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## The Relationship Between Time Perspective and Career Decision-Making Self-Efficacy and Its Impact on Academic Achievement

**Zahra Amanollahi<sup>1</sup>, Zakeyeh al-Sadat Hosseini<sup>2</sup>, Sohrab Abdi Zarrin<sup>3</sup>,  
Maryam Safara<sup>4,\*</sup>**

<sup>1</sup>Vocational Counseling, Faculty of Psychology and Educational Science,  
Allameh Tabatabaee University, Tehran, Islamic Republic of Iran

<sup>2</sup>Counseling Department, Faculty of Psychology and Educational Science, Isfahan University,  
Tehran, Islamic Republic of Iran

<sup>3</sup>PhD of career counseling, Assistant Professor Faculty of Educational Sciences,  
University of Gom, Iran

<sup>4</sup>PhD in Clinical Psychology, Assistant Prof. of Alzahra University, Women Research Center,  
Tehran, Islamic Republic of Iran

\*E-mail address: [Safara\\_maryam@yahoo.com](mailto:Safara_maryam@yahoo.com)

### ABSTRACT

According to the importance of education in the life of each person and that each school or university student faces career decision-making during education and also considering the importance of time perspective in decision-making self-efficacy and academic achievement, the present research was done to examine the relationship between time perspective and career decision self-efficacy and its influence on the academic achievement in students of Isfahan University. This study was a descriptive-correlative one and the research population consisted of students of Isfahan University. A sample of 184 subjects was selected using cluster sampling method. To collect data, participants completed Zimbardo Time Perspective Inventory (ZTPI) and Taylor and Betz Career Decision-making Self-efficacy Inventory. Academic Achievement was measured through previous semester GPA. The data were analyzed using SPSS software, version 18, by results of correlation and regression analysis. The results indicated that the dimensions of time perspective have significant relationships with self-

efficacy and career decision-making and predict them. In addition, there was not a significant relationship between career decision-making self-efficacy and academic achievement.

**Keywords:** time perspective; career decision-making self-efficacy; academic achievement

## **1. INTRODUCTION**

Self-efficacy is one of the concepts used in the learning-social and cognitive-social theories for professional behavior (Hackett, Lent and Brown, 1994 & 1996, quoted from Mos'haf, 2005). Self-efficacy refers to the individual's perception of confidence or his/her ability to carry out the tasks (Bandura, 2002, quoted from Samiei, Baghban, Abedi, Hosseinian, 2012) so that low efficiency causes the individual does not make choices that s/he can have or put out the decisions of his/her career path (Lent et al., 2006).

The application of Bandura's self-efficacy theory was first introduced in career counseling and professional behavior by Hackett and Betz (1981). Career self-efficacy is one of the most important studied factors in occupational history. Social cognitive career theory (SCCT) that is Bandura's (1986) expanded social cognitive theory explains the various internal dynamics and external professional growth factors and has recently highlighted the importance of self-efficacy. Based on the SCCT, different contextual factors lead to the individual learning experiences. These factors are considered as a basis for self-efficacy and expected results that in turn contribute the formation of interests, objectives and career development. In addition, these immediate contextual influences such as social protection and employment barriers can affect interests, objectives and performance through self-efficacy. SCCT can provide a useful framework to help researchers understand the role of career self-efficacy in job behavior. Using SCCT framework, several studies have found that career self-efficacy plays a key role in job planning and growth (Choi, Park, Yang, Lee and Lee, 2011).

Now, after 20 years of research in the field of self-efficacy, it has found that self-efficacy beliefs have an important influence on career choice (Betz, 2000). In the field of choosing a job, Hackett and Betz (1981) in a study concluded that there is a correlation between self-efficacy beliefs and the scope of careers that the people choose. Hackett and Betz (1981) presented the unique areas of career self-efficacy in the two fields of content and process. Career self-efficacy in field of content refers to self-efficacy in the fields of specific jobs such as mathematics, science, and language, while the scope of the process focuses on self-efficacy using necessary strategies to pass successfully a decision-making process (Betz and Hackett, 2006, quoted in Choi, Park, Yang, Lee and Lee, 2011). Career decision-making self-efficacy means the individual's belief about the ability to perform tasks relating to career path decision-making (Presti, Pace, Manda, Nota, Casarubia, Ferrari, and Betz, 2013).

