



Fomo Phenomenon: How and to What Extent Does it Affect Dental Students?

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Abstract

FOMO is a social phenomenon related to the constant anxiety or even fear of experiencing social isolation. It usually has various negative consequences that affect people's lives. The main purpose of this research is to investigate the extent of FOMO's consequences on students of the School of Dentistry of Aristotle University of Thessaloniki, as well as their level of satisfaction with their lives. The research was carried out with self-referential questionnaires, with two well-known psychological scales, SWLS and FoMoS. Throughout the statistical analysis of the sample's answers, it was found out that most participants are women at the age group of 18-24 with no job and monthly income of less than 300 euro. Also, TikTok and Facebook seem to be mostly preferred for long-distance social communication. However, most participants prefer face-to-face social contact. The replies to the questions of the two psychological scales showed that the mean value of FOMO level is equal to 24,095 and the mean value of SWLS scale is 21,6. So, based on the scales' classifications, the students of the examined university population seem to experience moderate FOMO level and slight satisfaction with their lives. At the same time, it was noticed that the lower the FOMO level, the higher the satisfaction with life. But, there is a need for further surveys examining FOMO phenomenon in Greece in order to fully understand the level of satisfaction with life of people who are more connected with social media.

Keywords: Emotional distress; Isolation; Jealousy; Life satisfaction; Psychological distress; Social media messaging; Social anxiety

Introduction

Since the beginning of 21st century, social life has undergone significant changes. Despite the positive impact of modern lifestyle, a recently known social phenomenon has made its appearance, as a result of people's need for information, entertainment and socializing. This phenomenon is described by the acronym FOMO (Fear of Missing Out) and is triggered by people's natural desire to be in constant connection with others' lives [1]. In 1996, Dan Herman described this social phenomenon, without naming it as FOMO [2,3]. This specific acronym was

primarily used in 2004 by Patrick McGinnis [4]. FOMO could be considered as a social "syndrome" with permanent anxiety or even fear, due to limited or even absent social communication, leading to social isolation [1-5]. It provokes a natural feeling of emptiness and possibly jealousy, which result in a spontaneous comparison among people's lives [6]. So, the components of FOMO are cognitive, behavioral and addiction-related [7]. The aim of the present study is to investigate the severity of FOMO's consequences at students of the School of Dentistry of Aristotle University of Thessaloniki, and their satisfaction with life.

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Materials and Methods

In order to determine the source of the sample, the researchers conducted two lotteries in a row. The first one was related to the sector of studies among all university institutions of Thessaloniki, Greece, whereas the second one was related to the school of studies of the previously chosen sector. The results from both drawings were accordingly: Sector of Health Sciences and School of Dentistry of Aristotle University of Thessaloniki.

During this study's planning, the researchers determined specific research questions to be answered after data gathering and processing:

1. How much time do students of the School of Dentistry of Aristotle University of Thessaloniki, spend on the internet?
2. What is the FOMO level of the chosen research sample?
3. What is the participants' level of satisfaction with life?
4. Is there any correlation between demographic factors and FOMO severity, and if so, how do they affect FOMO level?

The research hypothesis to be confirmed or rejected suggests that the sample experiences at least moderate level of FOMO and is not by any means highly satisfied with life. The results and conclusions of this survey are based on quantitative and qualitative data gathered with self-referential close-ended multiple choice questionnaires. Some questions provided participants with the chance to choose more than one answer. The questionnaires consisted of five parts: the introductory part with the aim of the study and participant's consent, section A with questions related to internet and the use of social media, section B with questions of scale FoMOs (Fear of Missing Out scale), section C with questions of scale SWLS (Satisfaction With Life Scale) and finally, section D with demographic questions. The scales FoMOs and SWLS are two widespread and scientifically approved psychological scales used to measure the impact of FOMO phenomenon on people's lives. Especially, FoMOs scale, developed by Dr. Przybylski, is considered to be the most usually applied self-referential psychological tool to determine a person's FOMO level [8-10]. In FoMOs questionnaire, there are 10 questions, each one of which receives a value ranging from 1 to 5. So, the total minimum possible score is 10 and the maximum is 50 (Table 1). On the other hand, scale SWLS consists of 5 questions, each one of which receives a value ranging from 1 to 7. So, the total minimum possible score is 5 and the maximum is 35 (Table 2). Through our research, we calculated the mean value of both scales, taking into consideration the cumulative scores of each participant. The questionnaires were distributed and collected between 1st May 2022 and 31st May 2022. In total, 200 questionnaires were handed out to students of the School of Dentistry of Aristotle University of Thessaloniki, regardless of

the academic year they attend. However, 180 questionnaires were finally collected, whereas 169 out of these 180 were answered correctly. So, keeping in mind that during the academic year 2021 – 2022 the School of Dentistry had 870 enrolled students, the sample of our research may be considered representative of the population under examination (19,4%). The inclusion criteria for the participants of the study have been determined by the researchers as follows: a) They should be 18 years old or older, b) They should consent to take part in the survey, and c) They should be able to communicate in Greek in order to understand the questions and avoid misunderstandings and non-realistic answers. Neither the attendance year of each participant nor any social and cultural factors were set as exclusion criteria.

