

CHANGES IN THE FUTURE TIME PERSPECTIVE OF UNIVERSITY STUDENTS: A COMPARISON OF MEASURES COLLECTED BEFORE AND DURING COVID-19

MUDANÇAS NA PERSPECTIVA DE FUTURO DOS ESTUDANTES UNIVERSITÁRIOS: UMA COMPARAÇÃO DE MEDIDAS COLETADAS ANTES E DURANTE A COVID-19

CAMBIOS EN LA PERSPECTIVA DE FUTURO DE LOS ESTUDIANTES UNIVERSITARIOS: UNA COMPARACIÓN DE MEDIDAS RECOGIDAS ANTES Y DURANTE EL COVID-19

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ABSTRACT: The Covid-19 Pandemic negatively affected education systems around the world and, to control its spread, countries and state governments started the closure of schools and colleges. The closure of universities had various effects on students' learning and plans for the future. The present study aimed to examine the differences of university students' future time perspective between the measurements taken before and during Covid-19. The study was designed as a longitudinal study and 80 university students from the school of physical education and sports of Hatay Mustafa Kemal University consisted of the study sample. The pre-test and post-test data were collected with the Turkish version of Husman and Shell's (2008) Future Time Perspective Scale. Paired samples t-test was used to analyze the differences between the pre-test and post-test scores. According to analyzed results, post-test results significantly increased in connectedness factor for males and valence factor for females.

KEYWORDS: Covid-19. Distance education. Post-truth. Future time perspective.

RESUMO: A Pandemia do Covid-19 afetou negativamente os sistemas de ensino em todo o mundo e, para controlar sua disseminação, países e governos estaduais iniciaram o fechamento de escolas e faculdades. O fechamento das universidades teve vários efeitos na aprendizagem dos alunos e em seus planos para o futuro. O presente estudo teve como objetivo examinar as diferenças da perspectiva de tempo futuro dos estudantes universitários entre as medições feitas antes e durante a Covid-19. O estudo foi desenhado como um estudo longitudinal e 80 estudantes universitários da escola de educação física e esportes da Universidade Hatay Mustafa Kemal constituíram a amostra do estudo. Os dados de pré-teste e pós-teste foram coletados com a versão turca da escala de perspectiva de tempo futuro de Husman e Shell (2008). O teste t de amostras pareadas foi usado para analisar as diferenças entre os escores do pré-teste e do pós-teste. De acordo com os resultados analisados, os

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resultados pós-teste aumentaram significativamente no fator de conectividade para o sexo masculino e no fator de valência para o sexo feminino.

PALAVRAS-CHAVE: Covid-19. Educação à distância. Pós-verdade. Perspectiva para o futuro.

RESUMEN: La pandemia de Covid-19 afectó negativamente los sistemas educativos de todo el mundo y, para controlar su propagación, los países y los gobiernos estatales iniciaron el cierre de escuelas y colegios. El cierre de las universidades tuvo varios efectos en el aprendizaje y los planes para el futuro de los estudiantes. El presente estudio tuvo como objetivo examinar las diferencias en la perspectiva del tiempo futuro de los estudiantes universitarios entre las medidas tomadas antes y durante el Covid-19. El estudio fue diseñado como un estudio longitudinal y 80 estudiantes universitarios de la escuela de educación física y deportes de la Universidad Hatay Mustafa Kemal conformaron la muestra del estudio. Los datos previos y posteriores a la prueba se recopilaron con la versión turca de la escala de perspectiva de tiempo futuro de Husman y Shell (2008). Se utilizó la prueba t de muestras pareadas para analizar las diferencias entre las puntuaciones previas y posteriores a la prueba. Según los resultados analizados, los resultados posteriores a la prueba aumentaron significativamente en el factor de conexión para los hombres y el factor de valencia para las mujeres.

PALABRAS CLAVE: Covid-19. Educación a distancia. Posverdad. Perspectiva del futuro.

