

RELATIONSHIP BETWEEN SELF-CONSTRUALS AND FUTURE TIME
ORIENTATIONS

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ABSTRACT

RELATIONSHIP BETWEEN SELF-COSTRUALS AND FUTURE TIME ORIENTATIONS

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The present research investigated attitudes of the university students towards the future, as well as the relation between future time orientations and self-construals. The sample consisted of 303 Middle East Technical University students with a mean age of 21. Four scales were administered to respondents: the Balanced Integration Differentiation Scale (BID) (Imamoglu, 1998, 2002), the Positive Future Expectation Scale (PFES) (Imamoglu, 2001), the Future Time Orientation Scale (FTO) (Gjesme, 1979), and the Attitudes Towards the Future Scale, which was developed for the current study. The BID Scale consists of interrelational and self-developmental orientation subscales. The high and low ends of the interrelational orientation subscale represent relatedness and separatedness, respectively. While the high and low end scores of the self-developmental orientation subscale represent

individuation and normative patterning, respectively. Two dimensions of the Future Time Orientation Scale were used, which are involvement and anticipation. The former dimension measures the degree to which an individual focuses on future events, and the latter one measures how well an individual prepares for future events.

Factor analyses of the Attitude Towards the Future Scale yielded three factors, which are referred to as positive, fearful, and planful future orientations. Analyses indicated that this new measure has adequate validity and reliability. A short form of the scale was formed, which has similar metric qualities with the former one, and it was used in the following analyses.

With regard to self-orientations and gender, a MANOVA test indicated that future orientations were affected by the interrelational and self-developmental orientations but not by gender. Individuals with high interrelational orientation scores were found to have higher positive and planful orientation scores, and lower fearful orientation scores. Individuals with high self-developmental orientation scores were found to have higher planful orientation and lower fearful orientation scores. A second MANOVA indicated significant differences among the four self-types suggested by the BID Model (i.e., separated patterning, related patterning, separated-individuation, related-individuation) on future orientations. A clear pattern was observed, in which the related-individuated respondents, representing the optimal development by the BID Model, seems to have the most positive and planful orientations and the least fearful orientation.

Keywords: Self-construals, Future Time Orientations.

ÖZ

BENLİK KURGULARI İLE GELECEK YÖNELİMLERİ İLİSKİSİ

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Bu araştırmada, üniversite öğrencilerinin geleceğe ilişkin tutumları ve bu tutumların benlik kurguları ile ilişkileri incelenmiştir. Örneklem yaş ortalaması 21 olan 303 ODTÜ öğrencisinden oluşmaktadır. Katılımcılara benlik kurguları ve gelecek yönelimleri ile ilgili dört ölçek uygulanmıştır: Dengeli Bütünleşme-Ayrısma Ölçeği (Balanced Integration-Differentiation Scale, Imamoglu, 1998, 2002), Olumlu Gelecek Beklentisi Ölçeği (Positive Future Expectation Scale, Imamoglu, 2001), Gelecek Zaman Yönelimi (Future Time Orientation Scale, Gjesme, 1979) ve bu çalışma için geliştirilen Geleceğe İlişkin Tutum Ölçeği. Dengeli Bütünleşme-Ayrısma Ölçeği, ilişkisel yönelim (interrelational orientation) ve gelişimsel yönelim (self-developmental orientation) olmak üzere iki alt ölçekten oluşmaktadır. İlişkisel yönelim boyutunun üst ve alt grupları sırasıyla, ilişkili (related) ve kopuk (separated) olmayı temsil ederken, gelişimsel yönelim boyutunun üst ve alt grupları sırasıyla, kendilemeyi (individuation) ve (normlara göre) kalıplasmayı (normative patterning)

temsil etmektedir. Gelecek Zaman Yönelimi Ölçeği'nin iki alt boyutu kullanılmıştır. Bunlar ilgililik (involvement) ve hazırlıklı olmadır (anticipation) . İlk boyut kişinin gelecek olaylara ne kadar odaklandığını yansıtırken, ikinci boyut kişinin gelecek olaylar için ne kadar iyi hazırlandığını ölçmektedir.

Yapılan faktör analizleri Geleceğe İlişkin Tutum Ölçeği'nin olumlu (positive), korkulu (fearful) ve planlı (planful) yönelim olmak üzere üç boyuttan oluştuğunu göstermiştir. Analizler sonucunda bu yeni ölçek güvenilirlik ve geçerlik bakımından yeterli bulunmuştur. Oluşturulan kısa formda ölçeğin yine benzer ölçüm özelliklerini tasıdığı görülmüş ve izleyen analizlerde ölçeğin bu kısa formu kullanılmıştır.

Benlik yönelimi ve cinsiyete ilişkin çoklu varyans analizleri (MANOVA) gelecek zaman yönelimlerinin ilişkisel ve gelişimsel yönelimlerden etkilendiğini ancak cinsiyetten etkilenmediğini göstermiştir. İlişkisel yönelimleri yüksek olan bireylerin daha olumlu ve planlı ve daha az korkulu gelecek yönelimlerine sahip oldukları; gelişimsel yönelimi yüksek olan bireylerin ise daha planlı ve daha az korkulu gelecek yönelimlerine sahip oldukları görülmüştür. Yapılan diğer çoklu varyans analizi de Dengeli Bütünleşme-Ayrısma Modeli tarafından öngörülen dört benlik tipinin (kopuk-kalıplasma, ilişkili-kalıplasma, kopuk-kendilesme, ilişkili-kendilesme) gelecek yönelimi bakımından anlamlı ve düzenli bir şekilde farklılaştığını göstermiştir. Model tarafından en uygun gelişme olarak öne sürülen ilişkili-kendilesmenin en olumlu ve planlı, diğer taraftan da en az korkulu gelecek yönelimleriyle bağlantılı olduğu bulunmuştur.

Anahtar Kelimeler: Benlik Kurguları, Gelecek Zaman Yönelimleri.

To Fatos and Celil

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I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.

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CHAPTER I

INTRODUCTION

The concept of time has been paid attention and given importance for a long time, although it was not a general and steady attention. The most important points about the concept and related studies are the complexity of the construct and the diversity of the studies (Zimbardo & Boyd, 1999). Besides the complexity of the construct in and of itself, the studies, which have been carried without an integrated approach, contribute to the complexity of the concept more. A literature review suggests that the question of “How should the time concept be defined and included into the studies in psychology?” has not been given a clear answer, yet. Also, the integration of the concept with other concepts and constructs related to human thinking and behavior, and to the self-concept is another major concern.

In this section, first a review of the conceptualizations of time concept, related studies, and methods of measurement will be presented. After a review of the role of future time on the self-concept, an evaluation of the cumulated research will be mentioned. Lastly, a model of self-construals will be considered and the aims of the study will be introduced.

1.1 Definition and Conceptualization of Time

Humans try to organize their knowledge about their selves and the world around them in order to create a predictable and controllable meaning system. Time is a part of this meaning system and moreover it can be claimed to constitute the basic ground of this meaning system. However, it is not very easy to define the time, on which human thinking and life are structured, and outline the role it plays.

As stated in the book of Buccheri, Gesu and Saniga (2000), understanding the nature of time has been the issue of many different disciplines from philosophy to physics. Efforts given for the understanding of the nature of time started around 450 B.C. with the contributions of Eraclito, Parmenide, Plato, and Aristotle. Especially the study of Aristotle on time was in detail and was taken as a reference point by following others such as the Saint Augustine as a member of the Catholic Church. According to Aristotle, time is a series of notion put into sequence by mind or soul with respect to before and after. However, with the dominance of positivism, the partitioning of time into past, present, and future had been started to be regarded as the pure illusions of humans. The belief of “division of time into regions lacks specific validity” was pioneered by Galileo and Newton and then was followed by many other famous scientists. The main point of this belief was based on the idea that “ the laws of physics do not contemplate irreversibility of physical processes and therefore cannot describe any privileged direction from past to future” (Buccheri et al., 2000, p.6). However, discoveries about the evolution of complex systems and criticism of lack of room for any implications of history, novelty, and creativity came as the reactions to this extreme simplification of determinism. Prigogine (as cited in Buccheri et al., 2000) suggested that the laws of physics should be reviewed in order to accommodate time because time is not out of

physics but not represented well in physics. He argued that time is an essential component of the universe and human beings are a product of time and take note of time by their consciousness. On the other hand, in science, the observer was considered to be independent of the observed world until the Einstein's relativity concept, which includes that the measure of some physical parameters may depend on the observer. This relativity principle brought the thinking that the characteristics of our universe are related to the existence of a conscious observer and so the time is a product of human mind (Buccheri et al., 2000).

Many studies in psychology accepted time as something related to individual's internal experiences and part of human consciousness. In other words, psychological time is believed to exist in individuals rather than existence of human in time (Shmotkin & Eyal, 2003). This individual based understanding of time led to different conceptualizations in psychology such as time perspective (Calster, Lens & Nuttin, 1987, Zimbardo & Boyd, 1999), time orientation (Gjesme, 1979), temporally extended self (Moore & Lemmon, 2001), and future possible selves (Markus & Nurius, 1986). A review of the literature suggests that among these conceptualizations, "time perspective", mainly with the Nuttin's description, is the most widely used description of psychological time. According to Nuttin (as cited in Calster, Lens & Nuttin, 1987), there are three aspects of psychological time, which are "time perspective", "time orientation", and "time attitude". Extension, density, degree of structuralization, and level of realism characterize time perspective. Time orientation as De Volder (as cited in Calster, Lens & Nuttin, 1987) suggests represents the "dominant or preferential temporal direction of an individual's thoughts and actions" (p.1). Time attitude, on the other hand, is the "positive

or negative attitude toward personal future, present, and past life period” (Calster, Lens & Nuttin, 1987, p. 1-2).

