

Received: October 12, 2017

Revision received: November 10, 2017

Accepted: November 24, 2017

OnlineFirst: December 1, 2017

e-ISSN: 2602-3733

Copyright © 2017

<http://journalrep.com>

December 2017 • 1(1) • 12-20

Research Article

The Relation of Future Time Perspective on Health Behaviors in High School Students

Tuncay Akinci¹

Marmara University

Seffat Duman²

Marmara University

Abstract

The present study attempts to determine the impact of future time perspective (FTP) on healthy life behaviors in adolescents. The study was conducted on 314 students attending five high schools in Kadıköy district of Istanbul. 132 of these students are female while 182 of them are male. Researchers used two measurement instruments to collect data in the study. First one is FTP scale and the second one is health behaviors survey developed by the researchers. The instruments were administered on a voluntary basis in course hours by getting permission from teachers in December 2016. One Way ANOVA and t test were employed in the analysis of data obtained via the instruments. Research findings indicate that FTP scores of students who regularly brush their teeth are higher than students who never brush their teeth ($p<0.05$). Scores of students that frequently eat fast food are lower than those of students who rarely eat fast food ($p<0.05$). FTP scores of students that never tried smoking, taking alcohol and use substance are higher than students that tried at least once ($p<0.05$). There is no significant difference among students with different frequencies of wearing seatbelt and doing sports in terms of FTP score ($p>0.05$).

Key Words

Education • Health • Future time perspective • Healthy life behaviors • Health education

¹ **Correspondence to:** Tuncay Akinci (PhD), Lecturer, Counseling Psychology and Guidance, Atatürk Faculty of Education, Kadıköy, İstanbul 34722 Turkey. Email: takinci@marmara.edu.tr

² Department of Educational Administration, Supervision, Planning and Economics, Atatürk Faculty of Education, Kadıköy, İstanbul 34722 Turkey. Email: seffatduman@gmail.com

Future time perception (FTP) is defined as individual's aim's impact of actions for present time which the individual wants to reach in the near or distant future (Nuttin & Lens, 1985). FTP is concerned with psychological time which has a subjective structure. Therefore, there are future oriented differences about time perceptions between individuals. By the time some individuals think of the distant future and make plans for it, the others only make plans for the near future. In view of these perceptions, individuals are named as if they have high future time orientation or low future time orientation. Individuals with low future orientation perceive a period of ten years longer than the ones with high future orientation. Because of this perception difference, the individuals with high future time orientation have more goals for their future, and make long-term plans (Nuttin & Lens, 1985). Individuals with high future time orientation care more about their future goals (Gjesme, 1975), as a result of it, they make more efforts to achieve these goals (Husman & Shell, 1996). Another feature of individuals with high future orientation is that they can make connections between their future and present goals easily. So these individuals can focus on completing present assignments to achieve their goals following a decade (Brown & Jones, 2004; Simons Seijzt, 1998). Just because individuals with high future time orientation act considering their future, their present actions are aimed at following intentions. During the school times of these individuals, they attend the lessons, do their assignments on time and get high scores in exams. So, they have advanced academic success (Husman, 1998; Jenkins – Marsan, 1999). They are called as idealist because they work for a mission which they want to have in five or ten years later, an academic degree, or more comfortable life instead of momentary happiness (Tsuzuki, 2004). FTP has a changing, growing structure rather than being steady. It can be said that FTP has different structures in adolescence, midlife, and senescence. For example, teens and elderly individuals set short term goals comparing to middle-aged individuals. As a result of FTP's changeable structure, it can be upgraded with a proper education (Fingermen & Perlmutter, 2001; Seijzt, 1998).