Career decision-making self-efficacy (CDESE) is related to a variety of occupational behaviors as an important factor, so that CDSE is a strong predictor for job indecision; it can also directly associate with job adjustment, career exploration behavior and other decision-making skills and attitudes, and thus represents the association between the comparative career development and CDSE. In addition, CDSE has a relationship with time perspective (Zebardast, Besharat and Haghghatgoo, 2011). Zimbardo and Boyd (1999) stated the concept of time perspective for the study of time perspective that combines time orientations of past, present and future with emotional capacities. They considered time perspective as a mostly

unconscious process whereby a continuous stream of social and personal experiences will be assigned to time classes or time frames to help with regularity, continuity and meaning. Zimbardo and Boyd operationalized the five time zones, including negative past, positive past, future, and hedonistic present and fatalism present. Each of these special perspectives draws behaviors and attitudes that are associated with any specific time zone (Zimbardo and Boyd, 1999).

Negative past shows a hate and pessimism of the past that may be based on real life negative experiences or negative reconstruction of the events of the past. The positive past reflects a warm and emotional vision of the past. The future time orientation indicates concerns about access to goals, to delay the satisfaction and avoidance of wasting time. The hedonistic present includes living in the moment, immediate satisfaction and seeking for pleasure. Deterministic present reflects a sense of hopelessness towards future and disability in liking the current behavior with future consequences. These five time zones are vertical, i.e., in all these perspectives one person may be high or low; however, this assumption may exist that these individuals may have a time bias that insists on a time zone in decision-making. In contrast, there are individuals that may normally be affected by one time zone or more (Boyd and Zimbardo, 2008). Several researches have examined the relationship between the perspectives of the past, present and future with a variety of psychological and behavioral outcomes. The early studies by Zimbardo and Boyd (1999) indicated a significant relationship between five time zones and the types of behaviors resulting from the theories. For example, negative past has a direct relationship with aggression, shyness and symptoms of anxiety and depression. In contrast, the negative past has an indirect relationship with happiness and self-esteem. The positive past is directly associated with self-esteem and happiness, and indirectly with anger and symptoms of anxiety and depression. The future perspective is positively associated with conscientiousness and the possibility of increased attention to the future consequences and hours allocated to the training study and GPA, and it is negatively associated with sense seeking and symptoms of anxiety and depression. The hedonist present is directly associated with the creativity, the search for new things, searching for sense and increased frequency in telling lie and theft and is indirectly linked with stability. The deterministic present is directly associated with searching for sense and increased frequency in telling lie and theft and as same extent with symptoms of anxiety and depression and indirectly associated with lower attention to future consequences and lower GPA. The subsequent research showed that the five time zones when are separately studied can explain the variance in other psychological behaviors and processes.

Although there is little research on time zones of past and present in history of career decision-making, the future perspectives has been clearly revealed as the planning and achievement of objectives in career path development theories (e.g., Keritis, 1965; Savikas, 2002; Super, 1974). Researches about future perspective and its relation with career path development greatly support theoretical expectations. For example, results of a study by Savikas, Siling and Chevarts (1984) showed that future perspectives is an important part of the maturity attitude of career path and is negatively related with career indecision in a sample of first-year students. Ferrari, Nota and Sorissi (2010) stated that the adolescents with future orientation show less career indecision and have higher academic achievement. In a research by Linens (1994), it was suggested that a positive attitude towards future positively predicts job maturity attitude at the time of control of locus of control and generalization of self-efficacy in a sample of first-year and last-year students (2010). Jaizo (2010) has recently

stated that the future perspective is an important factor in the career path planning in students of grades 9 and 12. Likewise, Marco and Savikas (1998) showed that interventions designed to enhance the future perspective lead to the development in career path planning. The pattern of results indicates that future perspective positively effects on career path, career decision-making and path design. In agreement with Levin's idea that believes the five time zones effect on behavior, the recent studies on time perspective open the windows to examine that the time perspective may effect on the career behavior (Taber, 2012).

