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FoMO PERCEPTION OF ACADEMICS: SCALE DEVELOPMENT AND ASSESSMENT

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ABSTRACT

This research was performed methodically to develop a scale to determine the perception of FoMO (The Fear of Missing Out) in the Covid-19 pandemic period and to carry out reliability and validity studies of this scale. The data were evaluated through the questionnaires obtained from a total of 1395 university academics via google form. In this search, the Descriptive Information Form and the FoMO Perception in the Covid-19 Pandemic Process Scale (FCS) were used as a five-point Likert type scale. The construct validity of this scale was evaluated by factor analysis. As a result of the explanatory factor analysis, the Cronbach Alpha internal consistency coefficient was found to be 0.776. The final form of the scale was tested with confirmatory factor analysis. Measurements revealed that the result has a high goodness of fit and can be used to measure FoMO perception during the Covid-19 pandemic. The relationship between the sub-scales of FCS showed that the factors were in a significant relationship with each other. In the light of the analysis, it was found that FCS is a valid and reliable measurement tool. It was concluded that researches with different groups using this scale would be useful..

Keywords: *Sovereign CDS Spreads, Machine Learning Algorithms, eXtreme Gradient Boosting, Turkey*

Jel Classification: *M10, M19*

1. INTRODUCTION

Today, technological developments have paved the way for the development of internet-supported smart devices. These developments have bringed sweeping transmutations in society. In the past, many different tasks had to be done with separate devices, but with the introduction of smart devices into our lives, we have the opportunity to do many different tasks thanks to a single device. (Kaplan & Gezgin, 2016). To give an example; we can use the internet, send e-mails or messages, listen to music, take photos, play games, shop and do many other things through these devices. (Hoşgör & Tandoğan, 2017). Such opportunities have provided individuals certain gains such as speed, space-time independence, easy sharing of information, and time savings (Kaplan, Gezgin, 2016). There are many gains provided by smart devices, but many negative situations caused by smart devices have also

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emerged. Some of these are more individualization of individuals, information pollution, the weakening of face-to-face communication, addictive practices and the psychological problems it brings (Kaplan & Gezgin, 2016). Just at the time of these problems, on December 31, 2019, the COVID-19 epidemic emerged in the city of Wuhan, Hubei province of China. This epidemic was caused by the SARS-CoV-2 virus. 6 continents and countless countries were exposed to the rapid spread of the virus. It went down in history as the first pandemic caused by corona viruses. Epidemic process, which began in Turkey on March 11, 2020 by identifying the first positive cases, continues to increase its impact. Since the isolation of recent genre of coronavirus, researches on COVID-19 and SARS-CoV-2 virus have been started in many countries. There are many issues that have not yet been clarified regarding the COVID-19 disease and the psychological and psychotic disorders triggered by this disease. Research is needed in our country regarding the COVID-19 that has affected the whole world for months. This scale research was developed to find the relationship and direction of the relationship between COVID-19 and FoMO (Fear of Missing Out).

1.1. The Fear of Missing Out (FoMO)

The FoMO concept was generally announced by Voboril in 2010. Its effect on behavior was first addressed in the JWT (James Walter Thompson Intelligence-2012) report, with statements that 70% of those aged 18-34 experienced FoMO. FoMO is defined as the individual's awareness of short-term positive experiences in his / her absence, and his willingness to ask for them, but the negative affect he faces when he is deprived (Hayran et al., 2016: 468). Today, especially young people spend a large part of their time sharing in the virtual world, following the agenda and friends, and updating their status (Gökler et al., 2016; Fox & Moreland, 2015). The continuous updating behavior of individuals in social networks has caused a new behavioral disorder defined as Fear of Missing Out (FoMO) (Gökler et al., 2016, Przybylski, Murayama & Haan, 2013). This situation prompted people to have fears like "I wonder if I missed something?", "Who shared what right now?", "Am I out of the topic?" and it emerged as a kind of addiction which provokes them to waste a big duration on social networks by constantly checking their phones or tablets (Gökler et al., 2016). FoMO is the driving force behind the increment in usage of social networks; FoMO levels are stronger in young people, particularly young men, reducing overall life satisfaction (Przybylski et al., 2013). Researches have reported that individuals who have FoMO feel lonely in their lives and try to complement the love and compassion they feel lacking through social networks (Gökler et al., 2016; Dossey, 2014). The fact that people with FoMO prefer to communicate through virtual environments instead of face-to-face communication increases the feeling of loneliness they experience. It has been determined that FoMO is observed more frequently in academics who continue to use social networks during lesson period (Dossey, 2014).