There is a positive relation between the preservation of health and FTP (Mahon, Yarcheski, & Yarcheski, 1997). As long as an individual can keep his FTP high, he can preserve his own health. FTP is also one of the effects which predicts positive health behaviours (Yarcheski, Mahon, Yarcheski, & Cannella, 2004). It is future oriented in respect to structure of health behaviours. For example, by the time an individual faces with some of the results of doing sport, he faces more than half of the results in the future time. An individual who works out at the age of 30 derives benefit from it after 20-30 years. When it is said healthy lifestyle behaviour, things come to mind should be healthy eating, doing sport, avoiding high-risk behaviours such as smoking, alcohol, drugs; putting seatbelt and helmet on, brushing teeth, taking care of personal hygiene, avoiding infectious diseases, etc. There is a negative relation between FTP and using drugs (Apostolidis, Fieulaine, Simonin, & Rolland, 2006; Henson, Carey, Kate, & Stephen, 2006; Kenough, Zimbardo, & Boyd, 1999). and also smoking cigarettes (Adams & Nettle, 2009; Henson et al., 2006; Kovac & Rise, 2007). Individuals, who can set goals for the future risk themselves by relating their present actions to those goals. Besides, there is a positive relation between future time perception and healthy eating (Adams & Nettle, 2009; Henson et al., 2006), and using condom (Henson et al., 2006). Also it can be said that individuals who think about their future take more actions for it. Individuals get motivated more when they take any action for their future (Brophy, 2004; Nuttin & Lens, 1985).

Adolescence is a stage of life which risky behaviours are observed the most. To start using drugs, alcohol and smoking occurs in that period the most frequently. Besides, the negative behaviours such as the actions causing injury, and unhealthy eating are observed. These risky behaviours reflect the following life in a negative way.

There are lots of reasons of these risky behaviours from the cultural, cognitive, and progressive aspects (Boyd, 1999; Crosby, 2009; DiClemente et al., 1999). One of these reasons is that the individual is not considering the results of his behaviours or their effect for his following life. Mid life or senescence are distant periods for adolescents. It's so important for FTP to be high in this period which is an important source of motivation for healthy lifestyle behaviour (Husman & Lens, 1999). As stated above, though there are lots of researches which indicate the relation between healthy lifestyle behaviour and FTP, there's no study about this matter in Turkey. In this research, its aimed to indicate the relation between healthy lifestyle behaviour in adolescents and FTP. It is considered that the indications which will be obtained from this research will be a guide for experts who work in the field of health education. This research is made to designate the FTP's effect to the health protective behaviours.

Method

Model of The Research

In this present study, relational screening model which is one of the general screening models is used to achieve the goal of the study.

Working Group

The research is applied to 314 students; 132 girls and 182 boys; from five different high schools in Kadikoy, Istanbul. The aforementioned schools are practice schools of Marmara University Ataturk Faculty of Education, and are preferred because transportation and permission procedures are easy. Students continue the ninth and tenth grades. These grades are chosen due to the structure of measurement which is not useful for younger grades. The research is applied in two classes from each school.

Measurement Tools

Future Time Perception Scale. The original scale has 27 items and it is developed by Husman and Shell (1996). The Likert scale has five options from "totally agree" to "totally disagree". Scale has four subscales; dependency (12 items), value (7 items), width (5 items), and speed (3 items). Scale is adapted to Turkish by Avci and Erden (2009). Adapted scale includes 26 items. Factor structures of adapted scale is similar to the original scale.

Health behaviors survey. The survey is developed by researchers. Health behaviors survey includes 8 questions to determine the frequency of students' use of seatbelt, workout, smoking, alcohol and drug usage, tooth brushing, and fast food eating habits. Questions are prepared to show the frequency of related habits, and each question set has either four or five choices.

Application of Scale Tools. Scale tools were applied in December, 2016 during school hours. It was applied on the basis of volunteerism along with the permission of classroom teachers.

Analysis of Data

Kolmogorov smirnov test showed normal distribution $p>0.05$. T test and one-way analysis of variance (ANOVA) tests were used in the analysis of the data obtained with the scale tools for independent groups. Students who showed different levels of health behaviors related to these tests were observed to check whether they differ in terms of FTP. Significance level in all statistical analyzes was taken as .05.

Findings

The findings obtained with measuring instruments in the direction of the research are included in this section. First, it was examined by the ANOVA test whether the future time perceptions of students changed according to the frequency of using harmful, and unhealthy substances (See Table 1-2-3).

Table 1 shows the result of t test conducted to the independent groups in order to determine whether the future time perceptions of students are changed according to the frequency of cigarette smoking.

