

Self-Efficacy as a Predictor of Academic Motivation and Life Satisfaction on Vocational Training Students with Guaranteed Job

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Abstract

Individual perceptions and beliefs play a critical role in how people think, feel and behave. Self-efficacy can affect a lot of cognitive process of human endeavor. By determining the beliefs, people decide their power to affect situations. And this determination influence not only the power a person actually has to face challenges but also the choices a person is most likely to make competently (Dixon et al.,2014; Chesnut and Burley, 2015;). People have goals in this life, and some of them are so common such as success, happiness, job satisfaction and life satisfaction. From the education life to the business life there are always graded objectives. In education life, the main goals are completing the education and finding a good job. So, if the education has a job guarantee, it can provide motivation about finish the education. And this hope with self-efficacy can affect all feelings about life. From this point of view, the purpose of this research is to examine the effect of self-efficacy on motivation and life satisfaction in vocational education which includes employment guarantee. Vocational education students feel like a worker more than others because of the job guarantee and the nature of technical education. So this situation makes them a good sample for this research. They choose being part of business life with applied training, when they are students, so they determine the life and career path already now. All 152 students take part in the survey which includes 23 items for self-efficacy, 22 items for academic motivation, 5 items for life satisfaction and 16 questions for demographic factors. According to the results, there are positive effects of self- efficacy and it's sub-dimensions on motivation and it's sub-dimensions ($R=0,426$; Adjusted $R^2=17,6$) and life satisfaction ($R=0,422$; Adjusted $R^2=17,3$) for this sample.

Keywords: Vocational education, employment guarantee, self-efficacy, academic motivation, life satisfaction.

JEL Codes: P46, E24, D23, I23, J28

Introduction

Individual perceptions, beliefs and behaviors consist of a lot of factors of individual and environmental. According to the social cognitive theory, when personality is developing, observational learning and social experience take role in this process. So, mostly all actions or behaviors include social and cognitive process. Similarly, social learning theory explains the acquisition of skills with a social group. According to the theory, people learn from others by observing, imitating and modeling (Mischel, 1973). So both theory explain the perceptions and behaviors with social process, it means environmental actions affect individual process and outcomes. Self-concept theory and attribution theory shed light on individual process. First theory explain the perceptions and interprets of individuals' existence and focus people' impressions and organization throughout life. Second one focuses people' attribution of events and explains to relationship between beliefs and self-perceptions (Baumeister, 1982). All these theories explain some terms such as self-efficacy, academic motivation and life satisfaction effectively. Shortly, self-efficacy can be defined as personal capabilities and beliefs about finishing a task, or education successfully (Bandura, 1993). Motivation is about

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the force of person to behaviour (Wigfield and Eccle, 2002) and life satisfaction is a kind of expression about person's attitude of life. Self-efficacy, motivation and life satisfaction are some of the main individual's factors that affect the outcomes of education (Voorman et al., 2010). Also employment guarantee of education can be a factor which affects the success significantly.

In this study, self-efficacy, academic motivation and life satisfaction is examined as the individual perceptions. Self-efficacy as the first variable has four dimensions in education literature which known start to behavior, continue the behavior, finish the behavior and struggle with the barriers (Gözüm, 1999). Secondly, academic motivation has three dimensions which known as intrinsic, extrinsic and situation of motivation (Vallerand et al., 1992). Finally, life satisfaction is a variable by itself.

Bandura (1977) studied the term of self-efficacy as a part of behavioral change theory. The theory encompasses several concepts but the most prominent being self-efficacy, the trans-theoretical model of behavior change. Self-efficacy is about the belief of control a situation and leading an ability to behave for beginning and ending. So the dimensions of self-efficacy include behavioral steps (Schwarzer and Fuchs, 1995).

Educational success is about psychological, social and physical conditions (Seven and Engin, 2010). So we can say that motivation, which is a psychological term, is an important part of success in all life steps. Motivation is defined as a force of acting basically. This force starts from the beginning of the behavior and continues to the last of behavior and it also includes behavioral interest, attention and willing (Vallerant et al., 1992).