The time construct was tried to be handled by dividing it into subcomponents. This multidimensional view of the construct has been suggested and accepted by many researchers but with different partitioning and meanings given to each. The definition provided by Nuttin, as noted above, is one of these multidimensional views, which has been widely used and accepted. There are other researchers suggesting the multidimensionality of the construct. For instance, Smothkin and Eyal (2003) indicate that the complexity of the construct make the multidimensional description inevitable. They suggest that the psychological time can be divided at least into four aspects. These aspects are individual’s experience of time, the time perspective in which a person exists, the individual’s attitudes and beliefs toward time, and the individual’s behavior in with, and because of time.

Also, for the future time perspective Hoornaert (as cited in Daltrey & Langer, 1984) suggested another multidimensional definition including the five dimensions of extension, coherence, directionality, density, and attitude/affectivity. On the other hand, Daltrey and Langer (1984) claimed that in order to understand the structure of the construct a measure with an acceptable psychometric base should be developed. They developed an 80-item instrument called the “Daltrey Future Time Perspective Test” and as a result of factor analyses they reached the conclusion that the future time perspective should be considered as a single (unidimensional) construct (Daltrey & Langer, 1984).

In their studies of developing a scale called the “Zimbardo Time Perspective Inventory” (ZTPI), Zimbardo and Boyd (1999) identified five aspects of time orientation, two of which are related to past, the other two are related to present and only one factor is

related to the future. However, the previous studies by Gonzalez and Zimbardo (1985) yielded four subfactors for the future time perspective.

It can be concluded that there is not an agreement on the structure of the time construct. While the complexity of the construct leads to a multidimensional understanding, some researchers suggest the unidimensionality.

1.2 Studies Related to Time Concept

Psychological time is considered to be a “developmental process that takes place at different stages of life” (Shmotkin & Eyal, 2003, p.261); an outcome of the socialization process by carrying the effects of culture and society (Stein, Sarbin & Kulik, 1968; Gonzalez & Zimbardo, 1985; Seijts, 1998), and it is also considered to have an ultimate role on behaviors (Atance & O’Neill, 2001; Strathman, Gleicher, Boninger, and Edwards, 1994; Lennings, 1992). Regardless of the effects of situational factors, psychological time is still considered to be a stable characteristic reflecting individual differences with a flexible and modifiable construct (Zimbardo & Boyd, 1999; Seijts, 1998).

1.2.1 Developmental Perspectives

Considerable amount of studies have focused on the developmental aspects of time, since the cognitive capacity constitutes the basic part for capturing the experience of time. Cottle and Klineberg (1974) indicated that a newborn is a passive actor in time within the regular temporal rhythms of life such as feeding schedules. However, with the cognitive development it starts to gain an active role in the conceptions of time. Although in a limited scope, by the age of four or five, the children begin to concern not only with

present but also with future. During the early school years, they become able to recognize distant future events with a sense of reality and also to prefer delayed rewards. As suggested by Piaget (as cited in Cottle and Klineberg, 1974) with the attainment of formal operations an adolescent gains the full acquisition of the abstract notion of time and becomes able to integrate his/her extended future time with past and present experiences.

According to Kurt Lewin (1951);

In adolescence a definite differentiation in regard to the time perspective is likely to occur within those parts of the life space which represent the future, levels of reality and irreality are gradually being distinguished” and “..., one has to ‘plan’: to structure the time perspective in a way which is in line both with one’s own ideal goals or values and with those realities which must be taken into account for a realistic structuring of the plane of expectation (p.141).

Many studies took the developmental process of psychological time as their central point. According to Gjesme (1979, p.174), “temporal perspective develops slowly through childhood”. He considered the need satisfaction situations as the basis of the future time dimension and indicated that cognitive elaboration of plans, tasks, and intentions facilitates the further structuralization of the future. He carried his study with pupils attending the sixth grade in elementary school and tested the effect of the three individual factors, which are the motives, the delay of gratification, and the ability to use symbols, on future time orientation. In their studies of the relation between ego identity and temporal perspective Rappaport, Enrich and Wilson (1985), by relying on Erikson’s ego identity concept, indicated, “Identity achievement should involve the development of a more balanced temporal orientation, including increased emphasis on the future” (p.1610). In another study, Lennings, Burns and Cooney (1998) tested the differences in future time orientation between adolescents and young adult groups, though they found no differences in temporal profiles as a person moves from adolescence to adulthood. In

their articles of episodic future thinking, which is defined as “ the projection of the self into the future to pre-experience an event”, Atance and O’Neill (2001, p.537) referred to the role of cognitive development in the development of episodic future thinking. They indicated that by age two children reveal awareness of the future and by age of four or five years children start to demonstrate more sophisticated planning and anticipatory behavior.

A related line of study pointed out the changes in subjective experience of time at different ages. For instance, Hogan (1979) suggested that for young people the time perspective is locked up in the present time, which makes the tomorrow seem so far away. On the other hand, for older people the past occupies a large part of their lives leaving a small space for the present and future. Shmotkin and Eyal (2003) worked on the implications of psychological time on later life and they divide the human life into categories according to the different experiences at each stage. These categories are young adulthood, which is categorized by planning for the near future, concern for efficient use of time, and attention given to the ticking of social clock; middle age, which is defined by realization of limitation of personal time, care for the well-being and future of the next generation, increased sense of autonomy and greater expression of potentialities; and later life, which is described by a slowdown of internal rhythms and quicker external rhythms, and cyclical perception of time.

Also, many scholars studied high school or university students (e.g. Calster, Lens, & Nuttin, 1987; Lennings, 1994; Mahon & Yarcheski, 1994; Marko & Savickas, 1998; Lasane & Jones, 1999). Although they did not provide any specific reason for studying young population, the implicit assumption behind these studies can be the significant role of future thinking and consideration among the young population.

1.2.2 Socio-Cultural Perspectives

Another group of study concentrated on the effects of social learning, socialization, and the culture on the psychological time. In their study on the relation between future time perspective and socialization process, Stein, Sarbin and Kulik (1968) suggested and tested that individuals differing on the socialization continuum also differs on the personal future time perspective. They suggested that more differentiated and integrated cognitive and temporal systems characterize more socialized individuals and these more socialized people have more extensive personal future time perspective than less socialized people. In their study, the number of delinquent behavior was taken as a measure of socialization. Marko and Savickas (1998) emphasized the learning process in the development of a future-oriented time perspective. According to them, learning to adopt a future-oriented time perspective starts in the childhood, continues and gains speed during adolescence and early adulthood. Further they indicated that even though cognitive development and abilities support the learning process, contextual factors such as the encouragement of parents and teachers, and socioeconomic status, play more important role. With the significant role given to the learning process, they tried to increase the future orientation of the subjects by an intervention and showed that the intervention was successful to some extent. Other studies also showed that the construction and meaning given to the aspects of the psychological time changes across the cultures. Researchers (Levine, West, & Reis, 1980; Levine & Wolff, 1985) indicated that differences exist in the time sense and orientation of individuals among people from different nationalities. Based on a review of the studies on how people use time, McGrath and Tschan (2004, p.31) indicated, "Humans' use of time is eminently social and cultural in its variations, as well as being strongly influenced by the biological and environmental

conditions of human life”. In fact, this is not something unexpected when the role and place of time in the whole meaning system of the individuals are considered. According to the Cottle and Klineberg (1974), human beings experience time through the changes which are repetitive and progressive like the alternations of day and night; or irreversible progressions such as biological change through aging. These experiences may cause the time to be represented as repetitive, cyclical or progressive, and unidirectional. However, they claim that the construction of all these experiences of time are determined by the cultural and social realities in which a person is embedded. Similarly, Nelson (as cited in Hudson, 2001) argues that over the cognitive development social interactions provide the context on which the time concepts are introduced to the child and time is not an entity, like concrete objects, to be discovered by the child.

1.2.3 Behavioral and Self-Regulatory Perspectives

In another line of studies, the effect of psychological time on the behaviors and self-regulation was investigated. While some of these studies were able to find a significant relation between a specific time aspect and a specific kind of behavior, others were not successful in showing a relationship. These different results may depend partially on the metrics used and the construction of the hypotheses being tested. In their studies, Zimbardo, Keough, and Boyd (1997) found present time perspective to be significantly correlated with reported risky driving behaviors. Another study by Mahon and Yarcheski (1994), which examined the relationship between future time perspective and positive health practices such as exercise, nutrition, and substance use in adolescents, found statistically significant positive but weak correlations between length of future time perspective and positive health behavior. Strathman et al., (1994) developed a measure

called as “the Consideration of Future Consequences Scale” in order to “measure stable individual differences in the extent to which people consider distant versus immediate consequences of potential behaviors” (p.742). They demonstrated that this scale predicts health and environmental behaviors better than other related constructs.