Table 1

Comparison of Future Time Perception According to Smoking Status

Smoking Frequency	N	Average	Std. Deviation	t	p
Never tried	236	89.8	10.9	2.331	.020
Tried at least once	74	86.4	11.0		

According to Table 1, there is a significant difference between the students who never tried smoking and the students who tried at least once in terms of future time perceptions ($p < 0.05$). Future-time perceptions of those who have never used cigarettes are higher than those who try it at least once.

Table 2 shows the results of the ANOVA and Tukey tests conducted to determine whether the future time perceptions of students change according to the frequency of alcoholic beverages.

Table 2

Comparison of Future Time Perception According to Alcohol Drinking Status

The frequency of using alcoholic beverages	N	Average	Std. Deviation	F	p	Tukey test
Never drank	179	90.3	11.2	3.577	.029	Never >
Tried once or few times	65	88.5	9.8			Yes.
Yes	66	86.1	11.3			

According to Table 2, there is a meaningful difference in the perception of future time among students who have never drunk alcohol, who have tried at least once and who use alcohol ($p < 0.05$). According to the Tukey test result which was applied to determine the source of the difference, future time perceptions of those who drink no alcohol are significantly higher than those who still use alcohol ($p < 0.05$). There is no significant difference in the sense of future time between those who try alcoholic beverages at least once, those who have never tried alcohol, and those who use alcohol ($p > 0.05$).

Table 3 shows the result of t test in the independent groups which was conducted to determine whether the future time perceptions of the students changed according to the frequency of drug use.

Table 3

Comparison of Future Time Perception According to the Status of Drug Use

Status of drug use	N	Average	Std. Deviation	t	p
Never	287	89.4	11.0	2.194	.029
At least once	23	84.2	9.7		

According to Table 3, there is a meaningful difference in the future time perceptions among students who have never used drugs and who have tried at least once ($p < 0.05$). Future-time perceptions of those who have never used drugs are higher than those who try it at least once.

Table 4 shows the results of the ANOVA and Tukey tests conducted to determine whether the future time perceptions of students change according to the fast-food eating frequency.

Table 4

Comparison of Future Time Perception According to Fast Food Eating Status

Fast food eating frequency	N	Average	Std. Deviation	F	<i>p</i>	Tukey test
Less than 2 times a month	153	90.6	9.8	6.711	.001	Yes, very often < Less than 2 times a month- Once a week
Once a week	90	89.3	12.0			
Yes, very often	67	84.9	11.3			

According to Table 4, there is a significant difference in the perception of future time among students related with their fast food eating frequency ($p < 0.05$). According to the Tukey test conducted to determine the source of the difference, the frequency of future-time perceptions of frequent fast-food eaters is significantly lower than twice a month and once a week eaters ($p < 0.05$). There is no significant difference in terms of future time perception between the students who eat fast food less than 2 times a month and once a week. fast food between two eaters per month and one ewe per week in terms of future time perception ($p > 0.05$).

Table 5 shows the results of the ANOVA and Tukey tests conducted to determine whether the future time perceptions of students were changed according to the frequency of toothbrushing.

Table 5

Comparison of Future Time Perception According to Tooth Brushing Status

Tooth brushing frequency	N	Average	Std. Deviation	F	<i>p</i>	Tukey test
Less than once a day	48	86.0	14.3	3.971	.020	Less than once a week < Two or three times a day
Once a day	130	88.2	10.0			
Two or three times a day	132	90.8	10.3			

According to Table 5, there is a meaningful difference in the perception of future time between students who brushes less than once a day, just once, and two-three times daily ($p < 0.05$). According to the Tukey test result which was conducted to determine the source of the difference, the future time perceptions of those who brush their teeth two or three times a day are higher than those who brush less than once a day ($p < 0.05$). There is no significant difference in the sense of future time between those who brush their teeth once a day, those who brush less than once a day, and those who brush twice a day or three times a day ($p > 0.05$).

Table 6 shows the results of the t test applied to the independent groups to determine whether the future time perceptions of the students changed according to the frequency of wearing seat belts.