At this point in the literature, national (Aydın, 2018; Gökler, et al., 2016; Hoşgör, et al., 2017; Kartol and Peker, 2020) and international (Milyavskaya et al., 2018; Rifkin, Cindy, & Kahn, 2015) ; Riordan, et al., 2015) it has been seen that many studies have been reached in the field. As stated above,

in these studies, the increase in the duration of internet and social media usage due to the fear of missing the developments, and therefore its negative effects such as stress, fatigue and insomnia are mentioned. Scale development studies on FoMO have also been found in the literature. In addition to multi-item scales, in a scale development study conducted by Riordan et al. (2020), a short form of FoMO consisting of a single item (Have you experienced FoMO?) was created and applied to 330 university academics. its reliability (r =.717) was calculated and it was concluded that it could be used in studies. In Gökler et al.'s (2015) Turkish validity and reliability evaluation studies of the FoMO scale, it was stated that 200 university academics were determined as participants, the Cronbach's alpha coefficient was .81, the test-retest reliability coefficient was .81, and the scale was valid and reliable for university academics. In our current research, in order to develop a scale at this point, we aim to reveal the relationship of this change in individuals with FoMO levels, as a result of the covid-19 pandemic process that has been experienced since the end of 2019, connecting individuals to social media and internet environments much more than normal. Its difference from other existing scales is to evaluate the FoMO levels of individuals in this process as a measurement tool created especially for the covid-19 pandemic process.

1.2. The Purpose and importance of the research

Within the context of this research, it was taken from the view that the Covid-19 pandemic process and the social negativities it brings with it are important factors on the FoMO (Fear of Missing Out) level. Accordingly, it is considered really significant to search about people's level of FoMO as particularly in these times of pandemi people are in need of getting the news immediately and change their behaviours (Laato, et al., 2020) according to the information they have got. Within the framework of this understanding, it has been attempted to develop a scale that aims to determine the FoMO (Fear Of Missing Out) perceptions of individuals during the COVID-19 pandemic process. Covid-19 and FoMO are included in the important issues explored in Turkey and in the world. However, the perception of FoMO associated with the Covid-19 pandemic has not yet been studied. There are some studies on FoMO while searching the literature, one of which is related to Covid-19 and FoMO. When it was examined in detail, it was noticed that the related research is regarding a doctor's sense of FoMO on her maternity leave in this time of coronavirus disease. Tough she doesn't work with a view to take care of her little baby, she is confused of ending her leave for working on the front line in the emergency department or of keeping on playing with her baby in her safe home (Phillips, 2020). The psychological state she lives can be specified as FoMO. In another research related to FoMO, variables such as media, crisis magnitude, shopping experience FoMO are included to measure purchasing behavior throughout primary stage of Movement Control Order in Malaysia (Kaur, et al., 2020). In addition, we can see FoMO within another research as research factors, which the researcher think that may affect the intrinsic cognitive load and that may be important in the context of getting misinformation and overusing social media during Covid-19 (Xiao & Mou, 2019).

However, while searching the literature, it has been detected that there is no scale to be used for FoMO levels. Within the present research, the aim is to form a scale to measure FoMO perceptions throughout the Covid-19 pandemic cycle and thus the first scale development research on the ongoing subject can be realized with the current research aims.

2. METHOD

2.1. Research design

The research was designed with the correlational survey model. Correlational design is a research in which the relationship between two or more variables is examined (Neuman, 2006). This design can be used when researchers are in doubt about a correlation regarding variables and promote these doubts owing to previous studies and literature. The primary goal of the design is to describe correlation between the variables rather than to test theory (Wood & Brink, 1998, p.161). This research was conducted to develop a scale to measure whether there is affect of Covid-19 pandemic process on FoMO and direction of this effect.

2.2. Sample group

The sample group of research is university academics working in Turkey's seven regions (All regions in Turkey). Academics working in the 2019-2020 academic year were included in the research group objectively. The reason of selecting university academics for sampling group is that universities are considered as the institutions that reflect the rich cultural structure most. Universities include differences in personality, sociocultural structure, religion, ethnic origin, ideological view, sexual orientation, in other words, a multicultural structure. For this reason, it was thought that it would be more appropriate to carry out the development work of this scale within the university.

Data were collected through an online questionnaire. It was stated that the information provided by the participants will be anonymous and will be processed with the strictest confidentiality. In addition, it was emphasized that they are free to withdraw from the research whenever they want if they feel uncomfortable in any way during data collection. Within the scope of the research, the required sample size was checked for factor analysis and it was seen that the research group was sufficient (Tabachnick & Fidell, 2001). An exploratory factor analysis was conducted with 200 questionnaires collected in the first week. 78% of this sample group is women and 22% is men. As a result of the 487 questionnaires obtained during the next second week, the factor structure resulting from the exploratory factor analysis was tested by confirmatory factor analysis. 67.8% of this sample group is women and 32.2% are men. As a result of the 708 questionnaires obtained over the next third week, the structure validity and reliability of the scale were tested and descriptive statistics were presented. 66.4% of this sample group was women and 33.6% were men.