Among the studies, there are some areas of subjects on which a considerable amount of research have accumulated. These areas constitute delay of gratification, motivation, goals, achievement, academic success and career decisions, which mainly focus on the future aspect of the time and mainly on cognitive representation of the construct and the temporal extension. The main reason of the common focus on these issues and future time may be resulting from the nature of the constructs and the role of the time concept as a ground on which these concepts are defined and operationalized. Although, the all three aspects of time, past, present and future, play a role on the formation of these specific constructs, the future time seems to be the dominant one.

Recently, these specific areas indicated above and the role of future time have been the subject of many studies related to education and educational psychology. The main assumption behind these recent studies is that “students’ conception of the future have a real and significant influence on their beliefs and motivation to learn that, in turn, influences their achievement positively” (Kauffman & Husman, 2004, p.4). According to Kaufmann and Husman (2004), the research on future time is not coordinated and integrated to models of motivation, self-regulation, and well-being.

1.3 Measurements

Time construct has been measured by many different techniques ranging from story completion, word selection, and experienced or targeted events to questionnaires (Strathman et al., 1994). Thematic Apperception Test (TAT), which consisted of responses on a set of three cards taken from TAT and based on the technique used by Wohlford (as cited in Zimbardo and Boyd, 1999), the Experiential Inventory of Cottle, the motivational induction method of Nuttin, questionnaires of Bond and Feather; Roos and Albers, and time lines of Rappaport, are the commonly used ones. According to them, there are also scales developed and used, which focus on a single dimension, such as Future Anxiety Scale of Zaleski, the Consideration of Future Consequences Scale (Strathman et al., 1994), and Sensation-Seeking Scale of Zuckerman. These scales are mostly considered with the time perspective and orientation, if we borrow the definitions of Nuttin, which mainly deal with the extension, structuralization and preferential temporal direction of thoughts and actions, respectively. For the measurement of attitudes or affect towards future there are two scales used in the studies. The most commonly used one is the Inventory of Temporal Experiences Scale (ITE) of Yonge, which is defined in detail in the article of Lennings (1992). This scale was utilized to assess the various attitudes a person might hold toward time. It is a 4-point scale with four subscales, which are measures of positive, negative, and neutral attitudes toward time and creative potential.

The other attitude scale is the “Time Attitude Scale” developed by Nuttin (as cited in Calster, Lens & Nuttin, 1987) to measure attitudes towards the personal past, present and future, which constitute the three subscales of the measure. The scale is based on Osgood’s semantic-differential rating technique and a 7-point scale is used.

Some studies pointed out the important role of attitudes towards future may play. For instance, in their studies Lennings, Burns and Cooney (1998) indicated that temporal extension did not appear to be an important variable, but the attitudinal variables and temporal structure that is defined as the capacity to structure events into a temporal sequence, ability to integrate time zones and a sense of temporal orientation, were important. In another study of Lennings (1992), a person's temporal attitude was found to be the most important determinant of the response given to scales used in the study, which were Time Questionnaire of Yufit and Benzies, Beck Hopelessness Scale, the Schalling Impulsivity Scale, and TAT. Also, Calster, Lens and Nuttin (1987, p10) found that "induction of a future time perspective in present activities will increase the motivation only for subjects with a positive attitude toward future".

1.4 Role of Time on the Self Concept

As stated before, individual based understanding of time was widely accepted, so time was conceptualized as a personality trait. For instance, Zimbardo, Keough and Boyd (1997) stated that learned and preferred focus regarding time becomes chronic and then functions as a personality trait, which is also open to situational modifications and contingencies. Moreover, organization of self-knowledge and time were, explicitly or implicitly, stated to be related in the studies. Smothkin and Eyal (2003, p.260) state, "the organization of psychological time reflects the construction of the self". Philosophers such as Locke (as cited in Brown, 1998) and James (as cited in Zimbardo and Boyd, 1999) indicated the basic integrating function of time and temporal contiguity in forming a meaningful unity in their definitions and descriptions of identity and self. For instance, Locke (as cited in Brown, 1998) defined a person as an intelligent creature that is able to

question and to represent itself in different times and places without losing the continuity of itself. William James (as cited in Zimbardo and Boyd, 1999) explicitly emphasized the centrality of the concept of time and wrote “time perception” chapter in *The Principles of Psychology*.

Time perspective and related terms have been used and integrated to theories of many psychologists starting from Piaget, Freud, and Lewin (Meade, 1971). Lewin became influential on the following studies with his inclusion of time into his life space model and studies on level of aspiration. He focused on the effect of time perception on current behaviors and related time with human motivation and goals. According to Lewin (1951, p.75), time perspective is “The totality of the individual’s views of his psychological future and his psychological past existing at a given time”. Lewin also indicated “Persons of all ages are influenced by the manner in which they see the future, that is by their expectations, fears and hopes” (Meade, 1971, p.175). The relation built by Lewin between time, especially the future time, and the motivation and goals inspired many other studies (Karniol & Ross, 1996).

Relation between time and self-concept has also been studied by many researchers under different names and conceptualizations. Moore and Lemmon (2001, p.2) state “Self is understood to be a person with continuous existence through time”. They specially used *temporally extended self* term in order to emphasize the existence of the self not just with a present but also with a past and a future.

Markus and Nurius (1986) indicated that possible selves are linked to the thinking about the future and are derived from the representations of the self in the past and future with a connection to the current selves. They also pointed out that studies on individuals’ understanding of the future had not paid much attention to how the future is represented

in the self-concept. Recent studies (e.g., Husman & Lens, 1999; Lasane & Jones, 1999; Seijts, 1998; Zimbardo, Keough, & Boyd, 1997) concentrate mainly on the effect of understanding of future on behavior and emphasize the role of goals and motivation on behavior and thinking. However, these studies provide a weak link between the future and self-concept.

1.5 Aims of the Study

Human beings are unique creatures in terms of having representations of objects and events and temporal integration. Different from other animals, they do not, and in fact cannot, live primarily in the present. They associate events from the past and future, which intrude into consciousness continually. Also, human beings have the ability to act in the present in the light of anticipations of reality and believing in their validity; integrating the past and present experiences with images of future; and experiencing the pleasure or discomfort as a result of these symbolic representations.

“The process of temporal integration does not in itself account, however, for the motivating power that such images possess” (p.34) and “ unless images of the future give rise to present emotions, anticipations will have little effect on a person’s behavior” (Cottle & Klineberg, 1974, p. 16).

From the review of the conceptualizations and studies, it can be concluded that the cognitive and motivational aspects of time construct has been given higher concern, while the attitudinal and affective sides have not received the attention they deserve yet. Also, in the studies focusing on the relation between time and self-concept, the emphasis has particularly been given to the development of temporally extended self and so to the early years of the human life. Therefore, memory and past-related issues were given

higher concern. Moore and Lemmon (2001) suggest that a bulk of research has accumulated and focused on the role of temporally extended self in personal forms of memory and recent interest in future oriented thinking should be incorporated to these studies to reach an overall picture.

In fact, the issue of few studies on the affective or attitudinal aspect of the time construct may also be a result of the lack of appropriate or adequate measurement instruments. Therefore, one part of the aims of the study was to focus on the future time and to develop a scale to measure attitudes towards the future, which may easily be integrated with the common research subjects in the area related with time such as motivation, goal, and achievement.

Also in view of its stable, trait-like nature, psychological time orientation may be associated with one's self-construals. Therefore, the second aim of the study was to explore the relationship between attitudes towards the future and self-construals based on the Balanced Integration and Differentiation Model proposed by Imamoglu (1998, 2002), as considered below.

1.5.1 The Balanced Integration and Differentiation (BID) Model

According to Imamoglu (1998, in press), people have two natural inclinations, which are intrapersonal differentiation and interpersonal integration. Individuals need to actualize their potentials and be effective in their environment by differentiating themselves and also they are inclined to integrate with other people. In fact, she suggests that is what happens in the natural order, which involves “ an interdependent system of differentiated components” (Imamoglu, 1998, p. 96). With this understanding she has developed the BID model, in which the balance is achieved with the satisfaction of these

two basic needs. In other words, optimal development occurs with actualizing and realizing oneself (i.e., individuation) while also building satisfactory relations with others (i.e., relatedness).

She points out that different levels of emphasis are given in different societies (i.e., individualistic and collectivistic societies) to these two basic needs, which may result in the development of cases other than the balanced one. Therefore, the model suggests two basic dimensions, which are the self-developmental-orientation (or the intrapersonal differentiation) and the interrelational-orientation (or the interpersonal integration). The two poles of the former dimension are characterized by individuation, (i.e., developing in accordance with personal inclinations and capabilities) and normative patterning, (i.e., developing in accordance with social control). On the other hand, the two poles of the latter orientation are characterized by separatedness and relatedness. Different combinations of these dimensions give way to four self-construal types- namely, separated-individuation, separated-patterning, related-patterning, and related-individuation. Of these self-construal types, related individuation is proposed to represent the optimal development with a balanced state of intrapersonal differentiation and interpersonal integration.

Future time attitudes are expected to vary systematically according to the different self-construals and related-individuation type is expected to have the most positive attitude towards the future.

In sum, the study basically aims to

- (a) develop a scale measuring the university students' attitudes towards the future,
- (b) explore the relationship between future time attitudes and self-construals.