As another variable life satisfaction can explain with fulfilling the needs, expectations and desires about life (Neugarten and Tobin, 1961). It is assessed in terms of mood, satisfaction with relations with others and with achieved goals, self-concepts, and self-perceived ability to cope with daily life (Uma Devi et al., 2015).

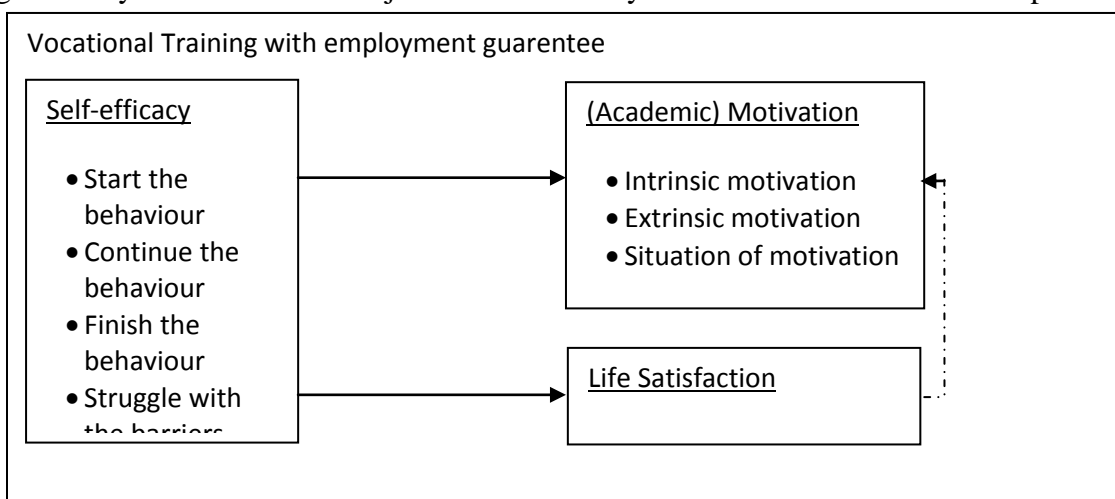
There are important studies about outcomes of self-efficacy. One of them is Schwarzer and Fuchs' (1995) study which includes effect of self-efficacy on psychological illness, success and career choosing. Also Gözüm (1999) finds that self-efficacy leads to decrease of stress level. Andrew' (1998) study is about education and he finds that there is a significant relation between self-efficacy and educational success. Similarly, Chacko and Huba (1991) find that self-efficacy has a rise effect on academic performance, so do Dixon et al. (2014).

Materials and Methods

In this part, firstly, methodological information about the survey and the model of the study are given, and then the results of research are discussed in detail. Finally, directions for future research are indicated in the study.

The aim and the model of study

The main objective of the study is to see whether self-efficacy has effects on academic motivation and life satisfaction in the students of vocational training with job guarantee significantly. Also the other objective of the study is to examine the relationships between



life satisfaction and academic motivation. So, it is determined that self-efficacy is independent variable and it has four sub-dimensions which known start the behavior, continue the behavior, finish the behavior and struggle with the barriers. First dependent variable is academic motivation which has three sub-dimensions as intrinsic motivation, extrinsic motivation and situation of motivation and life satisfaction. And the second variable is life satisfaction which has not sub-dimensions.

Figure 1: The Model of the Study

There are two main hypotheses in the study as “self-efficacy and sub-dimensions of it affect academic motivation and sub-dimensions of it positively” and “self-efficacy affects life satisfaction positively”. Also the sub hypothesis is “life satisfaction affects academic motivation positively”. Additionally, the group differences about variables are examined too.

Participants of the Study

All participants are a number of 152 vocational training students who deserve of technical education for job. All participants are man, and only three of them are woman because technical education is about the aircraft engine. Most of them are between 23-27 years old (65%), then 18-22 years old (20%) and the rest are 28-32 years old (M: 1,93; S.D:0,57). All of them are single, only three of them get married (M:1,99; S.D:0,16). Most of them have associate degree (61%), then bachelor degree (28%), three of them have post graduate and the rest are high school graduate (M:2,27; S.D:0,60). Branch of last education are technical sciences (60%), educational sciences (21%) and aviation (19%) sequentially (M:1,83; S.D:0,51). Grade point averages of the last educations are between 2-2,99 (40%) and 3-3,99 (28%) out of four mostly (M:2,36; S.D:0,55) .

