been developed by the International Quality-of-Life Study Organization (Shafipoor et al., 2009). This questionnaire consisted of 36 questions, which measure the quality of life in terms of aspects including general health, physical functioning, physical limitations in role playing, emotional limitations in role playing, bodily pain (physical), social functioning, vitality and mental health (Nikbakhtnazarbadi et al., 2008; Hadi et al., 2010). The questions have a ranking scale which differs from 0 to 5 (score of 0 indicates the worst, and 5 indicates the best possible state for the individual). The total score of questions has been adjusted from 0 to 100, and the quality of life, due to the subjects’ answers, is considered good (between the 75th percentile and above) partially desirable or moderate (between 25th to 75th), and bad (less than 25th percentile) (Shafipoor et al., 2009). This is an international standard questionnaire (Baraz et al., 2007). Validation studies about the questionnaire have confirmed it as a reliable and valid scale for assessing the quality of life in multicultural situations (Pakpoor HajiAgha et al., 2008). The validity and reliability of this questionnaire have also been confirmed in Iran (Baraz et al., 2007). The Cranach’s Alpha coefficient and reliability coefficient have been reported as $\alpha = 0.80$ and $r = 0.80$ and respectively (Bassiri Moghaddam, 2006).

Results

Descriptive Findings: descriptive indices which are related to participants’ scores in components of quality of life and self-efficacy have been presented in Table 1.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Average</th>
<th>Median</th>
<th>Exponent</th>
<th>Standard Deviation</th>
<th>Tilt</th>
<th>Elongation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Efficacy</td>
<td>23.4435</td>
<td>22.000</td>
<td>21.000</td>
<td>6.25609</td>
<td>0.27</td>
<td>-0.697</td>
<td>11.00</td>
<td>39.00</td>
</tr>
<tr>
<td>Physical Functioning</td>
<td>21.8696</td>
<td>21.000</td>
<td>19.000</td>
<td>4.54482</td>
<td>0.206</td>
<td>-0.754</td>
<td>11.00</td>
<td>30.00</td>
</tr>
<tr>
<td>Physical Role</td>
<td>6.1391</td>
<td>6.000</td>
<td>6.000</td>
<td>1.19231</td>
<td>-0.038</td>
<td>-0.697</td>
<td>4.00</td>
<td>9.00</td>
</tr>
<tr>
<td>Mental Health</td>
<td>4.4696</td>
<td>4.000</td>
<td>5.000</td>
<td>1.02221</td>
<td>0.145</td>
<td>-0.608</td>
<td>3.00</td>
<td>8.00</td>
</tr>
<tr>
<td>Vitality</td>
<td>11.6217</td>
<td>11.000</td>
<td>10.000</td>
<td>3.15266</td>
<td>0.106</td>
<td>-0.710</td>
<td>5.00</td>
<td>18.00</td>
</tr>
<tr>
<td>Emotional Role</td>
<td>15.9522</td>
<td>16.500</td>
<td>19.000</td>
<td>3.90637</td>
<td>-0.019</td>
<td>-0.493</td>
<td>7.00</td>
<td>26.00</td>
</tr>
<tr>
<td>Social Functioning</td>
<td>5.4348</td>
<td>6.000</td>
<td>6.000</td>
<td>1.50475</td>
<td>0.084</td>
<td>0.084</td>
<td>2.00</td>
<td>10.00</td>
</tr>
<tr>
<td>Bodily Pain</td>
<td>4.7391</td>
<td>4.000</td>
<td>3.000</td>
<td>2.14165</td>
<td>0.0629</td>
<td>-0.240</td>
<td>2.00</td>
<td>11.00</td>
</tr>
<tr>
<td>General Health</td>
<td>12.1652</td>
<td>12.000</td>
<td>13.000</td>
<td>3.02805</td>
<td>0.449</td>
<td>0.257</td>
<td>6.00</td>
<td>23.00</td>
</tr>
</tbody>
</table>
In components of quality of life, students had the highest average and standard deviation in physical functioning as $M=21.86$ and $SD=4.54$, and the lowest average and standard deviation in Mental Health as $M=4.46$ and $SD=1.02$, and in bodily pain as $M=4.73$ and $SD=2.24$, respectively.

The Inferential findings

Multivariate regression was used for statistical analysis. The summary of regression analysis related to prediction of self-efficacy based on eight components of quality of life has been presented in Table 2.