CHAPTER II

METHOD

2.1 Sample

The sample consisted of 303 undergraduate Middle East Technical University students. One hundred and seventy two of the respondents were females and 131 of the respondents were males, with an average age of 21 ranging from 17 to 28. Questions regarding to parents' education and occupations were asked in order to get information about the socioeconomic-status (SES) of the sample. Most of the students were from middle and upper middle SES families. Thirty five per cent of the mothers and 60% of the fathers were university graduates and post-graduates, 32% of the mothers and 27% of the fathers were high school graduates, and 32% of the mothers and 13% of the fathers were secondary or primary school graduates. As for the occupations of the parents, more than half of the mothers (59%) were housewives, 36% of the mothers were government officers and the remaining were professionals or high level bureaucrats and workers. Most of the fathers (60%) were government officers, 18% were professionals or high level bureaucrats, 12% were workers or farmers, and the remaining 10% were unemployed.

2.2 Measuring Devices

Four scales were used as the measuring devices, which are going to be explained below. Balanced Integration and Differentiation Scale (BID) (Imamoglu, 1998), the Positive Future Expectation Scale (PFES) (Imamoglu, 2001), the Future Time Orientation Scale (FTO) (Gjesme, 1979) and the Attitudes Towards Future Scale, which was developed for the current study, were used in the study. The scales used are presented in Appendices A, B, C, and D, respectively. Items of the FTO Scale were rated on a 4-point scale in the original form. However, to provide an overall consistency among the response sets in the scale set, the subjects were asked to rate the extent to which they agree to each item on a 5-point Likert scale (1= strongly disagree, 5= strongly agree) for all scales.

a) Balanced Integration and Differentiation Scale (BIDS)

The scale is composed of twenty nine items and taps the interrelational and self-developmental dimensions of the Balanced Integration and Differentiation Model of Imamoglu (1998, 2002). Thirteen items were related to the self-developmental orientation. These items measure one's orientation toward individuation (e.g., "having a personality unique to myself") rather than toward normative patterning (e.g., "acting in accordance with the society"). The remaining sixteen items were related to interrelational orientation and assess being attached to one's family (e.g., "feeling emotionally close to my family") and not feeling disconnected from personal relations (e.g., "feeling remote from others"). The Cronbach's alphas were .74 for self-developmental orientation and .91 for interrelational orientation for the original study. In the study of Kurt (2000) with the sample of Turkish university students, the Cronbach's alphas were found to be .79 for

self-developmental orientation and .87 for interrelational orientation. In another study (Gezici, 2002), the Cronbach's alphas were found to be .81 and .80 for self-developmental and interrelational orientations for a sample consisting of women, respectively. Also, in their studies, Imamoglu and Karakitapoglu-Aygün (under review), reported that for the sample consisting of Turkish university students the reliability values were .77 and .86, while for the sample consisting of American university students they were .71 and .86 for self-developmental and interrelational orientations, respectively (see Appendix A).

b) The Positive Future Expectation Scale (PFES):

This five-item scale aims to measure the positive expectations regarding the subjects' personal future (Imamoglu, 2001). None of the items were scored in reverse direction. Items were like "I am optimist about my personal future", and "I believe I will reach my goals at the end". In the study of Imamoglu (2001), the Cronbach's alpha of the scale was found to be .85 (see Appendix B).

c) The Future Time Orientation Scale (FTO):

Gjesme (1979) developed a six-item questionnaire in order to measure future time orientation. Then, he extended this scale by adding new items from Heimberg's Future Time Perspective Inventory by selecting the items according to their consonance with the original questionnaire. This 14-item scale intends to tap the degree of general concern, engagement, and involvement in the future. Items were rated on a 4-point scale ranging from "it is very true of me" to "not at all true of me". The reliability in terms of

the alpha coefficient was found to be .62 in Gjesme's study. The factor structure of the FTO suggested four factors, which are involvement, anticipation, occupation, and speed.

FTO Scale was used by Öner (2000). In the Turkish version, reliability of the scale was found to be low (Alpha= .26), but after the exclusion of three items it increased to .61. In the current study, after evaluating the Turkish version of the scale, one item ("I need to feel rushed before I can really get going") was decided to be reworded and all items were used. The dimensions related to the degree of involvement and anticipation were used in the study since the factor structure did not support the other dimensions completely for the sample of the current study. Involvement dimension measures the degree to which an individual focuses on future events. Involvement items were like "I have been thinking a lot about what I am going to do in the future", "I think about the future only to a very small extent" (reverse), and "I am not so very much concerned about things a little ahead in time" (reverse). Anticipation dimension measures how well an individual prepares for future events. Anticipation items were like "I always seem to be doing things at the last moment" (reverse), and "I find it hard to get things done without a deadline" (reverse) (see Appendix C).

d) Attitude Towards Future Scale (ATFS):

The scale consisted of 40 5-point Likert type items. The scale was developed for the current study in order to capture the attitudes of university students towards the personal future. In the first stage of scale development, a group of judges consisting of 12 graduate psychology students were given a brief and general description of the aim of the development and were required to generate as many items as possible about the attitudinal object. As a result of this session, a total of 54 items were generated. In the

second stage, these 54 items were given to the same group of judges for a further evaluation of the wording and meaning of the items. After this review, 14 of the items were deleted as a result of poor meaning and relation to the attitudinal object (Appendix E). The remaining 40 items were given to the participants in the study as a part of the set of scales (see Appendix D).

2.3 Procedure

Scales were administered to students during their class hours. The scales were presented in the above order and a brief instruction section was written at the beginning of the scales, which required all questions to be answered with sincerity. Respondents were required to write a code that they would not forget after three weeks in order to check test-retest reliabilities of the scales. Eighty-nine of the students were given the set of scales again after three weeks. Questionnaire administration lasted about 15-20 minutes.

CHAPTER III

RESULTS

First, reliability and validity of the Attitudes Toward Future Scale (ATFS) were investigated. Factor analyses were conducted in order to examine structure of the scale and determine underlying dimensions. As a result of these analyses a reduced form of the ATFS was formed. For testing the convergent validity, the correlational analyses were conducted among the subscales of ATFS and other related scales, Future Time Orientation Scale (FTO), Positive Future Expectations Scale (PFES), namely. Then, the reliability analyses were conducted. Finally, the relationship between the ATFS and BID Scale was investigated through correlational analysis and multivariate analyses of variance.

3.1 Validation of the Attitudes Towards Future Scale (ATFS)

The data were screened for missing values and outliers. For cases where there is only one missing value, the missing values were replaced by the median of the group. Two cases with more than one missing values were excluded from the analyses. Standard *z*-scores were computed and four cases with *z*-scores below -3.29 were excluded. Lastly,

two of the cases were found to be multivariate outliers by calculating Mahalanobis distance. As a result, the analyses were conducted with the data from 295 subjects.

3.1.1 Results of Factor and Item Analyses

In order to determine the factor structure of the ATF Scale, forty items of the scale were analyzed using principle components exploratory analysis. The scree plot indicated that the measure is not unidimensional. To decide on the most appropriate rotation technique, initially an analysis with Varimax rotation procedure, which is an orthogonal and also the most commonly used rotation in the exploratory analyses, was used (Tabachnick & Fidell, 2001). The scree plot and interpretability of factor solution suggested that the number of factors is between three and five. Then Direct Oblimin rotation, which provides an oblique solution, was run in order to check any existing relations between the components. Component correlation matrix suggested that the components are moderately correlated with most of the correlations over .32, which is accepted as the cut-off point for choosing an oblique rotation (Tabachnick & Fidell, 2001). Depending on these analyses, the most suitable rotation was decided to be Promax rotation which produces an orthogonal Varimax prerotation followed by an oblique rotation.

Since the factor model does not work well for the variables with low communality, seven items (1, 2, 12, 15, 25, 27, 33) with communalities lower than .25 and with low contribution in terms of interpretability to the factor solution were excluded from the analyses. Also another seven items (3, 17, 19, 26, 34, 37, 40) were excluded because of low loading, which was under the cut-off point of .32 (Tabachnick & Fidell, 2001), and cross loadings. After the exclusion of 14 items, principle component analysis

with Promax rotation procedure yielded four factors (eigenvalue>1) that explained 55 % of the variance. The first factor had an eigenvalue of 8.47 and explained 32.58% of the total variance. The second and third factors had eigenvalues of 2.66 and 1.80 and explained 10.23 and 6.94 % of the total variance, respectively. Lastly, the eigenvalue of the fourth factor was 1.25 and it accounted for 4.79 % of the total variance. However, the last factor was composed of only two items, which are related to having a good marriage and family in the future. In fact, these two items were also highly related to the first factor of having a positive attitude towards future, but since they were so strong they diverged and formed a separate factor. When the analysis was forced to a three-factor solution, these two items constituted the highest loading items on the first factor. This three-factor solution with principle component analysis and Promax rotation procedure accounted for 50 % of the total variance. The results of the analysis indicated that the solution is appropriate for factor analysis with sufficient inter-item correlations exceeding .30, Kaiser-Meyer-Olkin measure of sampling adequacy of .90, and a significant Bartlett's test of sphericity. Loadings of items on factors, communalities, percent of variances, and eigenvalues of the factors are shown in Table 3.1. Items are ordered and grouped by size of loading to facilitate interpretation. Items with loadings above .32 were accepted.

As can be seen in Table 3.1, the first factor included items related to positive attitudes towards future and positive expectations from the future in terms of family, job, friends and success. The high loading items included such attitudes as, "I believe I will have a good marriage in the future", "I believe I will have a good family", " I believe I will be more successful in the future", and "I believe I will do better things in the

future". This factor included 13 items, explained 32.58 % of the variance (eigenvalues = 8.47, $\alpha = .89$), and labeled Positive Orientation.