Zebardast, Beshart and Haghightgoo (2011) showed the direct relationship between self-efficacy and future perspective and negative correlation between self-efficacy and the determinist present and also the negative correlation between self-efficacy and negative past. They concluded that people with higher levels of self-efficacy have more positive perspective. Another study by Walker and Tracy (2012) demonstrated that the future perspective is a major and efficient antecedent in career decision-making. Time perspective is also correlated with academic achievement.

Academic achievement refers to a student situation that shows the score of a period, the average of scores for a set of periods in a course, or the average of scores for different courses (A'rabian, Khodapanahi, Heidari, Sedghpour, 2008). Several factors affect academic achievement such as time perspective, so that the researchers who have studied time perspective have reported a direct relationship between time perspective and academic achievement. For example, Lennings and Burns (1998) concluded that positive attitude to future predicts academic achievement in students. Zimbardo and Boyd (1999) reported that the future perspective was positively correlated with GPA. In another study, Bowles concluded that academic achievement is positively related with tendency to present and negatively related with tendency to past (Mello and Worell, 2006).

Another factor that is associated with academic achievement is self-efficacy beliefs, because self-efficacy believes are determining in the amount of effort that people should spend on each activity and the time they persist against barriers, the people who have strong self-efficacy beliefs see the tasks as challenges that they should overcome. These individuals are deeper engaged in activities and do more effort during failure (Pajariz, 2002, quoted in A'rabian et al., 2008). Many studies have reported the relationship between self-efficacy beliefs and GPA, including Bong (2001), Brown, Lent and Larkin (1989), Hackett and Betz (1992) (Zajacova, Lynch, and Espenshadet, 2005). Now considering the importance of education in one's life and that every student is faced with different decisions during schooling and that the self-confidence feeling is effective in any decision-making process, and the decision-making self-efficacy is affected in one aspect by the individual's time perspective, and on the other hand, these two variables have an impact on academic achievement, and since a little research has been done to examine these three factors together, the present study was done to investigate the relationship between time perspective and career decision-making self-efficacy and its effect on the academic achievement of students of Isfahan University in academic year 2013-2014. We assume that there is a significant relationship between dimensions of time perspective with each other and between time perspective and decision-making self-efficacy. On the other hand, there is a direct relationship among dimensions of time perspective and academic achievement and decision-making self-efficacy and academic achievement. Therefore, the hypotheses in this research include the following:

- H1.** There is a relationship between dimensions of time perspective with each other.
- H2.** There is a relationship between time perspective and career decision-making self-efficacy.
- H3.** There is a relationship between time perspective and academic achievement.
- H4.** There is a relationship between decision-making self-efficacy and academic achievement.

## **2. RESEARCH METHODOLOGY**

The present research is a descriptive-correlative one. The research population consisted of all students of Isfahan University in the academic year 2013-2014. The sample was estimated equal to 150 individuals using Cochran formula and primary administration on 30 persons of the population and calculation of variance and with the possibility of 30% abscission, the total of 200 questionnaires were distributed, which 184 people have fully completed them. The subjects were selected from both genders using stratified cluster sampling corresponding with the sample from different faculties, so that at first among the faculties of the University of Isfahan four faculties were randomly selected and then the questionnaires were distributed proportion to the population of men and women in each of these faculties. Two scales were used to collect data in this study.

### *1. Zimbardo Time Perspective Inventory (ZTPI)*

This questionnaire was developed by Zimbardo and Boyd in 1999 to measure time perspective (Taber, 2011). ZTPI has 56 items in 5 dimensions including the positive past, the negative past, hedonistic present, deterministic present and future which are scored based on a 5-point Likert scale (1 = completely disagree and 5 = strongly agree). Each time perspective has been determined in scoring that after summing up the scores and dividing by the number of items of the same dimension, each individual's score is obtained. The information has been provided in Table 1. Items 9, 24, 25, 41 and 56 have been scored reversely. Its predictive validity and related structure have been identified by Zimbardo and Boyd (1999, quoted in Taber, 2011).