Table 6

Comparison of Future Time Sense According to Seat Belt Wearing Status

Wearing seatbelt frequency	N	Average	Std. Deviation	F	<i>p</i>
Never	68	87.6	13.5	1.613	.186
Rarely	124	88.3	10.5		
Usually	71	89.7	9.6		
Always	47	91.8	10.2		

According to Table 6, there is no meaningful difference in future time perceptions between students who wear a seat belt at all, sometimes wear, often wear, and always wear when traveling in a car ($p > 0.05$). Although

there is no significant difference between the groups, when the averages are examined, it is seen that the sense of future time is increased in parallel with the increase of the wearing frequency of the seat belt.

Table 7 shows the result of the ANOVA test conducted to determine whether the future time perceptions of students change according to the frequency of doing sports.

Table 7

Comparison of Future Time Perception According to The Status of Doing Sports

Doing sports frequency	N	Average	Std. Deviation	F	<i>p</i>
Less than twice a month	87	87.9	10.1	1.035	.377
Once a week	90	90.4	9.2		
Two or three times a week	82	88.2	12.4		
Everyday	51	89.7	13.0		

According to Table 7, there is no significant difference between the students who who does sports less than once a month, once a week, two to three times a week and every day ($p>0.05$).

Discussion

Future-time perception, defined as the effects of the goals that the individual wants to achieve in the near or far future on the actions at present (Nuttin & Lens, 1985), is one of the important predictors of healthy lifestyle behavior (Yarcheski et al., 2004). Healthy life behaviors, also called preventive health behaviors, consist of actions such as avoiding harmful habits, obeying hygiene rules, paying attention to nutrition, doing sports and following traffic rules. All of these actions are for a healthier and happier life in the future. In the majority of the surveys conducted in this area, there was a positive relationship between healthy lifestyle behaviors and FTP (Adams & Nettle, 2009, Apostolidis, Fieulaine, Simonin, & Rolland, 2006, Brophy, 2004; Henson et al., 2006; Keough, Zimbaro, & Boyd, 1999; Nuttin & Lens, 1985; Mahon, Yarcheski, & Yarcheski, 1997; Yarcheski et al., 2004).

It can be said that the findings of this research support the literature to a large extent. The first one of the findings that support the literature is related to the frequency of smoking. 74 of 314 students reported that they have tried smoking at least once. This number includes the students who have tried just once or the students who still smoke. Trying to smoke a cigarette even once increases the likelihood of smoking three times more than usual (Fidler, Wardle, Henning Brodersen, Jarvis, & West 2005). Trying once in this way is an important risk factor. There is a statistically significant difference between those who have never tried smoking and those who have tried smoking at least once, in favor of those who have never tried smoking cigarettes ($p<0.05$). Those who have never tried to smoke have a higher FTP. According to this, it can be said that the students who do not try any cigarette can connect their current actions with their future life and they have their plans for further future. Similar results were obtained for both alcohol and drug use behaviors. That is, the students who do not use any alcohol or drugs have significantly higher FTP than those who use and try alcohol or drugs ($p<0.05$). It is meaningful to obtain similar results regarding the usage of cigarette, alcohol and drugs which are classified as risky behaviours in terms of health. It can be said that those exhibiting all three risky behaviors are those whose future goals are both limited and short term. At the same time, they are the individuals who live the moment. The people who live the moment refers to individuals who has short FTP. These people do not have much expectation for the rest of their future, that is why they are more likely to show risky behaviors.

As with the three risky health behaviors described above, there are differences in FTP among students with different fast food eating and toothbrushing frequency. Students who stated that they often eat fast food such as hamburgers and pizza are significantly have lower FTP than those who eat one to two times a week or less ($p<0.05$). Similarly, those who brush their teeth less than once a day have significantly lower FTP than those who brush two or three times a day ($p<0.05$). Accordingly, it can be said that those who eat irregularly and who do not brush their teeth regularly are less likely to have future expectations. Dental brushing is a habit that ensures your teeth are healthy, and indirectly prolongs your life. People who think for the future will consider having long periods of healthy teeth. The individual needs to consume all the nutrients he needs to grow, develop and survive in a healthy manner. Despite the need for all ages to maintain this balance, there is a greater need for healthy growth in adolescence (Erkan, 2011). Foods such as hamburgers and pizzas are rich in carbohydrates and oils, but they lack in vitamins and minerals. Frequent consume of these foods will disturb the nutritional balance and will affect the health; it will also cause obesity (Zeybek & Aydın, 2002). If young people consume these foods a lot they will lose their appetite for eating home-made food which is more beneficial for them. Young people who care themselves and the future should not consume these foods frequently. Findings above support this view.