2.3. Instrument

1. The Introductory Information Form: It consists of 5 questions prepared as closed and open-ended to determine the sociodemographic characteristics (gender, university, faculty, department, class) of university academics.

2. FoMO in the Covid-19 Pandemic Process Scale (FCS): The data were collected using a tool called the FoMO in the Covid-19 Pandemic Process Scale (FCS), consisting of four dimensions and 18 items. It was developed in order to explore how and in what way individuals' perceptions of FoMO are affected by new and different conditions during the Covid-19 pandemic. All four dimensions, extroversion, self-awareness, lack of self-confidence and social anxiety, all share the same structure in terms of content. While some of the statements question the potential negativities caused by the pandemic process, some of them question the potential positive results. A 5-point Likert-type scale was used in the response: 5 - strongly agree, 4 - agree, 3 - undecided, 2 – disagree, 1- strongly disagree.

2.4. Research Ethics

Informed consent form and ethics committee approval were obtained for the research. (Gaziantep University Rectorate, Social and Human Sciences Scientific Research and Publication Ethics Committee. Date: 01.06.2021, Decision No: 18)

2.5. Authors' Contribution

Conceptual framework of the research was created by Assoc. Prof. Dr. Veli BATDI. The data collection and analysis sections were conducted by Assistant Prof. Dr. Sezer AYAZ. Both authors contributed equally to the article.

2.6. Declaration of Conflict of Interest

There is no conflict of interest for the authors or third parties arising from the search.

3. RESULTS

In this section, findings regarding the reliability and validity of the "FoMO in the Covid-19 Pandemic Process Scale" are included.

3.1. Development and validation of a scale assessing FoMO in the Covid-19 pandemic process (FCS)

The FoMO in the Covid-19 Pandemic Process scale developed by the researchers is based on the certain scales as “State-Trait Anxiety Inventory” created by Spielberger et al., and abbreviated by Abed, Hall, and Moser (2012); “the Feelings of Inadequacy Scale” created by Janis and Field (1959); “Irritability Questionnaire” by Craig, Hietanen, Markova and Berrios (2006); and “the Self-Esteem scale” created by Rosenberg (1965). All items and factor titles are contextualized in the writing

discipline and adhering to the literature. The items were checked by a linguist who was a teacher at the English and Applied Linguistics Faculty.

We included respondents who answered all questionnaire items related to FCS. To assess our instrument structurally, an Exploratory Factor Analysis (EFA) with data derived from the first 200 participants and a Confirmatory Factor Analysis (CFA) with data derived from the next 487 participants was conducted. Finally, One-Sample T-Test and One-Way ANOVA Test were conducted with the data derived from 708 participants to see if there was a significant difference according to gender, classes and regions where universities are located. To evaluate the first 29 scale items, the principal component analysis with oblique rotation using Oblimin was applied. Oblimin rotation was used to allow correlated factors, although more difficult to interpret. To determine the factor structure, we evaluated the number of factors via scree plots and initial eigenvalues from EFA. The Kaiser-Meyer-Olkin value exceeded the suggested value of .6, resulting in .739. Bartlett's Test of Sphericity reached statistical significance by supporting the factorizability of the correlation matrix (Pallant, 2010). EFA used component correlation coefficients that were thought to be strong with ordinal item responses. At first, factor analysis disclosed an 8-factor solution. By eliminating items strongly loaded into multiple components and eliminating factors indicating poor reliability estimates, the final analysis resulted in a 4-factor solution considered to be appropriate for the literature. The properties of 18 items are presented in Table 1.

Table 1. Factor load values.

	Extroversion		Self-Awareness		Lack of Self-Confidence		Social Anxiety		
Item	EFA*	CFA**	EFA	CFA	EFA	CFA	EFA	CFA	t value***
A1	-.631	.77							7.58
A2	-.599	.53							13.99
A3	-.848	.79							6.00
A4	-.875	.63							11.76
B1			.381	.51					14.24
B2			.819	.78					9.34
B3			.773	.75					10.26
B4			.794	.67					12.41
C1					.672	.60			12.74
C2					.820	.65			12.01
C3					.674	.64			12.46
C4					.676	.70			11.27
C5					.724	.63			12.76
D1							.675	.69	10.30
D2							.705	.59	12.87
D3							.679	.52	13.12
D4							.591	.68	8.63
D5							.789	.62	12.05