Taber's study (2011) had calculated the reliability of the questionnaire between  $\alpha = 0.71$  for deterministic present and  $\alpha = 0.85$  for positive past. In this study, the alpha coefficient was obtained between 0.70 for positive past and 0.75 for negative past.

**Table 1.** The items and dimensions of Zimbardo Time Perspective Inventory.

Dimension	Items
Negative past	4,5,16,22,27,33,34,36,50,54
Hedonist present	1,8,12,17,19,23,26,28,31,32,42,44,46,48,55
Future	6,9,10,13,18,21,24,30,40,43,45,51,56
Positive past	2,7,11,15,20,25,29,41,49
Deterministic present	3,14,35,37,38,39,47,52,53

*2. Career decision-making self-efficacy (CDSE) questionnaire*

Career decision-making self-efficacy (CDSE) questionnaire was used to measure subjects' self-efficacy in career counseling. This questionnaire was developed by Taylor and Betz in 1983. This questionnaire evaluates five merits in the field of job selection based on Kraits' (1978) model. Thus, the items of the questionnaire are related the following domains: (1) Appropriate self-assessment, (2) Collecting career data, (3) Target selection, (4) Planning for future, and (5) Problem-solving. The questionnaire was scored based on a scale from 'no confidence' to 'full confidence'. The number of items was 25.

Taylor and Betz (1983) obtained reliability for this scale equal to 0.97 through Cronbach's alpha. Karimi (2008) administered this questionnaire on 50 students of Isfahan University, and obtained the reliability equal to 0.93 using Cronbach's alpha, and its content validity was approved by 5 counseling professors of Isfahan University. In the present study, alpha coefficient for the questionnaire is estimated as  $\alpha = 0.86$ .

*3. To measure the academic achievement, the students' GPA in the previous semester was selected as criterion.*

**3. FINDINGS**

The findings of the present research are related to perspective variable and its dimensions (including the negative past, hedonistic present, future, the positive past, and deterministic present) and variables of academic achievement and decision-making. This study was carried out on 104 women (56.5 percent of the sample) and 80 men (43.5 percent of the sample) of which 26 individuals (14.1 percent) were married and 158 individuals (85.9 percent) were single. The findings related to research variables including mean, standard deviation, minimum and maximum data are presented in Table 2.

**Table 2.** The mean, standard deviation, maximum and minimum data related to the variables of the study and its components.

Variables		Mean	SD	Minimum	Maximum
Academic achievement		15.99	1.6	11.20	19.60
Decision-making self-efficacy		3.05	0.4	1.84	4.0
Perspective	Negative past	2.03	0.55	1.80	4.60
	Hedonistic present	3.19	0.42	2.33	4.20
	Future	3.51	0.34	2.46	4.77
	Positive past	3.36	0.5	1.89	4.67
	Deterministic present	2.59	0.53	1.44	4.56

As shown in Table 2, the highest mean is related to future perspective (3.51) and the lowest mean is related to hedonistic present.

In Table 3, Pearson’s correlation coefficient and significance level obtained for perspective variable and its dimensions, including the negative past, hedonistic present, future, the positive past, and deterministic present and variables of academic achievement and decision-making have been provided. According to the results, there is a significant positive correlation between negative past and hedonist present ( $r = 0.348$ ,  $p < 0.01$ ), and a significant positive correlation between negative past and deterministic present ( $r = 0.496$ ,  $p < 0.01$ ), which are the subscales of perspective.

Also, there is a significant positive relationship between the hedonistic present and deterministic present ( $r = 0.377$ ,  $p < 0.01$ ). According to the obtained results, there is a significant positive relationship between the component of future and academic achievement ( $r = 0.229$ ,  $p < 0.01$ ); in other words, by increasing the future variable, the academic achievement increases.