47 % want to work as a technician, so they are happy being a part of this education while, 43% want to work another job (M:2,12 ; S.D:2,67). The rest are in indecision about their career in despite of job guarantee. The other question promote previous one, because 76% of participants choose this education for favorite job, 13% choose only for job guarantee and the rest choose for family pressure (M:1,49; S.D:1,04). Family education level is primary school for mothers (48%) and high school for fathers (33%) mostly. And only 14% of mothers have a job. They are first child of the family (38%) and the live city center (46%) frequently.

Job guarantee make them motive by 80% and the rest are in indecision (M:1,23; S.D:0,56). 41% of them want to take this education no matter if there is not a job guarantee, 33% of them come for job guarantee and the rest are in decision (M:1,78; S.D:0,78).

Data Collection Tools

Self-efficacy scale is developed by Bandura (1993), academic motivation by Vallerand et al. (1992) and life satisfaction by Deiner and Larsen (1985). All 50 items are measured with 5 point Likert scale in the survey which also includes some questions about demographic information. Additionally, the scales of variables are tried by different researches such as Gözümlü (1999), Altun and Yazıcı (2010), so the scale is valid for the culture of the sample too. The value of Cronbach Alpha has found to be 89,8%, which is greater than 50%.

Procedures

The survey was applied together to students in vocational training in April of 2014. All students are accepted to this training by provided passing the exam of beginning. After the training they must pass the final exam for job. At that year, there is only one vocational training for job, so all students take part in this survey. It means, complete inventory method

was used in the study (N: 152). Participants were informed about the objective of the study and were presented with detailed training of instruments used.

Data Analysis and Findings

The data collected via the survey have been analyzed statistically with arithmetic mean, t test, Pearson correlation analysis, stepwise multiple linear regressions using statistical program on the computer.

The descriptive statistics of research are summarized in table 1 and table 2, which includes means and standard deviations of variables of “self-efficacy”, “academic motivation” and “life satisfaction”. First table shows the points of “self-efficacy” variable and sub-dimensions of it.

Table 1. Descriptive Statistics of the Vocational Training Students’ Levels of Self-Efficacy

Dimensions	N	Mean	S.D.
Start to the behavior	152	4,116	1,046
Continue the behavior	152	4,128	1,044
Finish the behavior	152	4,035	0,984
Struggle with the barriers	152	3,265	1,147
Total Self-efficacy	152	3,991	1,045

The vocational training students’ point average of “self-efficacy” is 3,991 with 1,045 standard deviation. In detail, point average of “start the behavior” is 4,116, while “continue the behavior” is 4,128 and the smallest sub-dimension is “struggle with the barriers” with 3,265. The other sub-dimension is “finish the behavior” with 4,035 point of average. The results of the study indicate that the students find self-efficacy “I agree” at start to behavior, continue the behavior and finish the behavior, only sub-dimension of “struggle with barriers” under this level.

For self-efficacy variable which includes start the behavior, continue the behavior, finish the behavior and struggle with the barriers, there is not a meaningful difference between groups about demographic factors such as sex, parents education, income, class and grade point average ($p > 0.05$).

Also, table 2 shows that means and standard deviations of “academic motivation” as other variable. The biggest point is 4,063 about academic motivation and it belongs to “situation of motivation” of sub-dimension. Then, “intrinsic motivation” sub-dimension comes with 3,986 and “extrinsic motivation” sub-dimension with 3,847 is very close with other sub-dimensions. Lastly, mean of total academic motivation is 3,967 with 0,905 standard deviation. This results show that the students find “situation of motivation” sub-dimension “I agree” degree and they find total academic motivation “neither agree nor disagree”, but the point of academic motivation is very close with “I agree” point.

Table 2. Descriptive Statistics of the Vocational Training Students’ Levels of Academic Motivation

Dimensions	N	Mean	S.D.
Intrinsic motivation	152	3,986	0,867
Extrinsic motivation	152	3,871	0,909
Situation of motivation	152	4,063	0,975
Total Self-efficacy	152	3,967	0,905

The last variable is “life satisfaction” which has 3,025 mean level and 1,064 standard deviation. It means that the participants choose the “neither agree nor disagree” level for this

variable. So the self-efficacy and academic motivation variables have bigger points of means than life satisfaction.