FTP of students is not changed according to the frequency of two healthy lifestyle behaviours which are asked in the research. First of them is the frequency of using seatbelt. Students who attend the research can only trip as passengers because of their ages. Therefore, they are supposed to use seatbelts in the front seat, also back seat of the car. There is no difference found between the students who have different frequencies of using seatbelt regarding their FTP. This finding may have been caused by the fact that students often travel on the rear seat and the habit of wearing seat belts on this seat is not widespread. There is no difference found between the student's frequency of doing sport and FTP. The way how adolescents and adults perceive the word of doing sport is very different. Most of the adolescents perceive doing sport as social activity (Yıldırım et al., 2006). Playing football is perceived not as being healthy but as a social activity. The perception of the sport as a tool to stay healthy develops with age (Tel & Köksalan, 2008). Therefore, since young people did not do sports for the future, there might be no statistical difference between those who do sports and those who do not.

In conclusion, these findings support the idea that FTP is one of the important predictors of healthy lifestyle behavior. It will be useful to emphasize the importance of healthy life behaviors in the future health education for young people. Conducting studies by teachers to improve students' FTP will indirectly increase the frequency of healthy behaviors. Similar researches which will be done for same and different age groups will provide support for findings obtained. In addition, studies can be made to determine the relationship between FTP and other health behaviors

References

- Adams, J., & Nettle, D. (2009). Time perspective, personality and smoking, body mass, and physical activity: An empirical study. *British Journal of Health Psychology*, 14, 83–105.
- Apostolidis, T., Fieulaine, N., Simonin, L., & Rolland, G. (2006). Cannabis use, time perspective and risk perception: Evidence of a moderating effect. *Psychology and Health*, 21(5): 571–592.
- Avcı, S., & Erden, M. (2009). Gelecek zaman algısı ölçeğinin Türkçe formunun geçerlik ve güvenilirlik çalışması. *Çukurova University Journal of Education Faculty*, 3(37), 1-12.
- Brophy, J. (2004). *Motivating students to learn lawrence*. 2. bs. London: Lawrence Erlbaum Associates.
- Brown, W.T., & Jones, J. M. (2004). The Substance of things hoped for: A study of the future orientation, minority status perceptions, academic engagement and academic performance of black high school students. *Journal of Black Psychologist*, 30(2), 248-273.
- DiClemente, R. J., Santelli, J. S., & Crosby, R.A. (2009). *Adolescent health: Understanding and preventing risk behaviors*. Hoboken, NJ, USA: Jossey-Bass.
- Erkan, T. (2011). Ergenlerde beslenme [Adolescent nutrition]. *Turkish Archives of Pediatrics*, 46(3), 49-53.
- Fidler, J. A., Wardle, J., Henning Brodersen N., Jarvis, M. J., & West R. (2005). Vulnerability to smoking after trying a single cigarette can lie dormant for three years or more. *Tobacco Control*. 15(3), 205–209.
- Fingermen, K. L., & Perlmutter, M. (2001). Future Time perspective and life events across adulthood. The *Journal of General Psychology*, 122(1), 96-111.
- Gjesme, T. (1975). Slope of gradients for performers as a function of achievement motive, goal distance in time, and future time orientation. *The Journal of Psychology*, 91, 143-160.
- Hamilton, J. M., Kives K. D., Micevski M., & Grace S. L. (2003). Time perspective and health promoting behavior in a cardiac rehabilitation behavior. *Behav Med*, 28(4), 132-139.
- Henson, J. M., Carey M. P., Kate B. C., & Stephen A. M. (2006). Associations among health behaviors and time perspective in young adults: Model testing with boot-strapping replication. *Journal of Behavioral Medicine*, 29(2).
- Husman, J., & Lens, W. (1999). The role of future in the student motivation. *Educational Psychologist*. 34(2), 113-125.
- Husman, J. E. (1998). *The effect of perceptions of future on intrinsic motivation* (Doctoral dissertation). The University of Texas at Austin.
- Husman, J. E., & Shell, D. F. (1996, August). Beliefs and perceptions about the future: A Conceptualization and measurement of future time perspective. XXVI. *International Congress of Psychology*, Montreal, Canada.
- Jenkins-Marsan, B. (1999). *Causal attribution patterns and future time perspective: A comparison of technical sector and pre-university college students* (Master's thesis, University of Sherbrooke, Québec, Canada). Retrieved from <http://savoirs.usherbrooke.ca/bitstream/handle/11143/479/MQ56918.pdf?sequence=1>