* Factor loadings of the Explanatory Factor Analysis
** Factor loadings of Confirmatory Factor Analysis
***T values giving the significance of factor loadings estimated by CFA

Table 1 shows the factor loads of the explanatory and confirmatory factor analysis. T values that give the significance of factor loadings estimated by CFA are presented in the last column of the table. When t values were examined, it was seen that the said factor loads were statistically significant. As

seen in Table 1, the first dimension factor load consists of 4 items ranging from .60 to .88. The second dimension consists of 4 items with a factor loading between .38 and .82. Third dimension factor loading consists of 5 items varying between .67 and .82. The fourth dimension factor load consists of 5 items ranging from .59 to .79.

56.32% of the total variance was explained. Specifically, component 1 explained 24.28% of variance, component 2 explained 12.67% of variance, component 3 explained 12.08% of variance, component 4 explained 7.29% of variance as shown in Table 2 below.

Table 2. Total variance explained

	Initial Eigen values			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.371	24.283	24.283	4.371	24.283	24.283
2	2.280	12.668	36.951	2.280	12.668	36.951
3	2.174	12.076	49.027	2.174	12.076	49.027
4	1.312	7.290	56.316	1.312	7.290	56.316
5	1.029	5.714	62.031			
6	.999	5.552	67.583			
7	.787	4.370	71.952			
8	.742	4.124	76.076			
9	.670	3.723	79.798			
10	.602	3.343	83.142			
11	.538	2.992	86.133			
12	.496	2.754	88,888			
13	.473	2.628	91.516			
14	.395	2.194	93.710			
15	.340	1.890	95.600			
16	.309	1.719	97.319			
17	.249	1.385	98.704			
18	.233	1.296	100.000			

Reliability analysis was applied on 4 components obtained as a result of EFA. Consistent with the recommendations of Nunnally (1978, p. 245), factors with a Cronbach alpha value of over .70 were sought (Nunnally, 1978). All 4 factors met this level of acceptability. The Cronbach's alpha coefficients for the 4 components resulting from EFA with data obtained from the first 200 participants varied between 0.73 and 0.79. Cronbach's alpha coefficients ranged from 0.75 to 0.79, while the Kaiser-Meyer-Olkin value was found to be .82 as a result of CFA using the data obtained from the second 487 participants. Bartlett's Test of Sphericity was found to be statistically significant. The resulting proposed scale consists of 18 items and the component matrix is presented in Table 1 above.

In the analyzes made on the same research group, the relationship between the subscales of the scale was also examined. Correlation coefficients between the factors are presented in Table 3. As a result of the analysis, it was seen that the factors were in a positive and significant relationship with each other while a negative and high significant relationship is observed between the Social Anxiety and Self Awareness factors.

Table 3. Correlation coefficients between factors

Factors	Extroversion	Self-Awareness	Lack of Self-Confidence	Social Anxiety
Extroversion	1	.158**	.269**	.382**
Self-Awareness	.158**	1	.121**	-.116**
Lack of Self-Confidence	.269**	.121**	1	.291**
Social Anxiety	.382**	-.116**	.291**	1