Introduction

The world has met with a worldwide epidemic, which first appeared in Wuhan, China in December 2019, and was named 2019 novel-coronavirus (SARS-CoV2). The virus has seriously threatened public health and has a high risk of death and catching (GUAN *et al.*, 2020). At the time of this writing (14.01.2022), more than 240 million cases were detected in more than 200 countries, causing more than 4,899,169 deaths (WHO, 2020) The clinical manifestations of COVID-19 consist of fever, cough, shortness of breath, myalgia, headache and diarrhea (WANG, 2020). Besides, fatal lung damage and multi-organ failure have occurred in some of the infected individuals (RENU *et al.*, 2020). The virus is a type of coronavirus that is transmitted primarily from the person-to-person respiratory spread (by persons in close contact with each other or by respiratory droplets produced when an infected person coughs or sneezes) and to a lesser extent from contact with contaminated surfaces or objects (GUAN *et al.*, 2020).

Covid-19 has negatively affected many areas of daily life (HALEEM *et al.*, 2020) from health (BLUMENTHAL *et al.*, 2020) to the economy (WEISS *et al.*, 2020). So, to minimize the negative effects of the pandemic most of the countries launched restrictions.

According to scientists, the preventive strategies could effectively limit the rapidly expanding outbreaks of 2019-nCoV globally (WELLS *et al.*, 2020). In this sense, many countries, including Turkey, have declared indefinite quarantines to reduce the infection rate and prevent overloading their health systems. Staying at home and isolation has been recognized as the best preventative strategy for maintaining health (RODRIGUEZ *et al.*, 2020). Accordingly, as in many other countries, education in Turkey took place “online” rather than face-to-face.

The Covid-19 Pandemic negatively affected education systems all around the world. As stated before, to control the spread of the novel coronavirus, countries and state governments started the closure of schools and colleges. The closure of universities had various effects on students' learning. At that period, like in most of the countries, higher education in Turkey started to be performed “online” (distance), and that caused many problems in practical lessons. When the curricula of the university students having sports education are examined, it can be understood that the courses are mainly applied for courses, and performing these courses online is not very useful. Supporting this idea, a qualitative study conducted on physical education and sports students showed that among 144 views on distance education 57 views contained negative statements, and only 30 views contained positive statements (ALTUN EKIZ, 2020). In another study, it was determined the exams made with the distance education system did not increase sports faculty students' competence (AKTAŞ *et al.*, 2020).

Apart from students, stakeholders of education such as teachers and administrators generally have negative thoughts about distance education. These negative thoughts included the loss of motivation, lack of measurement and evaluation, insufficiency of resources such as the internet and computers, inequality of opportunity in education, lack of environmental communication and interaction, technical problems, insufficient socialization, and unpreparedness for the distance education process (ÖZDOĞAN *et al.*, 2020). All these aforementioned negativities not only increased students' future anxiety but also affected their future time perspectives (FTP). FTP refers to the "effects of the individuals' near or far future expectations and goals on their current actions” (SIMONS *et al.*, 2004) or simply “individuals' perception of their remaining time in life” (CARSTENSEN *et al.*, 1999).

Researchers tried to explain FTP in many facets and conceptualizations. Among these conceptualizations, Husman and Shell's (2008) conceptualization has been widely used in the education concept. According to this conceptualization, there are four relevant dimensions of FTP valence, connectedness, extension, and speed (HUSMAN; SHELL, 2008). Valence is about the importance that individuals place on goals attainable in the future. Connectedness is

the ability to make connections between present activities and future goals. Extension refers to "how far ahead of a person projects one's thoughts" and speed focuses on the lack of plan fullness for the future, needing external regulation to manage upcoming events, and a sense of being overwhelmed by approaching deadlines (HUSMAN; SHELL, 2008).

It is inevitable for university students to have doubts, concerns, and plans for the future. Behaviors and thoughts exhibited by students at university are important for their future (WALKER; TRACEY, 2012; CORSO *et al.*, 2013). However, Covid-19 affected humanity adversely. So, the purpose of the study presented here is to report the effects of distance education and Covid-19 on university students' FTP in a sample of physical education students.