Table 3.1.

Factors, Factor Loadings and Communalities of the Promax Rotated Factor Analysis for Attitudes Towards the Future Scale

Items	Item no.	Loadings
Positive Orientation (eigenvalue = 8.47; variance accounted = 32.58 %; $\alpha = .89$)		
▪ Gelecekte iyi bir evlilikim olacagina inanıyorum.	30	.94
▪ Güzel bir aile kuracagima inanıyorum.	24	.89
▪ Gelecekte iyi dostlarim olacagina inanıyorum.	31	.70
▪ Gelecekte daha basarili olacagima inanıyorum.	36	.68
▪ Gelecekte daha güzel isler yapacagima inanıyorum.	35	.66
▪ Herseyin yoluna girecegine inanirim.	08	.62
▪ Gelecegin bugünden daha iyi olacagina inanıyorum.	29	.56
▪ Yasamda istediklerimi elde edecegime inanirim.	04	.56
▪ Gelecekte daha güzel seylere sahip olacagima inanıyorum.	13	.53
▪ Zorluklarin asilacagina inanirim.	09	.51
▪ İyi bir ise sahip olabilecegimi düşünüyorum.	23	.51
▪ Gelecekte güzel sürprizler bekliyorum.	18	.47
▪ Gelecegimi yönlendirebilirim.	32	.43
Fearful Orientation (eigenvalue = 2.66; variance accounted = 10.23 %; $\alpha = .82$)		
▪ Gelecegin bilinmezligi beni kaygilandırıyor.	21	.86
▪ Hayatin bana ne getirecegini bilmemek beni huzursuz ediyor.	11	.85
▪ Gelecegi düşünmekten korkarim.	06	.73
▪ Gelecegi düşünmek bana kaygi veriyor.	38	.65
▪ Hayatin gittikçe zorlastigina inanıyorum.	39	.64
▪ Gelecegimi belirsiz görüyorum.	10	.55
▪ Gelecegi düşünmek beni rahatsiz etmez.	22	-.53
▪ Gelecekte alacagim olasi sorumluluklardan korkuyorum.	28	.48
Planful Orientation (eigenvalue = 1.80; variance accounted = 6.94 %; $\alpha = .79$)		
▪ Gelecegi bugünden planlamam gerektigini düşünüyorum.	14	.88
▪ Uzun vadeli planlar yapmam.	07	-.84
▪ Gelecege dair planlar yaparim.	05	.74
▪ Gelecek hakkında düşünmek yersiz.	20	-.70
▪ Bugünü, gelecegi daha güzel hale getirecek sekilde yasıyorum.	16	.46

The second factor is composed of eight items related to attitudes about uneasiness about the unpredictability of the future, fear and anxiety about the future. The high loading items are “ The unpredictability of the future makes me anxious”, “Not knowing what the future will bring makes me uneasy”, and “I am afraid of thinking about the future”. This factor explained 10.23 % of the variance (eigenvalues = 2.66, $\alpha = .82$) and labeled Fearful Orientation.

Finally, the third factor included five items related to thinking and planning about the future and explained 6.94 % of the variance (eigenvalues = 1.80, $\alpha = .79$). It was labeled Planful Orientation. The marker items in this factor are “I think I should plan the future from today”, and the negatively loaded item of “ I do not make plans for the long-term”.

Also, a short form of the scale was formed by choosing five items from each factor. While choosing the items from the first and second factors, the first criterion was the high loadings of the items. However, for the high-loading items, which are similar in meaning, another item was chosen that has lower loading but in accordance with the factor. When these fifteen items were analyzed again using principle component analysis with Promax rotation procedure, the analysis yielded three factors (eigenvalues > 1) explaining 59 % of the variance, which is higher than the explained variance of the long form of the scale. The reliabilities of the factors showed almost no change, despite the fact that the number of the items was reduced by nearly half of the scale, except the minor decline in the reliability of the Positive Orientation factor. Therefore, as a reduced form of the ATFS, this short form was formed, which is carrying better measurement qualities. This short form is going to be the subject of analyses from this point forward.

Loadings of items on factors, communalities, percent of variances, and eigenvalues of the factors are shown in Table 3.2.

Table 3.2.

Factors, Factor Loadings and Communalities of the Promax Rotated Factor Analysis for the Reduced Form of Attitudes Towards the Future Scale

Items	Item no.	Loadings
Positive Orientation (eigenvalue = 5.13; variance accounted = 34.17 %; $\alpha = .80$)		
▪ Gelecekte daha güzel isler yapacagima inaniyorum.	35	.83
▪ Gelecekte iyi bir evliligim olacagina inaniyorum.	30	.80
▪ Gelecekte daha basarili olacagina inaniyorum.	36	.80
▪ Gelecegin bugünden daha iyi olacagina inaniyorum.	29	.78
▪ Gelecekte daha güzel seylere sahip olacagima inaniyorum.	13	.55
Fearful Orientation (eigenvalue = 2.43; variance accounted = 16.17 %; $\alpha = .81$)		
▪ Gelecegin bilinmezligi beni kaygilandiriyor.	21	.87
▪ Hayatin bana ne getirecegini bilmemek beni huzursuz ediyor.	11	.85
▪ Gelecegi düşünmek bana kaygi veriyor.	38	.70
▪ Gelecegi düşünmekten korkarim.	06	.66
▪ Gelecegi düşünmek beni rahatsiz etmez.	22	-.62
Planful Orientation (eigenvalue = 1.31; variance accounted = 8.74 %; $\alpha = .79$)		
▪ Uzun vadeli planlar yapmam.	07	-.85
▪ Gelecegi bugünden planlamam gerektigini düşünüyorum.	14	.81
▪ Gelecek hakkında düşünmek yersiz.	20	-.76
▪ Gelecege dair planlar yaparim.	05	.71
▪ Bugünü, gelecegi daha güzel hale getirecek sekilde yasiyorum.	16	.46

3.1.2 Correlational Analyses and Convergent Validity

The correlational analyses showed that there are significant correlations among the subscales of the ATFS (short form). Positive orientation subscale is highly but negatively correlated with the fearful orientation scale and also highly correlated with the planful orientation scale, which were $-.44$ and $.46$ ($p < .01$), respectively. On the other

hand, the correlation between the fearful orientation and planful orientation scales was a bit less but still significant in the reverse direction ($-.19, p < .01$). Intercorrelations among the subscale scores are given in Table 3.3.

Scores on this new scale, ATFS, were correlated with other scales in the scale set, which are measuring similar characteristics. These scales, as explained before, were:

a) Future Time Orientation Scale (FTO):

For the sample of the current study, involvement and anticipation dimensions of the scale were supported by the factor structure. The factor structure for the anticipation dimension was the same as in the original study. However, one item (“The future seems very vague and uncertain to me”), which were also stated to be more related to the degree of clarity and structure of the future by Gjesme (1979), did not load on the involvement factor. This item was also the one with lowest loading (.36) in the original study. Therefore the analysis was conducted without this item. In the current study the Cronbach’s alpha for the involvement and anticipation items were found to be .71 and .83, respectively. The correlations between the subscales of FTO and ATF Scales were statistically significant except one and ranging from .14 ($p < .05$) to .66 ($p < .01$). The first factor of the ATFS, which is related to positive outlook towards the future, was found to be weakly correlated with the involvement and anticipation dimensions of the FTO Scale, which are .24 ($p < .05$) and .14 ($p < .01$), respectively. The second factor of the ATFS, which is related to future concerns, worries and fears, was found to be weakly and negatively correlated with the anticipation dimension ($-.17, p < .01$). The third factor of ATFS, planning, thinking and concerns about the future, was more strongly correlated with the involvement dimension, which was aiming to measure the focus on future, as

expected (.66, $p < .01$), and also weakly correlated with the anticipation dimension (.17, $p < .01$), as can be seen in Table 3.3.

b) Positive Future Expectations Scale (PFES):

This scale aims to measure the positive expectations regarding the individual's personal future. In the current study, Cronbach's alpha was found to be .93. The subscales of the ATFS had high correlations with the PFES, which were .68 with the first factor as expected, -.53 with the second, and .39 with the third one, all being significant at the .01 level.

Table 3.3.

Intercorrelations of Subscale Scores of ATFS, FTO, BIDS, and PFES

	1	2	3	4	5	6	7	8
ATFS								
Positive (1)	--							
Fearful (2)	-.44**	--						
Planful (3)	.46**	-.19**	--					
FTO								
Involvement (4)	.24**	.03	.66**	--				
Anticipation (5)	.14*	-.17**	.17**	.15*	--			
PFES (6)	.68**	-.53**	.39**	.15*	.22**	--		
BIDS								
Relational (7)	.37**	-.28**	.26**	.15*	.06	.44**	--	
Individuation (8)	.09	-.19**	.16**	.19**	.05	.19**	.02	--

** $p < .01$

* $p < .05$

3.1.3 Reliability Analyses

According to Schmitt (as cited in McIntire and Miller, 2000), Cronbach's alpha coefficient over .70 is sufficient for reliability. The reliability Cronbach's alphas for the subscales of the ATFS meet this criterion as being .80, .81, and .79, respectively. Also for

obtaining test-retest reliabilities, eighty-nine of the students were given the scale set after three weeks. The test-retest correlations of the ATFS and its subscales were .70, .76, .71, and .78, respectively.