T-test results show that there are some differences between means of groups. Life satisfaction has different means between two groups ($p:000$). First group choose this vocational training program whether the employee guarantee occurs or not (M:3,322; N:62). Second group do not choose this education program, if there is not any job guarantee (M: 2,706; N:49). Also the students which have job guarantee has higher points of motivation (M:4,049; N: 121) from others (M: 3,698; N:14) who have not any guarantee ($p:0,004$).

After the descriptive statistics and t-test, correlation analysis is needed to show relations between all variables which are self-efficacy, academic motivation, life satisfaction and sub-dimensions of them.

Table 3. Pearson Correlation Analysis of the Relations between Self-efficacy, Academic Motivation, Life Satisfaction

Dimensions		Academic motivation	Intrinsic motivation	Extrinsic motivation	Situation of motivation	Life satisfaction
Self-efficacy	r	0,390**	0,372**	0,219**	0,347**	0,383**
	p	0,000	0,000	0,007	0,000	0,000
	N	152	152	152	152	152
Start to behavior	r	0,247**	0,205*	0,109	0,265**	0,305**
	p	0,002	0,011	0,183	0,001	0,000
	N	152	152	152	152	152
Continue the behavior	r	0,320**	0,297**	0,186*	0,288**	0,290**
	p	0,000	0,000	0,022	0,000	0,000
	N	152	152	152	152	152
Finish the behavior	r	0,392**	0,410**	0,241**	0,307**	0,353**
	p	0,000	0,000	0,003	0,000	0,000
	N	152	152	152	152	152
Struggle with barriers	r	0,315**	0,348**	0,209**	0,221**	0,335**
	p	0,000	0,000	0,010	0,006	0,000
	N	152	152	152	152	152
Life Satisfaction	r	0,297**	0,248**	0,157	0,298**	
	p	0,000	0,002	0,053	0,000	1
	N	152	152	152	152	

** $p<0.01$; * $p<0.05$ level

Table 3 shows the results of Pearson correlation analysis, according to the results there is a positive significant correlation between all variables and sub-dimensions of it ($p<0,01$). Only extrinsic motivation has not any correlation with “start to behavior” and “life satisfaction” significantly. Also the same variable has 0,05 level correlation with “continue the behavior”. Similarly, “start to behavior” and “intrinsic motivation” has 0,05 level relationship. Except these, all variables have significant correlation with 0,01 level, as in seen in the table 3.

“Finish the behavior” has the biggest point in the correlation table. It has 41% correlation with “intrinsic motivation” and 39% correlation with “academic motivation” significantly ($p<0,01$). Then, “self-efficacy” has 39% correlation with “academic motivation” and 38% correlation with “life satisfaction” arrestingly.

This correlation proves that when students’ self-efficacy raises their academic motivation and life satisfaction levels raise as well and vice versa. The results are similar with Andrew (1998) and Van Dinther et al. (2011) suggestions that including the self-efficacy correlations with various variables such as success and academic performance.

Following to obtained results, it can be verified a possible effect of self-efficacy on academic motivation and life satisfaction. The multiple regression results are shown in table 4, table 5 and table 6 to analyze these effects.

At first, the model of the effect of self- efficacy on academic motivation is valid (F: 26,900; p:0,000). The value of regression has found to be 0,390 while the value of R square is 1,152 (Beta: 0,343; t:5,187). The effects of sub-dimensions of self-efficacy on academic motivation can be seen in table 4 in detail.

Table 4. Regression Analysis of Sub-Dimensions of Self-efficacy and Academic Motivation

Dimensions	Beta	t	Sig.	R	R2	F	Sig.	Result
Constant	2,761	13,338	0,000					
<i>Start to behavior</i>	0,122	1,524	0,130					
<i>Continue the behavior</i>	0,161	1,850	0,066					
Finish the behavior	0,219	3,752	0,000	0,392	0,153	27,176	0,000	
Struggle with the barriers	0,100	2,067	0,040	0,421	0,177	16,021	0,000	
								Accept
Regression Model Y(Academic motivation)=2,761+0,219*finish the behavior+0,100*struggle with the barriers								
Excluded Variables: Start to behavior, continue the behavior								

Sub-dimensions of self-efficacy affect academic motivation, as seen table 4. The regression models are accepted with excluding the sub-dimensions of “start to behavior” and “continue the behavior”.