Material and Method

Study Design & Procedure

The study was designed as longitudinal research. At the beginning of the study, we intended to analyze the four-year changes in the FTP of the participants. So, the pre-test data were collected from the participants at the end of their 1st grade (June 2019). However, then the Covid-19 Pandemic started (December 2019) and education turned into distance education (April 2020) Therefore, we changed our initial aim to measure the impact of the pandemic, and post-test data were collected again from the participants at the end of their third year (June 2021). Since the measurements at the end of the 2nd year (June 2020) would not show the full effect of the pandemic, it was skipped.

Research Sample

82 students from the school of physical education and sports of Hatay Mustafa Kemal University consisted of the participants of the study. However, with the start of the pandemic two of the participants dropped out of the school and the final participants consisted of 80 students. The distribution of the participants' socio-demographic features was shown in table 1.

Table 1 - Demographic information of the participants

	Female (N=25)		Male (N=55)	
	Mean / %	Std Dev.	Mean / %	Std Dev.
Pre-test age	20.92	5.21	20.98	3.78
Post-test age	22.44	5.22	22.41	3.79
Pre-test grade	3.12	0.72	3.16	0.60
Post-test grade	3.36	0.70	3.29	0.49

Source: Devised by the authors

Description: According to descriptive statistic results, the pre-test mean age for females was 20.92 and the post-test mean age was 22.44. On the other hand, the pre-test mean age for males was 20.98, and the post-test mean age was 22.41. Pre-test mean grades for females were 3.12 out of 4 and post-test mean grades were 3.36 out of 4. On the other hand, pre-test mean grades for males were 3.16 out of 4 and post-test mean grades were 3.29 out of 4.

Data Gathering Tool

Future Time Perspective (FTP) scale is a self-report scale and was initially developed by Husman and Shell in 2008. Turkish adaptation of the scale was made by Avci and Erden in 2009. The Turkish version of the scale consists of 26 items and 4 factors such as connectedness, valence, speed, and extension. The answers given to the scale are evaluated with a 5 type Likert scale from 1 to 5. The higher factor scores indicate better FTP related to the factor (AVCI; ERDEN, 2009).

Analysis of the data

The obtained data were analyzed with SPSS 23.0 for Windows. In the analysis of the data in addition to descriptive statistics, the paired-samples t-test was used for evaluating the differences between the pre-test and post-test results at a 95% confidence level.

Results

Table 2 - Changes between pre-test and post-test results for all participants (N=80)

FTP	Time	M (sd)	95% Confidence		t	p
			L	U		
Connectedness	Before	4.369 (0.450)	-0.20412	-0.02297	-2.495	0.015*
	During	4.483 (0.415)				
Valence	B	3.353 (0.666)	-0.25159	0.09444	-0.904	0.369

	D	3.432 (0.613)				
Speed	B	3.708 (0.849)	-0.21585	0.22419	0.038	0.970
	D	3.704 (1.03)				
Extension	B	2.575 (0.593)	-0.30392	0.03892	-1.539	0.128
	D	2.707 (0.555)				

* $p < 0.05$ N=80

Source: Devised by the authors

Description: According to analyzed results, when all participants were considered jointly, there was a significant increase in the variable FTP pre-test and post-test results in connectedness factor ($p < 0.05$). However, no significant differences emerged between pre-test and post-test results in other factors.

Table 3 - Changes between pre-test and post-test results for males (N=55)

FTP	Time	M (sd)	95% Confidence		t	p
			L	U		
Connectedness	Before	4.357 (0.473)	-0.21507	-0.01220	-2.246	0.029*
	During	4.471 (0.383)				
Valence	B	3.459 (0.659)	-0.18713	0.24947	0.286	0.776
	D	3.428 (0.585)				
Speed	B	3.648 (0.892)	-0.30231	0.26594	-0.128	0.898
	D	3.666 (0.981)				
Extension	B	2.570 (0.599)	-0.29585	0.05585	-1.368	0.177
	D	2.690 (0.523)				

* $P < 0.05$ N=55

Source: Devised by the authors

Description: According to analyzed results, there was a significant increase in the variable FTP pre-test and post-test results in connectedness factor for males ($p < 0.05$). However, no significant differences emerged between pre-test and post-test results in other factors.