3.2 Relationship Between ATFS and Self-Construals

3.2.1 Correlational Analyses

The self-developmental orientation was negatively correlated with the fearful and positively with the playful orientations of the ATFS, which were rather weak, $-.19$ and $.16$ ($p < .01$), respectively and uncorrelated with the positive orientation. On the other hand, interrelational orientation dimension was correlated with all three subscales of the ATFS ($.37$, $-.28$, and $.26$, $p < .01$, respectively), as can be seen in Table 3.3.

3.2.2 MANOVA Analyses

To explore whether attitudes towards the future vary as a function of gender and self-construal orientations, a 2 (gender) \times 2 (interrelational; low, high) \times 2 (self-developmental; low, high) between-subjects MANOVA was performed. Being low and high on self-construal orientations were determined by dividing participants into two groups by using the median of interrelational orientation (Median= 3.82) and the median of self-developmental orientation (Median= 3.62).

With the use of Wilks' criterion, the combined DVs were found to be significantly affected by both interrelational, $F(3, 285) = 15.84$, $p < .001$, and self-developmental orientation, $F(3, 285) = 4.15$, $p < .05$, but not by gender, $F(3, 285) = 3.50$, $p > .05$ and their interactions. The multivariate η^2 based on Wilks' lambda showing

the association between relatedness scores and the combined DVs was stronger (.14) than that of the association between individuation and the combined DVs (.04).

The univariate between-subjects effects indicated that for interrelational orientation, all univariate ANOVAs regarding positive orientation, $F(1, 287) = 40.74$, $p < .001$, $MSE = .256$, $\eta^2 = .12$, fearful orientation, $F(1, 287) = 20.50$, $p < .001$, $MSE = .400$, $\eta^2 = .07$, and planful orientation, $F(1, 287) = 13.84$, $p < .001$, $MSE = .340$, $\eta^2 = .05$, were significant. For self-developmental orientation, only fearful orientation, $F(1, 287) = 9.17$, $p < .05$, $\eta^2 = .03$, and planful orientation were significant, $F(1, 287) = 4.63$, $p < .05$, $\eta^2 = .02$.

An examination of estimated marginal means shown in the Table 3.4 indicated that those individuals who have high rather than low interrelational orientation scores, have more positive attitudes towards the future, have less future concerns, worries and fears, and have a more planful orientation towards the future. Also, individuals with high self-developmental orientation scores have less future concerns, worries and more plans when compared to those who are low on this dimension (See Table 3.4).

Table 3.4.

Means and Standard Deviations for the Positive, Fearful, and Planful Orientations Towards the Future in Terms of Interrelational and Self-developmental Orientations

Self Orientations	Future Orientations		Mean	SD	F	η^2
Relational						
	Positive	Low	3.60	.04	40.74*	.12
		High	3.99	.04		
	Fearful	Low	2.69	.05	20.50*	.07
		High	2.35	.05		
	Planful	Low	3.56	.05	13.84*	.05
		High	3.82	.05		
Individuational						
	Positive	Low	3.75	.04	2.40	.01
		High	3.84	.04		
	Fearful	Low	2.63	.05	9.17*	.03
		High	2.40	.06		
	Planful	Low	3.62	.05	4.63*	.02
		High	3.77	.05		

* $p < .05$ Note: Cronbach's alphas for relational and individuational orientations were found to be .86 and .77, respectively.

Secondly, a one-way MANOVA was conducted to determine the effects of the four self-types suggested by the BID Model (i.e., separated patterning, related patterning, separated-individuation, related-individuation, which are formed by different combinations of being high and low on self-developmental and interrelational orientations), on future orientations (positive, fearful, and planful orientations) as dependent variables.

For this purpose, participants were divided into two groups by using the median of the each dimension as the cutting point. Relatedness and separatedness represented the

high and low ends of the interrelational orientation dimension, respectively (Median= 3.82); and individuation and normative patterning represented the high and low ends of the self-developmental-orientation dimension, respectively (Median= 3.62). Four self-construal types were formed using the combinations of those high and low scores on each dimension.

Significant differences were found among the four self-types on future orientations, Wilks' $\lambda = .83$, $F(9, 704) = 6.17$, $p < .001$. The multivariate η^2 based on Wilks' λ was .06.

Univariate ANOVAs indicated that the self-type main effect was significant for positive future orientation, $F(3, 3609) = 14.02$, $p < .001$, $MSE = .257$, $\eta^2 = .13$, for fearful orientation, $F(3, 4034) = 9.91$, $p < .001$, $MSE = .407$, $\eta^2 = .09$, and as well as for planful orientation, $F(3, 1866) = 14.02$, $p < .001$, $MSE = .341$, $\eta^2 = .05$.

Post-hoc analyses to the univariate ANOVA using Bonferroni test, as can be seen in Table 3.5, indicated that respondents with separated-patterned and separated-individuated self-types, who did not differ from each other, had lower positive orientation scores than the related-patterned and related-patterned ones, who also did not differ from each other on this orientation. For the fearful orientation, the separated-patterned respondents differed significantly from other three self-types by having the highest mean score on this orientation, as shown in Table 3.5. For the planful orientation, respondents with related-individuated self-type significantly differed from those with separated-patterned and separated-individuated self-construals by having the highest mean score on this orientation.

Table 3.5.

Means and Standard Deviations for the Self-types in Terms of Positive, Fearful, and Planful Orientations Towards the Future

Future Orientations	Self-types								F	η ²
	Separated patterning		Separated individuation		Related patterning		Related individuation			
	Mean	SD	Mean	SD	Mean	SD	Mean	SD		
Positive	3.54 ^a	.50	3.66 ^a	.65	3.93 ^b	.42	4.01 ^b	.43	14.02*	.13
Fearful	2.85 ^a	.61	2.53 ^b	.74	2.44 ^b	.60	2.31 ^b	.60	9.91*	.09
Planful	3.50 ^a	.55	3.61 ^a	.65	3.72 ^{a,b}	.56	3.87 ^b	.58	5.47*	.05
N	78		72		74		71			

* $p < .05$

Note. Different superscripts denote significant differences ($p < .05$) on means according to Bonferroni Test.

CHAPTER IV

DISCUSSION

Present research aimed to explore how people with different self-construals orient themselves toward the future. To achieve this aim first a scale was developed which was found to be tapping positive, fearful, and planful orientations to future and its association with other future related scales was examined. Secondly, time orientations of respondents with different self-construals, as specified by the Balanced Integration Differentiation (BID) Model, were explored. In this section first results of the study are considered, in the order specified above, and then limitations of current study and suggestions for future studies are stated.

4.1 Characteristics of Future Orientations

As indicated before, Attitude Towards Future Scale (ATFS) yielded three subscales, which are labeled as positive, fearful and planful orientations. Although positive orientation and fearful orientation factors are highly but negatively correlated, the relationship between fearful and planful orientation is not as high as the relation between fearful and positive orientations. This may provide support for the view of multidimensional structure of the future time orientation. In fact, the first two orientations

may be said to represent the affective, and the latter cognitive-motivational aspects of the future time conceptualizations. That is, while concern and focus given to the future, and planning represent the cognitive and motivational aspects, positive outlook, and its opposite, the negative perspective which is carrying fears, worries and anxieties, may be said to represent the affective dimension.

Positive orientation toward the future covers positively valenced thoughts regarding the future. It is about general positive expectations for the future, which are positive. This orientation does not carry a deep future concern but rather a general sense of positive personal future. This interpretation is supported by its closer association with the involvement dimension of Future Time Orientation (FTO), which emphasizes the focus on future events, and Positive Future Expectations Scale (PFES) than anticipation dimension of FTO, which emphasizes preparation for future events.

Fearful orientation, on the other hand, represents the avoidance of the thoughts related to the future, which is constructed as ambiguous and uncertain, and an inclination to attribute negative valence to the future. The lack of correlation between fearful orientation and involvement dimension of FTO indicates that this orientation is not related to focusing on future events and may be said to be negatively associated with the preparation for future events as the negative correlation between fearful orientation and anticipation dimension of FTO pointed out.

Planful orientation represents a general mental organization for the future events and a future commitment rather than a ready to apply action plan. Its strong association with the involvement dimension of the FTO indicates that this orientation captures how much an individual believes that future needs to be planned in accordance with one's goals and expectations.

In general, ATF Scale seems to be a reliable and valid tool for exploring orientations toward the future. It is meaningfully related to other future-related constructs and has considerably high reliability scores even when its number of items is reduced and a short form is produced. In fact, what Kurt Lewin (1951) indicated while he was trying to explain constructs in Field Theory was quite supportive and in line with the dimensions of ATFS. According to him, "Fear may seem to have the same dimension as aversion. However, in most cases fear is related to the psychological future. It has to deal with some aspect of 'time perspective'. In this respect it is similar to concepts like hope, plan, expectation." (p. 40).

4.2 The Relationship between Future Orientations and Self-Construals

As indicated before, Imamoglu's model (2002) suggests two main dimensions on which self-construals are built, which are self-developmental and interrelational self-orientations. Self-developmental orientation represents an intrinsic individual inclination, actualizing one's own potential and being effective in the environment, while the interrelational orientation refers to the inclination to integrate with others (Imamoglu, 1998).