There is a significant negative relationship between positive past and deterministic present ( $r = -0.176$ ,  $p < 0.01$ ); there is a significant positive relationship between positive past and decision-making self-efficacy ( $r = 0.191$ ,  $p < 0.01$ ) that we can conclude that by increasing the variable of positive past, decision-making self-efficacy variable also increases. There is a significant negative relationship between deterministic present and decision-making self-efficacy ( $r = -0.259$ ,  $p < 0.01$ ); in other words, by increasing the variable of deterministic present, the decision making self-efficacy variable decreases. It should be noted that there is no significant relationship between the other components existing in the research.

**Table 3.** Pearson correlation analysis between perspective and its dimensions, academic achievement and self-decision.

Research components	Negative past	Hedonist present	Future	Positive past	Deterministic present	Academic achievement	Decision-making self-efficacy
Negative past	1	**0.348	-0.046	-0.104	**0.496	0.020	-0.105
Hedonist present		1	-0.073	0.066	**0.377	-0.056	-0.074
Future			1	**0.294	-0.140	**0.239	0.231
Positive past				1	** -0.176	0.002	**0.191
Deterministic present					1	0.024	** -0.259
Academic achievement						1	-0.016
Decision-making self-efficacy							1

\*\*Significance at the level of 0.01

**First hypothesis:** Based on the dimensions of perspective, the decision-making self-efficacy can be predicted in these dimensions.

In order to determine which dimensions of perspective have a significant role in predicting decision-making self-efficacy, stepwise regression analysis was used that the results are shown in Table 4.

**Table 4.** Results of regression analysis of decision-making self-efficacy using the dimensions of perspective.

Model	Statistical Indicators	Non-standard coefficients		$\beta$	t-test	Significance level
		B	standard error			
Model 1	Constant	3.564	0.143		24.841	0.000
	Deterministic present	-0.196	0.054	-0.259	-3.619	0.000
Model 2	Constant	2.857	0.29		9.882	0.000
	Deterministic present	-0.175	0.054	-0.231	-3.259	0.001
	Future	0.186	0.066	0.199	2.797	0.006

\*\*Significance at the level of 0.01

As seen in Table 4, at the first step the variable of deterministic present has been entered into the regression equation so that this variable separately explains 6% of the variance in decision-making self-efficacy ( $R^2 = 0.067$ ). In the second step, the variable of Future has been entered into the regression equation that the level of explanation with 3 percent increase is equal to  $R^2 = 0.106$ .

Therefore, in the end by adding variables of the deterministic present with negative coefficient of -0.175 and the variable of future with a positive coefficient of 0.186, a total of 11 percent of decision-making self-efficacy is explained by subscales of deterministic present and future that according to coefficients obtained, the perspective significantly increases by increasing the future variable, but decision-making self-efficacy variable decreases by increasing the deterministic present.

**The second hypothesis:** Based on the dimensions of perspective, the academic achievement can be predicted in these dimensions.

In order to determine which dimensions of perspective have a significant role in predicting the academic achievement, stepwise regression analysis was used that the results are shown in Table 5.

**Table 5.** Results of regression analysis of the academic achievement using the dimensions of perspective.

Model	Statistical Indicator	Non-standard coefficients		$\beta$	t-test	Significance level
		B	standard error			
Model 1	Constant	12.885	0.945		13.639	0.000
	Future	0.885	0.267	0.239	3.317	0.001

\*\*Significance at the level of 0.01

As seen in Table 5, at the first step the variable of future has been entered into the regression equation so that this variable separately explains 6% of the variance in academic achievement ( $R^2 = 0.057$ ). Thus, a total of 3% of changes in academic achievement is explained by the dimensions of the perspective.

**The third hypothesis:** There is a relationship between decision-making self-efficacy and GPA.

According to following Table, since there is no significant relationship between decision-making self-efficacy and academic achievement, therefore, by fitting the regression model, the decision-making self-efficacy variable does not enter into regression, and we cannot predict academic achievement or GPA using decision-making self-efficacy.

#### 4. DISCUSSION AND CONCLUSIONS

The purpose of the present study was to examine the multiple nature of time perspective in relation with decision-making self-efficacy and academic achievement. Results of this study indicate a relationship between the dimensions of time perspectives from one hand and the relationship between this concept and career decision-making self-efficacy and academic achievement on the other hand.