Table 4 - Changes between pre-test and post-test results for females (N=25)

FTP	Time	M (sd)	95% Confidence		t	p
			L	U		
Connectedness	Before	4.396 (0.405)	-0.31066	-0.08399	-1.185	0.247
	During	4.510 (0.486)				
Valence	B	3.120 (0.635)	-0.59198	-0.04802	-2.428	0.023*
	D	3.440 (0.683)				
Speed	B	3.840 (0.746)	-0.29899	0.40565	0.312	0.757
	D	3.786 (1.15)				
Extension	B	2.584 (0.594)	-0.57278	0.25278	-0.800	0.432
	D	2.744 (0.631)				

* $P < 0.05$ N=25

Source: Devised by the authors

Description: According to analyzed results, there was a significant increase in the variable FTP pre-test and post-test results in valence factor for females ($p < 0.05$). However, no significant differences emerged between pre-test and post-test results in other factors.

Discussion

The present study aimed to analyze the changes in the FTP of university students in a sample of a school of physical education and sports students. The main purpose of the study was to examine the measurements taken before and during Covid-19 as the Pandemic affected education (DANIEL, 2020) all around the World. We think that the present longitudinal study results will contribute to the literature and can assist future studies. When the analyzed results were examined, it was seen that post-test results of the participants showed a significant increase in the Connectedness factor (Table 2). While the pre-test results were calculated as 4.369 (± 0.450), post-test results were calculated as 4.483 (± 0.415). This increase in the post-test result showed us that the students were more connected to their future goals, as previous studies showed that connectedness was related to connections with future goals and thoughts (RABINOVICH *et al.*, 2010; HUSMAN *et al.*, 2016). This result of the research is acceptable for all participants jointly regardless of gender. To investigate the changes in FTP in-depth, we further conducted analyzes only with male ($n = 55$) and female ($n = 25$) participants separately and found similar results with male participants (Table 3). Male participants' pre-test results were calculated as 4.357 (± 0.473), and post-test results were calculated as 4.471 (± 0.383) in the connectedness factor. On the other hand, female participants' pre-test results were calculated as 3.120 (± 0.635), and post-test results were calculated as 3.440 (± 0.683) in the valence factor (table 4). There may be several reasons for these results. The first and one of the most essential reasons for the present results is that the learning environment and learning activities did not satisfy students. We think that with the spread of Covid-19 and the closure of the schools, students did not satisfy with distance education, and this increased their future concerns. So, they have started to pay more attention to their plans. According to Schuitema *et al.* (2014) when learning activities in school do not provide satisfaction by students, engagement with future goals and the perceived utility of learning activities for future goals may be vital for commitment to those activities.

When the actual FTP studies conducted on sports faculty students are examined it can be seen that FTP is related to psychological variables (USTUN, 2018). Besides, in some

studies, while gender had little effect or no effect, some study results showed gender differences in FTP. For instance, Dalli and Pekel (2017) did not find any gendered differences in the variable FTP for sports faculty students. In another and a more recent study by Harmandar Demirel *et al.* (2020) gender was found to be ineffective in predicting FTP. However, Yildiz *et al.* (2020) found significant differences in favor of male university students.

Conclusion

In conclusion, the present study showed that the future time perspective of the participants increased significantly in connectedness factor for males and valence factor for females during Covid-19. However, it is not very clarified whether these results were due to Covid-19, distance education, or other reasons since there was no control group in our study. Therefore, further qualitative and quantitative studies are needed to better understand the reasons for these results.

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