According to her, an individual questions who s/he is, who s/he should be and who s/he can be, and this inquiry leads to particular affective and cognitive-motivational orientations. Part of the answers of the questions regarding the self exists in the future dimension of time since these answers imply mostly the reflection of the self into the future. Therefore, a meaningful relation between self-construals and future time orientation was expected to be found in this study.

In the previous studies, the interrelational orientation was found to be correlated with affective-relational orientations (e.g., being able to cope with relational problems and being satisfied with one's self, family, marriage or life), while the self-developmental orientation was found to be related to cognitive-motivational orientations (e.g., being high on need for cognition and low on authoritarianism, and being able to cope with individual problems) (Imamoglu, 2002, in press). Therefore, finding an association between positive future orientation and interrelational self-orientation, but the lack of association between positive future orientation and self-developmental orientation supports the previous description of the positive orientation as implying a general positive outlook to future.

On the other hand, fearful future orientation seems to involve both the cognitive and affective aspects as its correlations with self-orientation dimensions indicate. The fear regarding the uncertain future may create negative apprehensions, while understanding or constructing the future as something ambiguous requires cognitive effort. The negative correlation between fearful future orientation and interrelational self-orientation may indicate that being meaningfully related to others may decrease the fear felt toward the future or that having low fear towards the future may enable one to have or establish meaningful relations with others. While the negative correlation between fearful orientation and self-developmental orientation may indicate that being effective in the environment may decrease the fear toward future or that having low fear towards the future may enable one to individuate.

Being integrated with others seems to be associated with planning for the future as well as with a decrease in the fear felt toward the uncertain future. This may imply that being meaningfully related to others give people the power to handle uncertainty with

courage and support provided by close others rather than feeling fearful toward it. Thus individuals may be able to perceive the uncertain future as something they can cope with and plan for. Also, individuation and hence the agency a person feels seems to be positively associated with his/her planning orientation toward the future.

When future attitudes of the four self-construal types, suggested by the BID Model, were explored, a clear pattern was observed. Separated-patterned respondents tended to have the lowest positive expectations toward the future, the highest fearful orientation and the lowest planful orientation. This self-construal type was followed by the separated-individuated, related-patterned and lastly by related-individuated types. As suggested by the model, the related-individuated respondents, representing the optimal development, seems to have the most positive and planful orientations and the least fearful orientation. This clear pattern in the attitudes toward future definitely supports the association of the BID Model that related-individuation is associated with optimal psychological outcomes.

However, being interrelated with others seems to be more strongly associated with positive, planful, and (negatively) fearful future orientations. Present findings are supportive of the BID Model's assertion that the interrelational and self-developmental orientations, representing distinct needs, tend to be associated with qualitatively distinct types of variable domains, i.e., the former of an affective nature and the latter of a cognitive-motivational nature (Imamoglu, 2002, in press).

4.3 Limitations and Suggestions

Historical conceptualization of time brings the main discussion about the absolute or relative nature of time (McGrath & Tschan, 2004). Literature review suggests that the

second claim is accepted in psychology studies. Possible changes in time orientation with the effect of life stage, social and cultural factors bring another question regarding the trait-like nature of the construct. Being under the control of so many situational factors, the trait-like conceptualization of temporal orientation may be contradictory. However, most of the researchers working in this area concluded that the temporal orientations involve individual differences regardless of their flexibility and are subject to modification by the surrounding circumstances (e.g. Zimbardo & Boyd, 1999; Gjesme, 1979; Lennings & Burns, 1998). Despite the acceptance of this trait-like definition, this discussion regarding the nature of the issue may be the reason for not relating studies on time with the self. However, a total definition of self cannot be given without placing it on a basic dimension, which is the time. Moore and Lemmon (2001, p. 2) indicate, "Self is understood to be a person with continuous existence through time". According to Smothkin and Eyal (2003, p.260), "the organization of psychological time reflects the construction of the self". As indicated in these definitions and comments on self, time is an inseparable part of self and that is why this study aimed to explore how people with different self-construals orient themselves toward the future.

On the other hand, another point about the temporal studies in social psychology is on the different emphasis given to the individual parts of time, past, present, and future. According to Zimbardo and Boyd (1999), each of these individual parts of time is presented in human thinking and so all time dimensions or parts of time should be represented in the studies. As McGrath and Tschan (2004) indicated, according to Zimbardo and Boyd's conceptualization future orientation is a general time orientation and they have contrasted future orientation with present and past orientations. Zimbardo and Boyd argued that time orientation is a relatively stable individual tendency and

people emphasize a particular time frame and develop a consistent temporal bias, such as being more future-oriented, more present-oriented, or more past-oriented.

However, contrary to their views, most of the time orientation studies focused on and indicated the importance of the future time orientation (McGrath & Tschan, 2004). Although different parts of time interact with and so feed each other, the locomotive role of the future time cannot be denied. In fact, as a result of their studies, Zimbardo and Boyd (1999) also found that people in Western cultures are largely future-oriented, or else they have a balanced future and present orientation.

Particularly, in this study the special place of the future time is emphasized because of its probably high relation with self-construals. On the other hand, developmental perspective on the time perception suggests that future time perception completes its development in adolescence and takes an important role in adulthood.

Therefore, this specific time period is expected to carry a significant importance for the sample of the study. On the other hand, considering the importance of the individual's life stage on future time orientation, the sample of the study could have included people from different age groups. Also, the students in the Middle East Technical University may not be a representative sample of the population because they may be likely to have stronger individualistic values (Imamoglu, 1998).

Another issue of concern in the area of study comes with the development of the scales and relative emphasis given to the cognitive part of the time orientation. While length of future extension and organization of future events were emphasized and tried to be measured, affective components were not represented in the previous scales. In fact, the structure of the construct requires both cognitive and affective approach and a synthesis of these would give the best representation of the construct.

Therefore, the scale constructed for this study, ATFS, is believed to fill in this gap by capturing both the affective and cognitive aspects of the future time orientation.

In fact, time as a dependent variable received considerable research interest, but for the issues where time serves as an independent variable, such as what role time plays in motivational and action processes, how time affects cognitive and decision processes, how time is related to feelings and emotions and affect our thoughts and actions, have been given relatively little theoretical and research interest (McGrath & Tschan, 2004). In the current study, future time orientation was also employed as a dependent variable but systematic associations found between future and self-orientations may provide rich guides for future research to explore the affective, cognitive and behavioral domains involved.

As the literature review suggested, studies on time carried up to now are quite diverse in terms of definitions, measures and methods used, and the aspects they have emphasized. Future studies on time need to be organized in a more integrated way, which also should be supported by a common theoretical background and understanding.

As Lewin (1951) suggested, a proper translation from phenomena to concepts requires attention and work from the scientists. Just as in mathematics, scientists working in psychology and other social sciences need to develop appropriate elements of construction and they should find ways to combine these elements into a system of concepts. Although, there is still a long way to go for such kind of a study, the area of time studies may be the one, which has such an urgent need.

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APPENDICES

APPENDIX A

BALANCED INTEGRATION -DIFFERENTIATION SCALE (BIDS)

1. Kendi kendime kaldigimda yapacak ilginç seylar bulabilirim.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

2. Kendimi aileme hep yakin hissedecegime inanıyorum.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

3.* İnsanlarla iliski kurmakta güçlük çekiyorum.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

4. Kendi isteklerimi yapabilmek için kendime mutlaka zaman ve imkan tanımaya çalışırım.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

5.* Kendimi duygusal olarak toplumun disinda kalmis gibi hissediyorum.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

6. Kendimi duygusal olarak aileme çok yakin hissediyorum.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

7.* Farkli olmaktansa, toplumla dsnsel olarak kaynasmis olmayi tercih ederim.

1. Hi katilmiyorum 2. Katilmiyorum 3. ne katiliyorum, ne katilmiyorum 4. Katiliyorum 5. Tamamen katiliyorum

8.* Kendimi yakin evremden duygusal olarak kopmus hissediyorum.

1. Hi katilmiyorum 2. Katilmiyorum 3. ne katiliyorum, ne katilmiyorum 4. Katiliyorum 5. Tamamen katiliyorum

9.* Kendimi insanlardan olabildigince soyutlayip, kendi isteklerimi gereklestmeye alisirim.

1. Hi katilmiyorum 2. Katilmiyorum 3. ne katiliyorum, ne katilmiyorum 4. Katiliyorum 5. Tamamen katiliyorum

10. Hayatta gereklestmek istedigim seyler iin alisirken, ailemin sevgi ve destegini hep yanimda hissederim.

1. Hi katilmiyorum 2. Katilmiyorum 3. ne katiliyorum, ne katilmiyorum 4. Katiliyorum 5. Tamamen katiliyorum

11.* Kendimi yalnız hissediyorum.

1. Hi katilmiyorum 2. Katilmiyorum 3. ne katiliyorum, ne katilmiyorum 4. Katiliyorum 5. Tamamen katiliyorum

12.* Ailemle duygusal baglarimin zayif oldugunu hissediyorum.

1. Hi katilmiyorum 2. Katilmiyorum 3. ne katiliyorum, ne katilmiyorum 4. Katiliyorum 5. Tamamen katiliyorum

13. Ailemle aramdaki duygusal baglarin hayatta yapmak istedigim seyler iin bana gc verdigini dsnyorum.

1. Hi katilmiyorum 2. Katilmiyorum 3. ne katiliyorum, ne katilmiyorum 4. Katiliyorum 5. Tamamen katiliyorum

14.* Kendimi diger insanlardan kopuk hissediyorum.