As the results show the highest mean of subjects is related to future perspective that considering many years of education, endeavor and hard-working needed for schooling in this level, it is expected that such a result is obtained. The present result is consistent with that of Taj, Mokri, and Fotohi (2010). Zimbardo and Boyd believe that the individuals who obtain the highest score the future subscale have a clear plan for achieving future goals (Taj, Mokri, and Fotohi, 2010).

The results indicates a significant relationship between negative past and hedonistic present as well as the relationship between negative past and deterministic present and also the negative correlation between positive past and deterministic present that the results can be interpreted in the way that since the individuals with negative past perspective have either unpleasant past or at least perform reconstruction of the past negatively or feel weakness for

controlling future, and consequently have less concern and engagement for future that this is the same attitude of individuals with hedonistic perspective and deterministic present that these individuals have a negative and frustrated attitude towards the future and do not consider a path and goal for future, and in deterministic state even the individuals are in trouble in relating the current behavior with future outcomes (Taber, 2012). This explanation be used to describe the positive relationship of hedonistic present and deterministic present that both types of these individuals do not have a positive perspective toward future, because the individuals with hedonistic present perspective are seeking pleasure and excitation without considering the future results, and individuals with deterministic present perspective have a frustrated sensation towards future (Haghighatgoo, Besharat, and Zebardast, 2011); and both groups believe that thinking and planning about future is inconclusive, and on the other hand, in both present perspectives a kind of delay is seen such that the individuals with high scores in deterministic present are more likely to avoid performing tasks for the prevention of negative feedback and the hedonistic individuals have a delayed arousal meaning that they delay in completing the tasks in order to experience pleasure (Taber, 2012).

Another result is the positive relationship between future perspective and positive past that we can say that those individuals who evaluate their past positively and see themselves as a tool in forming their future have more efficient believes and highlight their role in future consequences (Taber, 2012).

About the positive relationship between decision-making self-efficacy and positive past, it can be said that essentially in Bandura's theory the most effective source of judgment about feeling of the self-efficacy is the achievement of performance; that is, the previous successful experiences give us a direct sign of domination level as well as self-efficacy (Schultz and Schultz, 2008). Therefore, those who obtain high scores in positive past, since reflect a warm and emotional vision of the past and have a positive view in contacting with past and recall the achievement experiences of the past, have higher self-efficacy.

As the results showed, it can be predicted that by increasing the future perspective the decision-making self-efficacy increases, and on the other hand, it can be predicted that by increasing the deterministic present the decision-making self-efficacy decreases that these results can be explained by the possibility that those people who have deterministic present perspective do not see themselves as a tool to form the future, have more inefficient believes about decision-making as well as less autognosis and they often associate the problems with unreliable and contradictory career information (Taber, 2012) that all these cases are the signs of low decision-making self-efficacy. These findings are consistent with those of Ferrari (2010) and Taber (2012). Taber showed that individuals experience fewer problems of low motivation and indecision in high future perspective and low deterministic present. This model of results shows that those who have a bias towards future and believe that they can control their fate are more likely certain and have motivation, and show more maturity in decision-making process and also have more efficient beliefs (Taber, 2012).

About another finding of the present research which indicates the relationship between future perspective and academic achievement, we can say that this result is consistent with many studies in this field, including Barons and Kenny (1998) who concluded that the positive attitude towards future is the predictor of high academic achievement in high school students and university students. Also, Zimbardo and Boyd (1999) reported that the emphasis on future is positively associated with GPA and the hours allocated to study during the week that is consistent with the result obtained by Shell and Hussmann (2001); in other words, the

successful individuals in education are more optimistic about their future, and in contrast, are less pessimistic about their present situation (Mello and Worell, 2006).

One of the other results of the research is the absence of the relationship between decision-making and academic achievement. There are several reasons for rejecting this hypothesis and its inconsistency with previous researches, including the use of different instruments in different studies, dissimilarity among disciplines, motivations, and the goals of participants, dissimilarity among communities in terms of labor market. In addition, these studies have been conducted in different cultures and with different criteria for measuring academic achievement that can be the reasons for difference of the results of the present study with the previous ones.

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