Figure 2. (a) Histogram residues; (b) P-P Plot of standardized residual

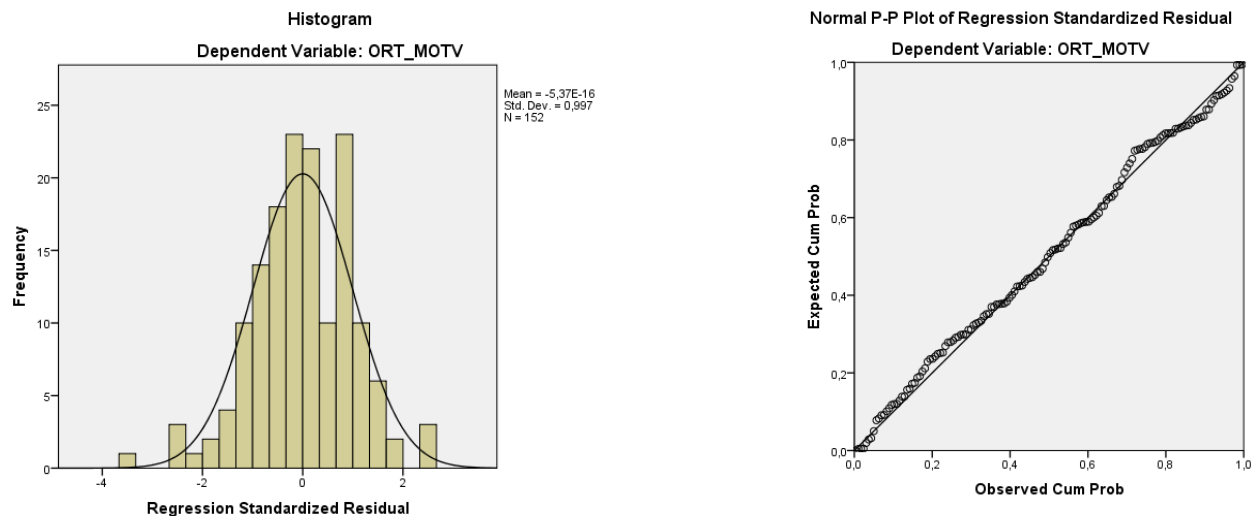


Figure 2 shows the histogram and normal p-plot of regression standardized residual of “academic motivation” and “academic motivation”.

Table 5. Regression Analysis of Sub-Dimensions of Academic Motivation

Dimensions	Beta	t	Sig.	R	R2	F	Sig.	Result
1. Regression Model								
Constant	2,554	10,611	0,000					
<i>Start to behavior</i>	0,067	0,837	0,404					
<i>Continue the behavior</i>	0,117	1,346	0,180					
Finish the behavior	0,248	3,853	0,000	0,410	0,168	30,260	0,000	
Struggle with the barriers	0,132	2,481	0,014	0,448	0,201	18,728	0,000	
								Accept
Regression Model Y (Intrinsic motivation)=2,554+0,248*finish the behavior+0,132*struggle with the barriers								
Excluded Variables: Start to behavior, continue the behavior								
2. Regression Model								
Constant	3,128	12,646	0,000					
<i>Start to behavior</i>	0,026	0,300	0,765					
<i>Continue the behavior</i>	0,084	0,907	0,366					
Finish the behavior	0,184	3,040	0,003	0,241	0,058	9,242	0,003	
<i>Struggle with the barriers</i>	0,125	1,413	0,160					Accept
Regression Model Y (Extrinsic motivation)= 3,128+0,184*finish the behavior								
Excluded Variables: Start to behavior, continue the behavior, struggle with the barriers								
3. Regression Model								
Constant	2,181	8,437	0,000					
Start to behavior	0,208	2,164	0,032	0,349	0,122	10,322	0,000	
<i>Continue the behavior</i>	0,087	0,745	0,458					
Finish the behavior	0,252	2,955	0,004	0,307	0,094	15,577	0,000	
<i>Struggle with the barriers</i>	0,063	0,711	0,478					
								Accept
Regression Model Y (Situation of motivation)= 2,181+0,208*star to behavior+0,252*finish the behavior								
Excluded Variables: Continue the behavior, struggle with barriers								

As seen table 5, sub-dimensions of self-efficacy affect the sub-dimensions of academic motivation one by one. Intrinsic motivation, extrinsic motivation and situation of motivation are affected by self-efficacy significantly.