Table 2. Summary of regression analysis related to the prediction of self-efficacy based on eight components of quality of life.

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Non-Standardized Coefficients</th>
<th>Standard Error of Estimation</th>
<th>Coefficients</th>
<th>Standardized β</th>
<th>T</th>
<th>Significance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.872</td>
<td>3.244</td>
<td></td>
<td></td>
<td>0.269</td>
<td>0.788</td>
</tr>
<tr>
<td>Physical Functioning</td>
<td>0.334</td>
<td>0.082</td>
<td>0.242</td>
<td>4.081</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Physical Role</td>
<td>0.379</td>
<td>0.312</td>
<td>0.072</td>
<td>1.216</td>
<td>0.225</td>
<td></td>
</tr>
<tr>
<td>Emotional Role</td>
<td>0.102</td>
<td>0.328</td>
<td>0.017</td>
<td>0.311</td>
<td>0.756</td>
<td></td>
</tr>
<tr>
<td>Happiness-Vitality</td>
<td>0.723</td>
<td>0.119</td>
<td>0.364</td>
<td>6.058</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Mental Health</td>
<td>0.193</td>
<td>0.096</td>
<td>0.120</td>
<td>2.017</td>
<td>0.045</td>
<td></td>
</tr>
<tr>
<td>Social Functioning</td>
<td>-0.313</td>
<td>0.230</td>
<td>-0.075</td>
<td>-1.359</td>
<td>0.175</td>
<td></td>
</tr>
<tr>
<td>Bodily Pain</td>
<td>-0.305</td>
<td>0.179</td>
<td>-0.154</td>
<td>-2.699</td>
<td>0.041</td>
<td></td>
</tr>
<tr>
<td>General Health</td>
<td>0.342</td>
<td>0.135</td>
<td>0.165</td>
<td>2.537</td>
<td>0.012</td>
<td></td>
</tr>
</tbody>
</table>

$R = 0.644, R^2 = 0.415$ converted $R^2 = 0.394$

$F = 19.611, \text{Sig} = 0.000$

According to the above table, the value of $R^2(0.415)$ shows that 41.5 percent of the changes in variance of general self-efficacy variable can be justified by the eight components of QOL. Also, the observed $R$ value 0.644 shows that the present linear regression model can now be used to predict. In addition, the calculated $F$ value 19.611 is significant at the 99% confidence level. Thus it can be concluded that there is a significant correlation between the eight components of quality of life and general self-efficacy, and at least one of the regression coefficients is significant. The component of physical function has Beta coefficient as 0.242, t value equal to 4.081 and significance level of (0.01) with $99\%$ confidence, happiness-vitality has beta coefficient as 0.364 with the obtained t as equal to 6.058 and significance level of (0.01) with $99\%$ confidence, mental health has beta coefficient of 0.120 and t value as 2.017 and a significance level with $95\%$ confidence, general health has beta as 0.165, t value as equal to 2.537 and significance level of 0.012 with $95\%$ confidence.

Due to the fact that signs of calculated coefficients are all positive except in case of bodily pain, it can be concluded that there is a positive and significant correlation between components of physical functioning, happiness-vitality, mental health and general health, with general self-efficacy. In other words, with increment in components of physical functioning, happiness and vitality, mental health and general health, the general self-efficacy level increases, and there is a negative and significant correlation between component of bodily pain and self-efficacy. In other words, by reducing the amount of bodily pain component, general self-efficacy level increases.

Discussion and Conclusions

In present research which was carried out to predict the self-efficacy of students based on quality of their lives, results showed that there is a positive correlation between general self-efficacy and life qual--
ty components of happiness-vitality, mental health, general health and physical functioning, and there is a negative and significant correlation between general self-efficacy and bodily pain component. In other words, by increasing happiness-vitality, mental health, general health and physical functioning, the general self-efficacy value increases, and by decreasing the amount of bodily pain component, general self-efficacy increases.