- Keough, K. A., Zimbardo, P. G., & Boyd, J. N. (1999). Who's smoking, drinking, and using drugs? Time perspective as a predictor of substance use. *Basic and Applied Social Psychology*, 21(2), 149-164.
- Kovac, V. B., & Rise, J. (2007). The relation between past behavior, intention, planning, and quitting smoking: The moderating effect of future orientation. *Journal of Applied Biobehavioral Research*, 12(2), 82-100.
- Mahon, N. E., Yarcheski T. J., & Yarcheski A. (1997). Future time perspective and positive health practices in young adults: an extension. *Percept Mot Skills*, 84(3), 1299-1304.
- McKaig, C. S. (1989). *The relationships among adolescent future time perspective, self- esteem and present health behavior* (Master's thesis, State University of New York at Buffalo). Retrieved from <https://elibrary.ru/item.asp?id=5876044>
- Nuttin, J., & Lens, W. (1985). *Future time perspective and motivation: Theory and research method*. Belgium: Lawrence Erlbaum Associates.
- Ronan, N. M. (1997). *The relationship between future time perspective and breaths self examination in young adult women* (Master's thesis, University of Nevada). Retrieved from <https://elibrary.ru/item.asp?id=5567124>
- Seijts, G. H. (1998). The importance of future time perspective in theories of work motivation. *The Journal of Psychology*, 132(2), 154-168.
- Simons, J., Vansteenkiste, M., Lens W., & Lacante, M. (2004). Placing motivation and future time perspective theory in a temporal perspective. *Educational Psychology Review*, 16(2),121-139.
- Tel, M., & Köksalan, B. (2008). Öğretim üyelerinin spor etkinliklerinin sosyolojik olarak incelenmesi (Doğu Anadolu örneği) [Sociological Investigation Of Sport Activities Of Lecturers (East Anatolian Sample)]. *Firat University Journal of Social Science*, 18(1), 261-278.
- Tsuzuki, M. (2004). Longitudinal analysis of future time perspective during transition from junior high school to high school. The autumn seminar of the Japanese Research Association of Psychological Science, Tottori, Japan.
- Yarcheski, A., Mahon N. E., Yarcheski T. J., & Cannella B. L. (2004). A Meta-analysis of predictors of positive health practices. *Journal of Nursing Scholarship*, 36, 2.
- Yeung D. Y., Fung H. H., & Lang F. R. (2007). Gender differences in social network characteristics and psychological well-being among Hong Kong Chinese: The role of future time perspective and adherence to Renqing. *Aging & Mental Health*, 11(1): 45-56.
- Yıldırım, D. A., Yıldırım, E., Ramazanoğlu, F., Uçar, Ü., Tuzcuoğulları, Ö. T., & Demirel, E. T. (2006). Üniversite öğrencilerinin spora bakış açıları ve spor yapma durumu [University student's approach towards sports and involvement behavior in sports]. *Research of Eastern Anatolia*, 4(3), 49-53.
- Zeybek Ç. A., & Aydın, A. (2002). Çocukluk çağı obesitesi [Childhood obesity]. *Clinical Children Forum, Special Number of Pediatric Nutrition*. 2(3), 24-29.