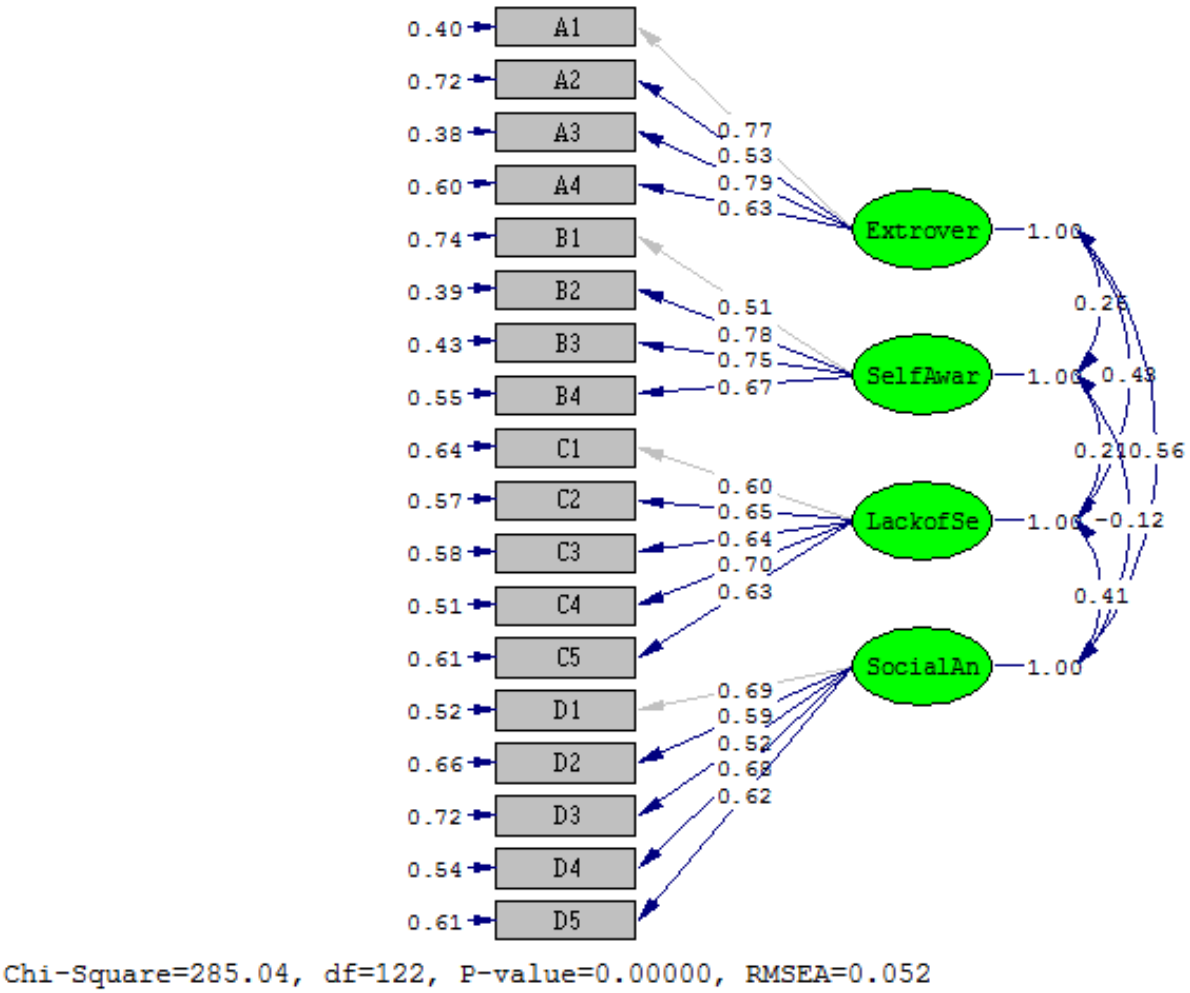
**Correlation is significant at the 0.01 level (2-tailed).

CFA was applied using a package program that performs first-level confirmatory factor analysis. Detailed fit values were obtained as a result of examining the solution. The main purpose of evaluating the measurement model is to what extent empirical indicators measure latent factors reliably (Musil, Jones, Warner, 1998). In the basic model, maximum likelihood estimation was used to establish parameters and evaluate the adequacy of the predicted model. The purpose of structural equation models is to bring to light small, statistically insignificant chi-square values (Youngblut, 1994; Boyd, Frey, Aaronson, 1988). Approximately 2: 1 or 3: 1 RLRs are considered to be indicative of good fit. However, it is difficult to obtain an insignificant value, as the chi-square statistics can be inflated with larger sample sizes (n> 100) (Youngblut, 1994; Long, 1983; Bentler, Bonett, 1980). Therefore, a closer examination was made with the model predictions that are less dependent on sample size, such as adjusted goodness fit index (AGFI), normed fit index (NFI), comparative fit index (CFI), the goodness of fit index (GFI), non-normed fit index (NNFI) and relative fit index (RFI). The root mean square error of approximation (RMSEA) is a measure of the inconsistency per degree of freedom in the model, showing the error caused by the simplification of the model. It is appropriate to determine values not higher than 0.05 in order to say that the fit level of the model is perfect, and values between 0.05 and 0.08 to say that it is midlevel (Musil et al., 1998).

The process of validating the original measurement model involved adding error covariances between each component's own items to obtain a well-fitting model. It was aimed to re-designate the model with modification indices (Jöreskog and Sörbom, 1993). Detailed wiew of individual parameters became possible with the acquisition of the model (Youngblut, 1994). The variables were analyzed with the squared multiple correlations (R2) to determine whether the independent variables made a big contribution to the model and if so, how much of the variance in the latent variable was explained (Jöreskog et al, 1993; Musil et al., 1998). Finding that the coefficients between the latent variable and the empirical indicator are between 0.50 and 1.0 indicates that the indicator can be well connected to the latent variable (Youngblut, 1994). Path coefficients are evaluated in terms of significance with the t test and the expected aspects of the relationships with the obtained are compared (Youngblut, 1994). A t value greater than 2.0 usually indicates that the parameters are considerably different from zero and are statistically significant. Once for all, the amount of error or unexplained variance of each endogenous variable was analyzed.