Happiness and vitality as one of the most important psychological needs of human has a major influence on the formation of human personality and literally in one word on human life as a whole (Mirshah Jaafari et al., 2002). Most of the philosophers and psychologists agree that the sense of control over behavior, environment, thoughts and feelings is a base and foundation for living happily and well-being. Studies suggest that self-efficacy is one of the factors which have huge impacts on happiness and vitality. Feasel believes that self-efficacy is a critical and necessary factor to achieve happiness. Findings of this study also indicate the existence of a positive correlation between self-efficacy and happiness, a result which is in a good agreement with results of Zarei and Kalantari (2012) who showed that there is a positive relationship between happiness and self-efficacy, and with results of researches that were carried out by Salami (2008), and Ismaeilifar et al. (2011), which demonstrated that there is a positive correlation between self-efficacy and happiness, and self-efficacy can effectively predict the changes related to happiness.

This finding can be explained and defined by the theory of quality of life. In theory of quality of life, low self-efficacy level is of personality traits which predispose the individual to feel unhappy about his/her life (Frisch, 2006). Timothy et al., (1997) argue that people who believe in themselves to be able to coordinate the motivation, cognitive resources, and behavior needed to exercise control over life events, compared with the ones who have not such a belief, feel more happiness about their lives. It seems that efficient movements of people towards their own objectives are the main reasons for the positive changes in their happiness and welfare, and generally, making efforts to achieve internal goals improves the well-being and happiness (Ryan, & Deci, 2000).

The existence of a significant positive correlation between self-efficacy and mental health is one of the other findings obtained from this study, which has a good agreement with the results of researches which were completed by Bandura et al. (1997) and Khoshnevisan and Afrooz (2011) and showed the existence of a positive relation between self-efficacy and mental health, the findings of Bahadori et al. (2012) demonstrating the existence of a significant positive relation between self-efficacy and psychological well-being, and the results of Siu-kau and Stephen (2000), Muris (2002), which showed that people with high self-efficacy level are in better conditions in terms of mental health. In relation to mental health, self-efficacy is the indicator of the issue that a person with high self-efficacy level has the ability to change its negative psychological states (Kim, 2003). In other words, strong beliefs in self-efficacy can lead to having more peace and relaxation, and can be considered as good predictors for mental health (Sarafino, 1998). People having low levels of self-efficacy avoid obstacles rather than dealing with them, and unrealistically choose high standards for themselves, which lead to successive defeats, depression and eventually occurrence of mental health problems for them (Shvlts & Shvlts, 2008).

Also, the findings of this research indicate the existence of positive correlation between self-efficacy and general health and physical functioning, and negative correlation between self-efficacy and bodily pain, which has a good agreement with the results of Ali Mostafaei and Mohammad khani (2012) showing the existence of positive correlation between self-efficacy and general health, findings of Boersbo and colleagues 2010 demonstrating the existence of positive correlation between self-efficacy and general health, and negative one between self-efficacy and bodily pain, and the findings of Ryan and Dzewaltowski (2002), and Sidman, D’Abundo and Sidman and Hirtz (2009) who found that self-efficacy-based beliefs increases the physical activity and functioning in young people and students.

Low self-efficacy can destroy motivation, lowers the aspirations, interferes with cognitive abilities and affects unfavorably the physical health (Ismaeilifar et al., 2011). Bendura believes that the people’s judgment about their own capabilities (self-efficacies) is a function of physical states, which by themselves are under the influence of emotional states and quality of life in all of its aspects as a whole. The study of Smylie (1988) showed that the self-efficacy has a two-way or interplaying relationship with the physical and emotional states of a person, and generally with the quality of his/her life. Researchers believe that, in order to change and improve the people’s self-efficacy level, increasing their physical ability and life quality should be con-
sidered and with decreasing the levels of their stress and negative emotional tendencies, their individual misconceptions about health or their hypochondria will be reformed and modified (Bandura, 1994).

In general, to explain and define the results of this study, it can be expressed that, when students are faced with stressful events, high level of self-efficacy will help them to be able to manage those stressful events and situations, and to protect themselves against the physical and mental problems, and their efficient movements towards their goals will lead to increase the feeling of happiness and vitality in them.

Considering the results of this research which indicated the existence of a positive relationship between self-efficacy and quality of life, and also regarding the theoretical bases of this research which were based on the influence of self-efficacy and life quality on students’ educational improvement and achievement, it’s proposed that the universities’ officials use the regulated programs such as holding instructional workshops in order to improve the students’ life quality and self-efficacy

Acknowledgments

Researchers sincerely appreciate the unwavering advisement and guidance gifted by Dr. N. Bagheri.

References


Muris, P. (2002). Relationship between self-efficacy and symptoms of Anxiety Disorders and
Depression in a Normal Adolescent.