Table 6. Regression Analysis of Sub-Dimensions of Self-efficacy and Life Satisfaction

Dimensions	Beta	t	Sig.	R	R2	F	Sig.	Result
Constant	0,431	0,883	0,379					
Start to behavior	0,228	2,021	0,045	0,431	0,185	11,229	0,000	
<i>Continue the behavior</i>	-0,018	-0,157	0,875					
Finish the behavior	0,259	2,467	0,015	0,353	0,124	21,300	0,000	
Struggle with the barriers	0,183	2,103	0,037	0,404	0,163	14,501	0,000	
								Accept
Regression Model Y (Life satisfaction)=0,431+0,228*start to hebavior+0,259*finish the behavior+ 0,183 struggle with the barriers								
Excluded Variable: Continue the behavior								

Also sub-dimensions of self-efficacy are predictors of life satisfaction, except “continue the behavior” in table 6. If it is need to analyze the direct effect of self-efficacy on life satisfaction, it is seen that the regression model of direct effect is valid too. “Regression model Y (Life satisfaction)=0,600+0,590*self-efficacy” has 0,383 regression point and 0,146 R square point (F:25,736; p:0,000).

Additionally, sub-goal of the study is the effect of life satisfaction on academic motivation. The regression model of sub-goal is valid too (F:14,514; p:0,000). Regression point is 0,297 while R square point is 0,088 (Beta: 0,170; t:3,810).

In this study, three hypotheses are analyzed with regression analyses. The results show that there are significant correlations between variables and self-efficacy affect academic motivation and life satisfaction. Also life satisfaction affects academic motivation in this sample too. It means that all hypotheses are accepted in this sample. So it can be said that self-beliefs such as self-efficacy and self-confidence may lead on higher motivation and satisfaction.

Conclusion

The most desired outcomes or perceptions such as success, motivation, satisfaction and self-efficacy encompass in individual and environmental factors. Some beliefs are so strong to chance behaviors about an action like self-efficacy which is a belief about personal ability to manage a situation. According to the social cognitive theory and social learning theory, beliefs and skills consist of observation of social group experiences. Additionally, self-concept theory and attribution theory focus of the power of perceptions. All these theories explain the individual perceptions and beliefs with antecedents and effects. Self-efficacy is associated with motivation in education literature (Aronson, 2002) because of its power. It is wondered in this study, whether self-efficacy can affect the life perceptions or not as well as education life. Also job guarantee is an important factor for a student so it can affect the beliefs or perceptions. Therefore, it is analyzed that the effect of self-efficacy on academic motivation and life satisfaction. The results show that there are positive relationships between variables and self-efficacy is a predictor of academic motivation and life satisfaction in this sample. Also the motivation level of vocational training students has different means. Job guarantee make the students more motive about their job and life. The students who love their occupation have higher motivation level in this sample. It means that the more self-efficacy occurs, the more motivation and life satisfaction occur with other positive outcomes too.

Life and job, which include some goals, affect the behavior of people as a whole. Behavioral steps are needed strong beliefs, abilities and motivation. If people believe the control and manage of situation, they can be more successful about finishing the goals. Then, it leads life satisfaction. Also, being happy is one of the most important factors about life satisfaction, during the achieving a goal or doing something. Favorite jobs may bring happy life with self-efficacy. This study shows that if people do their favorite job with self-efficacy, they can get more life satisfaction and more motivation about achieving the goals. Also, if they believe themselves, they can feel more powerful and satisfied.

To extend the study, woman participants and some emotional variables can add in the research. Also different samples lead different results to shed light beliefs power on the behavior for teachers, managements and team leaders.

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