As a result of the Confirmatory Factor Analysis, it was observed that the structure revealed in EFA was confirmed. This result also shows that the dimensions created by considering the literature are statistically validated. The model obtained with DFA is given in Figure 1.

Figure 1. First-Level Confirmatory Factor Analysis



Chi-Square=285.04, df=122, P-value=0.00000, RMSEA=0.052

In Table 4, the acceptable limit values of the most used fit indices (Schermelleh-Engel and Moosbrugger, 2003) and the fit values of the proposed model are given. As a result of the analyzes, it can be said that some values of the model provide the perfect fit values and some are acceptable. These findings confirm the factor structure of FCS.

Table 4. Fit values of the proposed model and standard fit values.

Fit Measures	Good Fit Values	Acceptable Fit Values	Recommended Fit Values
RMSEA	0.00<RMSEA<0.05	0.05<RMSA<0.10	0.052
SRMR	0.00<SRMR<0.05	0.05<SRMR<0.10	0.057
GFI	0.95<GFI<1.00	0.90<GFI<0.95	0.94
AGFI	0.90<AGFI<1.00	0.85<AGFI<0.90	0.91
NFI	0.95<NFI<1.00	0.90<NFI<0.95	0.94
CFI	0.95<CFI<1.00	0.90<CFI<0.95	0.96
RFI	0.90<RFI<1.00	0.85< RFI <0.90	0.92

Descriptive statistical methods (mean, frequency, standard deviation, percentage) were used to get demographic data in the analysis of the data acquired with the assessment instrument of the research from a final sample group of 708 participants. In order to define the normality distribution, kurtosis and skewness coefficients were obtained by statistical analysis method, which is often used in social sciences, and it was observed that all the kurtosis and skewness coefficients were between -1 and +1 (Black, Hair, Anderson, Babin & Tatham, 2013) and consequently normally distributed.

As seen in Table 5, the Cronbach's Alpha internal consistency coefficient, which was calculated to test the internal consistency reliability of the measurement tool, showed that the relevant 4 factors were above the reliability value of > .60, which is accepted in social sciences. Values not below .60 are acceptable reliability ranges for scientific researches in the social sciences (Nunnally, 1978).

Table 5. Internal consistency reliability and normality distribution results

	Extroversion	Self-Awareness	Lack of Self-Confidence	Social Anxiety	Total
A	.77	.73	.80	.74	.78
Skewness	.696	-.223	-.428	.221	
Kurtosis	.080	-.337	-.374	-.245	

In order to see the differences of the scale items according to the demographic characteristics of the participants, one-factor ANOVA and independent samples t-test statistical methods were applied (Büyüköztürk, 2002). In order to measure the binary relationship between variables Pearson Correlation Analysis was applied.

Table 6. T-Test for comparison of participants according to gender on extraversion, self-awareness, lack of self-awareness and social anxiety levels

Factor	Gender	N	Mean	Standard Deviation	t	df	p
Extroversion	F	470	2.2112	.88773	1.000	706	.318
	M	238	2.1397	.91873			
Self-Awareness	F	470	3.3553	.90931	3.512	706	.000
	M	238	3.0987	.93610			
Lack of Self-Confidence	F	470	3.4374	.84113	2.513	706	.018
	M	238	3.2571	1.01121			
Social Anxiety	F	470	2.6749	.86929	1.886	706	.060
	M	238	2.5437	.88438			

A significant difference was found between the male and female participants in the research in the factors of Self-Awareness (p =. 000) and Lack of Self-Confidence (p =. 018), which are two of the four factors. Table 6 shows the relevant values for significant differences. Accordingly, the self-awareness level of female participants ($\bar{x}$=3.3553) is significantly higher than that of male participants ($\bar{x}$ = 3.0987). Lack of self-confidence level of female participants ($\bar{x}$ = 3.4374) is significantly higher than male participants's ($\bar{x}$ = 3.2571).

Table 7. ANOVA for comparison of participants according to class on extraversion, self-awareness, lack of self-awareness and social anxiety levels

Factor		Sum of Squares	df	Mean Square	F	p
Extroversion	Between Groups	2.593	4	.648	.802	.524
	Within Groups	567.860	703	.808		
	Total	570.453	707			
Self-Awareness	Between Groups	5.741	4	1.435	1.681	.152
	Within Groups	600.127	703	.854		
	Total	605.868	707			
Lack of Self-Confidence	Between Groups	.661	4	.165	.201	.938
	Within Groups	578.639	703	.823		
	Total	579.300	707			
Social Anxiety	Between Groups	2.617	4	.654	.852	.493
	Within Groups	539.872	703	.768		
	Total	542.489	707			

As a result of the ANOVA test, no significant difference was found in any of the four factors between the individuals participating in the research according to the classes they were educated.