1. Hi katilmiyorum 2. Katilmiyorum 3. ne katiliyorum, ne katilmiyorum 4. Katiliyorum 5. Tamamen katiliyorum

15.* Toplumsal deęerleri sorgulamak yerine benimsemeyi tercih ederim.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katılıyorum, ne katılmıyorum 4. Katılıyorum 5. Tamamen katılıyorum

16. Kendimi sosyal çevreme duygusal olarak yakın hissediyorum.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katılıyorum, ne katılmıyorum 4. Katılıyorum 5. Tamamen katılıyorum

17. Kendimi ilginç buluyorum.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katılıyorum, ne katılmıyorum 4. Katılıyorum 5. Tamamen katılıyorum

18.* İnsanın kendi kendini istedięi gibi deęil, toplumda geçerli olacak şekilde geliştirmesinin önemli olduğunu düşünüyorum.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katılıyorum, ne katılmıyorum 4. Katılıyorum 5. Tamamen katılıyorum

19.* İnsan geliştikçe, ailesinden duygusal olarak uzaklaşır.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katılıyorum, ne katılmıyorum 4. Katılıyorum 5. Tamamen katılıyorum

20. İnsanın en önemli amacı sahip olduğu potansiyeli hakkıyla geliştirmek olmalıdır.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katılıyorum, ne katılmıyorum 4. Katılıyorum 5. Tamamen katılıyorum

21. İnsanın kendi farklılığını geliştirip ortaya çıkarabilmesi gerekir.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katılıyorum, ne katılmıyorum 4. Katılıyorum 5. Tamamen katılıyorum

22.* Kisinin kendine deęil, topluma uygun hareket etmesi, uzun vadede kendi yararına olur.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katılıyorum, ne katılmıyorum 4. Katılıyorum 5. Tamamen katılıyorum

23.* İnsanin yapmak istediklerini yapabilmesi için, ailesiyle olan duygusal bağlarını en aza indirmesi gerekir.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katılıyorum, ne katılmıyorum 4. Katılıyorum 5. Tamamen katılıyorum

24.* Çevremdekilerin onayladığı bir insan olmak benim için önemlidir.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katılıyorum, ne katılmıyorum 4. Katılıyorum 5. Tamamen katılıyorum

25.* Zamanımızda insanlar arasında güçlü duygusal bağların olması, kendileri için destekleyici değil, engelleyici olur.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katılıyorum, ne katılmıyorum 4. Katılıyorum 5. Tamamen katılıyorum

26. Sahip olduğum potansiyeli ve özelliklerimi geliştirip kendime özgü bir birey olmak benim için çok önemlidir.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katılıyorum, ne katılmıyorum 4. Katılıyorum 5. Tamamen katılıyorum

27. Çevreme ters gelse bile, kendime özgü bir misyon için yaşayabilirim.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katılıyorum, ne katılmıyorum 4. Katılıyorum 5. Tamamen katılıyorum

28.* Herkesin kendi farklılığını geliştirmeye uğrması yerine toplumsal beklentilere uygun davranmaya çalışmasının daha doğru olduğu kanısındayım.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katılıyorum, ne katılmıyorum 4. Katılıyorum 5. Tamamen katılıyorum

29.* Toplumlar geliştikçe, insanlararası duygusal bağların zayıflaması doğaldır.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katılıyorum, ne katılmıyorum 4. Katılıyorum 5. Tamamen katılıyorum

*Requires reverse coding

APPENDIX B

THE POSITIVE FUTURE EXPECTATION SCALE (PFES)

1. Kisisel geleceğim konusunda oldukça iyimserim.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

2. Eninde sonunda hedeflerime ulaşacağıma inanıyorum.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

3. Gelecekte yapmak istediklerimi gerçekleştirebilmek konusunda iyimserim.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

4. Kisisel geleceğim konusunda kötümser sayılmam.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

5. Bazi güçlükler olsa da geleceğe iyimser bakıyorum.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

APPENDIX C

THE FUTURE TIME ORIENTATION SCALE (FTO)

1.* Bazi seyleri genellikle hep son dakikada yapmaya çalisirim.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

2. Gelecekte ne yapacagim hakkında çok fazla düşünürüm.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

3.* “Son teslim tarihi” olmayan seyleri yapmakta zorlanirim.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

4.* Bir seyleri halledebilmem için üzerimde zaman baskisi hissetmem gerekir.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

5.* Yarim yil benim için oldukça uzun bir zamandır.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

6.* Gelecek hakkında çok az düşünürüm.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

7.* Genelde su an için neler hissettigim ile ilgilenirim.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

8.* Zamanin biraz ilerisindeki seylerle çok fazla ilgilenmem.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

9.* Gelecek ile ilgili endişelenmek aslında yersiz, çünkü ne olursa olur.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

10. Gelecek hakkında çok fazla kafa yorardım ve geleceğin çok çabuk yaklaştığını hissedirim.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

11.* Genellikle, gün hiç bitmeyecekmiş gibi gelir.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

12.* Birçok kere kendimi zamani öldürecek yollar ararken bulurum.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

13.* Gelecek bazen bana çok belirsiz gelir.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

14. Genellikle zamanın çok çabuk geçtiğini hissedirim.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

*Requires reverse coding

APPENDIX D

ATTITUDES TOWARDS THE FUTURE SCALE (ATFS)

1. Daha önce yaptığım hataları tekrarlamak istemiyorum.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

2. Bir amaç olmazsa hayattan zevk alınamayacağını düşünüyorum.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

3. Geleceği düşünmek beni mutlu eder.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

4. Yarımda istediklerimi elde edeceğime inanıyorum.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

5.^S Geleceğe dair planlar yaparım.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

6.^S Geleceği düşünmekten korkarım.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

7.*^S Uzun vadeli planlar yapmam.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

8. Herseyin yoluna gireceğine inanırım.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

9. Zorlukların asılacağına inanırım.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

10. Geleceğimi belirsiz görüyorum.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

11.^S Hayatın bana ne getireceğini bilmemek beni huzursuz ediyor.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

12. Tecrübelerimden ders alıyorum.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

13.^S Gelecekte daha güzel şeylere sahip olacağımı düşünüyorum.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

14.^S Geleceği bugünden planlamam gerektiğini düşünüyorum.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

15. Gelecekte şu an sahip olduğum güzel şeylere sahip olamayabilirim.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

16.^S Bugünü, geleceği daha güzel hale getirecek şekilde yaşıyorum.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

17. Gelecekte her şeyin kötüye gideceğine inanıyorum.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

18. Gelecekte güzel sürprizler bekliyorum.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

19. İleride mesleki basarılar elde etmeyi umuyorum.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

20.*^S Gelecek hakkında düşünmek yersiz.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

21.^S Geleceğin bilinmezliği beni kaygılandırıyor.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

22.*^S Geleceği düşünmek beni rahatsız etmez.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

23. İyi bir işe sahip olabileceğimi düşünüyorum.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

24. Güzel bir aile kuracağıma inanıyorum.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

25. Geleceği geçmişteki hatalarımı düzeltmek için bir fırsat olarak görüyorum.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

26. Gelecekte mutlu olmak için bugün bazı şeylerden fedakarlık edilmesi gerektiğine inanıyorum.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

27. Gelecekte zorluklarla karşılaşabilirim.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

28. Gelecekte alacağım olası sorumluluklardan korkuyorum.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

29.^S Gelecegin bugünden daha iyi olacagina inanıyorum.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

30.^S Gelecekte iyi bir evliliğim olacagina inanıyorum.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

31. Gelecekte iyi dostlarım olacagina inanıyorum.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

32. Geleceğimi yönlendirebilirim.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

33. Geleceğimi görmek isterdim.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

34. Gelecek, hayallerimin gerçekleşeceği zamandır.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

35.^S Gelecekte daha güzel işler yapacağıma inanıyorum..

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

36.^S Gelecekte daha başarılı olacağıma inanıyorum.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

37. Gelecekte yapacağım güzel işleri düşündükçe heyecanlanıyorum.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

38.^S Geleceği düşünmek bana kaygı veriyor.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

39. Hayatin gittikçe zorlastigina inaniyorum.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

40. Gelecekte umutsuzum.

1. Hiç katılmıyorum 2. Katılmıyorum 3. ne katiliyorum, ne katılmıyorum 4. Katiliyorum 5. Tamamen katiliyorum

*Requires reverse coding

^s Short-form of the scale

APPENDIX E

ELIMINATED ITEMS OF THE ATTITUDE TOWARDS THE FUTURE SCALE

1. Asilamayacak engel yoktur.
2. Isler bir kere ters gitti mi bir daha düzelmesinin çok zor olduğuna inanıyorum.
3. Hayati bos ve alamsiz buluyorum.
4. Basima ne gelirse gelsin, yasamayi tercih ederim.
5. Hayati dogumdan ölüme bir geri sayim gibi görüyorum.
6. İnsan kaç yasinda olursa olsun, ruhunun genç kaldigina inanıyorum.
7. Gelecekte bugüne benzer bir durumda olacagima inanıyorum.
8. Gelecegimi net olarak göremiyorum.
9. Hayatimdaki herseyin kötüye gittigini düşünüyorum.
10. Ölmekten korkuyorum.
11. Kanser olmaktan korkuyorum.
12. Ailemi kaybetmekten korkuyorum.
13. Gelecek benim için gizem dolu.
14. Yaslanmak beni korkutuyor.