Table 8. ANOVA for comparison of participants on the extroversion, self-awareness, lack of self-confidence and social anxiety levels according to the regions of universities

Factor		Sum of Squares	df	Mean Square	F	p
Extroversion	Between Groups	13.035	6	2.173	2.732	.012
	Within Groups	557.418	701	.795		
	Total	570.453	707			
Self-Awareness	Between Groups	8.529	6	1.422	1.668	.126
	Within Groups	597.338	701	.852		
	Total	605.868	707			
Lack of Self-Confidence	Between Groups	11.739	6	1.957	2.417	.026
	Within Groups	567.561	701	.810		
	Total	579.300	707			
Social Anxiety	Between Groups	3.139	6	.523	.680	.666
	Within Groups	539.350	701	.769		
	Total	542.489	707			

Significant differences were found in Extraversion (p =. 012) and Lack of Self-Confidence (p =. 026) factors, two of the four factors, according to the region where the universities of the participants in the research were located, and no significant difference was found in the other two factors. Table 8 shows the coefficients for significant differences. According to the results of the LSD test conducted to determine which regions there is a difference, it was determined that the level of Extroversion of the Southeastern Anatolia Region participants ($\bar{x}$ = 2.2949) was significantly higher than the Aegean Region participants ($\bar{x}$ = 1.9368). It was determined that the level of Extroversion of the Eastern Anatolia Region participants ($\bar{x}$ = 2.3227) was significantly higher than the Aegean Region participants ($\bar{x}$ = 1.9368) and the Marmara Region participants ($\bar{x}$ = 2.0631). The level of Extroversion of the participants in the Black Sea Region ($\bar{x}$ = 2.2381) was found to be higher than the participants of the Aegean Region ($\bar{x}$ = 1.9368). In addition, it has been determined that the level of extroversion of the Mediterranean Region participants ($\bar{x}$ = 2.3333) is significantly higher than the Aegean Region participants ($\bar{x}$ = 1.9368) and the Marmara Region participants ($\bar{x}$ = 2.0631).

As a result of the ANOVA applied for the comparison of Extroversion, Self-Awareness, Lack of Self-Confidence and Social Anxiety levels of the participants by regions, it was observed that the Lack of Self-Confidence dimension did not fulfill the prerequisite for variances to be homogeneous and showed significant difference. Games-Howell, Dunnett's C, Dunnett's T3 and Tamhane's T2 tests which are applied when equal variances are not assumed were applied but no significant difference was detected in any of them. Our null hypothesis (H0) in Levene's test is that the variance of each group is equal. If the p-value is higher than 0.05, we cannot reject this hypothesis and we can say that variance homogeneity is achieved. If the p-value we obtained from Levene's test is less than 0.05, we reject this hypothesis and say that the assumption of variance homogeneity is not met. In this case, we cannot use the F and p values given in the ANOVA table. Instead, the F value and related p-value obtained through the Welch's F (1951) and Brown – Forsythe F (1974) statistics presented in SPSS are used (Delacre, Leys, Mora and Lakens, 2019).

Table 9. Robust tests of equality of means for the comparison of participants on the lack of self-confidence levels according to the regions of universities

	Welch			
	Statistic[a]	df1	df2	Sig.
Lack of Self-Confidence	1.864	6	299.114	.087

As can be seen in the Table 9 below, no significant difference was observed according to the result of the Welch statistic in which the levels of Lack of Self-Confidence of the participants were compared by the regions of the universities.

4. DISCUSSION

In this research, the validity and reliability study of the FoMO scale was conducted. In order to determine the FoMO perceptions of individuals on how much they felt this emotion during the Covid-19 process, the opinions of 1395 academics were consulted. For this purpose, it can be stated that the scale, which consists of 18 items and 4 sub-dimensions, has sub-dimensions such as Extroversion, Self-Awareness, Lack of Self-Confidence, and Social Anxiety.

The construct validity of the scale was determined by factor analysis, and as a result of the exploratory analysis, the Cronbach's alpha coefficient was found to be .776, which was consistent. In this context, the Extroversion dimension, which is the first sub-dimension of the scale, measures individuals' levels of dependence on and interaction with their environment. There are 4 items in this sub-dimension. The highest score that can be obtained from this sub-dimension is 20, and the lowest score is 4. High scores indicate that individuals have a high level of Extraversion.

The other dimension is recorded as Self-awareness. There are 4 items in this sub-dimension. The highest score from this sub-dimension is calculated to be as 20, and the lowest score is as 4. The high score indicates a high level of Self-Awareness. The third one is the Lack of Self-Confidence dimension which measures the level of perception of individuals to think that their actions are inadequate. 5 items

can be seen under this sub-dimension. The highest score of the sub-dimension seems to be 25, while the lowest 5. The high score means that there is a high level in terms of the Lack of Self-Confidence.

The last sub-dimension of the scale is determined as the social anxiety dimension. It includes 5 items related to the feeling of anxiety. The highest score that participants can score in this sub-dimension is 25 while the lowest one is 5. The high score represents a high level of Social Anxiety. On the other hand, the lower one shows that there is low level of anxiety. When the Alpha coefficients of the sub-dimensions of the scale are considered (Extroversion = .77, Self-Awareness = .73, Lack of Self-Confidence = .80 and Social Anxiety = .74), it is seen that the items in the sub-dimensions are consistent with each other. Moreover, both Exploratory Factor Analysis and Confirmatory Factor Analysis results confirm the validity of the scale. In conclusion, it can be said that this scale is applicable in future researches based on validity and reliability studies.

5. CONCLUSION

FoMO refers to the feeling of being out of what's going on around it, such as having fun with others, meeting up with them, and going on vacation or planning get-together (Casale & Flett, 2019). The FoMO is a notable concept in modern culture. It is used in advertising appeals to launch sales (Hodkinson, 2019), is associated with many kind of maleficence (excessive alcohol consumption) (Hunter, Riordan, Scarf, Flett, & Conner, 2015), problematic smartphone usage (Lo Coco et al., 2020), etc. Thus, in the scientific research, it has been focussed exclusively on FOMO as an individual trait causing to self-initiated FoMO-driven behaviors.

In the related research, it was understood from the factor analysis values that the sub-dimensions in the scale were sufficient to reveal the FoMO perceptions of the participants at this point. It is stated in the literature regarding socially extroverted individuals that individuals with the personality trait of extroversion are social, enjoyable and talkative people (Tkach & Lyubomirsky, 2006; Somer, Korkmaz &Tatar, 2002; Benet, Martinez & John, 1998). Accordingly, a high level of scoring for the relevant factor in the scale developed in our study can be interpreted as a high level of extraversion of the participants.

The other dimension is recorded as Self-awareness which includes emotional and cognitive processes such as perceiving emotions, distinguishing between emotions and evaluating emotional experiences (Lane, Hsu, Locke, Ritenbaugh & Stonnington, 2015; Killian, 2012; Bajgar, Ciarrochi, Lane & Deane, 2005). Self-awareness dimension measures the level of individuals' own cognitive experiences and their evaluation of these cognitive experiences. In this context, it is understood from the analysis values stated in the findings that they are sufficient and appropriate to measure the self-awareness levels of the participants regarding the relevant factor in the current scale.

Lack of self-confidence is the the factor in the scale. This term is generally defined as an individual's negative predictions about his or her own future performance (Lenney, 1977). In the scale,

the participants scores indicate that the related items and the factor is sufficient and suitable for the implication of scale. The final sub-dimension in the scale is stated as social anxiety which is defined as avoidance or distress in situations where an action takes place, a situation that disrupts a person's usual daily work, professional or educational functionality, social activities or interpersonal relationships (First, Frances, Pincus, 1999). Social Anxiety dimension measures the perception levels of individuals who think that they will be excluded from their social environment. Herein, the analyses of the items within the related sub-dimension make it clear that the last sub-dimension of the scale can be seen acceptable to be applied in the reseach areas.

In today's world where technology gradually increase domination in our lives, especially during Covid-19 pandemic, FoMO is the case to be one of the issues to be emphasized strongly in Turkey as in all over the world. As Argan, Tokay-Argan and İpek (2018) stated it may harm to the current purposes of people to buy and/or to repeat their visitation behavior. Moreover, a research conducted by WT Intelligence (2012) concluded that the FoMO has an internal force to encourage spending as it increases joining in social media platforms and prompting to do more. A person having a certain level of FoMO owns the perception that the thing to be missed is more valuable than the thing that is done (McDermott, 2017). Thus, it is recommendable to keep people away from the negative effects of the FoMO like the aforementioned.

The results and statements, inevitably, show that there is a need for comprehensive researches into the conditions with which FoMO is associated. In this context, firstly it is expected that tools that can test individuals' FoMO perceptions in various situations will become available. In this research, in which the validity and reliability of FoMO in the Covid-19 Pandemic Process Scale are tested, scale development studies are conducted in accordance with international scientific methods and it has been determined that the scale meets the validity and reliability criteria. It is thought that this scale can be beneficial in researches to be conducted with various sample groups.

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