Results

The statistical analysis of the numeric and qualitative data of the questionnaires was conducted with the statistical program IBM SPSS Statistics 23, and afterwards graphs and charts were created in order to better illustrate the results. Even though the demographic questions were asked at the end of the questionnaires (section D), it is preferable to present them first for the better description of the research's sample. The researchers observed a greater representation of the feminine gender (Figure 1). Only 17,2% of the participants are students older than 24 years old (Figure 2). Also, the majority (3 out of 4 participants) seems to have very limited monthly income (lower than 300 euro) (Figure 3). This finding is in agreement with the occupational status of the students, most of which (almost 9 out of 10 participants) either work at part-time jobs or are unoccupied (Figure 4). It is worth noticing that women are more likely to have very low monthly income (95 out of 127 of all participants whose monthly income is lower than 300 euro) (Figure 5). Throughout the processing of the answers of section A, it was noticed that 77,5% of the participants spends up to 6 hours daily on the internet, which replies to the 1st research question (Table 3). As far as the use of smartphones is concerned, 87,6% of the sample uses them mainly to surf the web and the social media, regardless of the participants' gender (Figure 6). When asked about the purpose of internet surfing with a multiple-choice question allowing more than one answers to be chosen, almost all participants (97%) picked the answer related to social communication with friends (Figure 7). Nevertheless, 7 out of 10 of them tend to prefer face-to-face communication rather than long-distance communication through social media (Figure 8). In an effort to correlate the time spent on internet surfing and the preferred method of communication, it seems that those surfing the web for 4 to 6 hours daily are most likely to dedicate more time to communicate face-to-face rather than through social media (Table 4). Regarding the most usually visited social media, TikTok seems to be the most popular with no gender dependence

(Figure 9). When examining participants' age, participants from the age group 18-24, which is the greatest group of the survey, prefer Facebook than TikTok (Figure 10). Taking into account the answers given to the FoMOs scale of section B of the

questionnaires, the mean total score is 24,095 and so, based on the classification of Table 1, this total score is within the range 21 – 35 (Table 5).

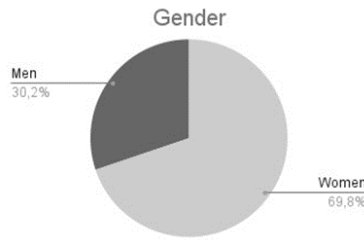


Figure 1: Participants' gender.

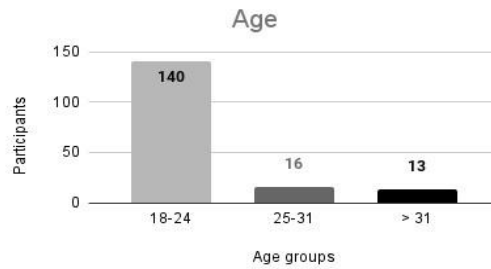


Figure 2: Participants' age.

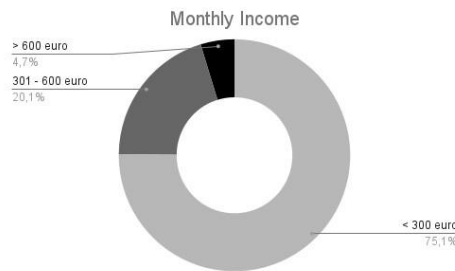


Figure 3: Participants' monthly income.

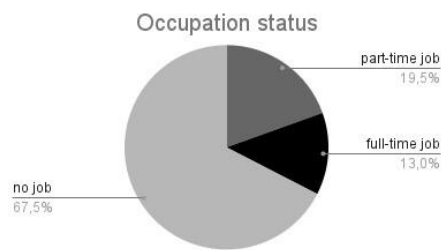


Figure 4: Participants' job status.

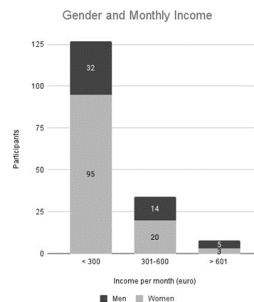


Figure 5: Correlation between gender and monthly income.

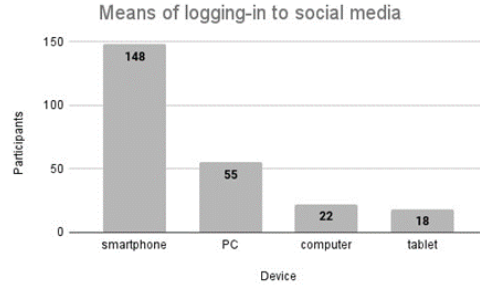


Figure 6: Most usually used electronic device for visiting the social media.

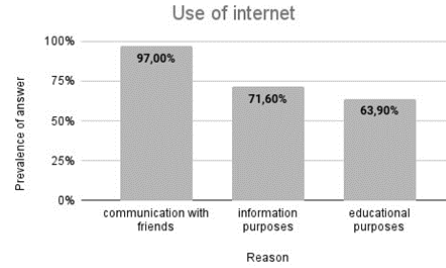


Figure 7: Purpose of using the internet.

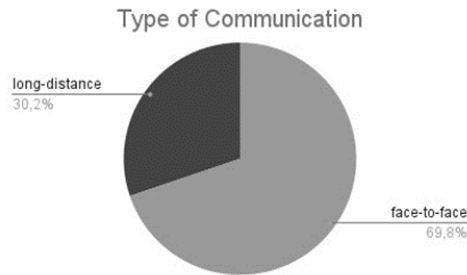


Figure 8: Preference of communication type.

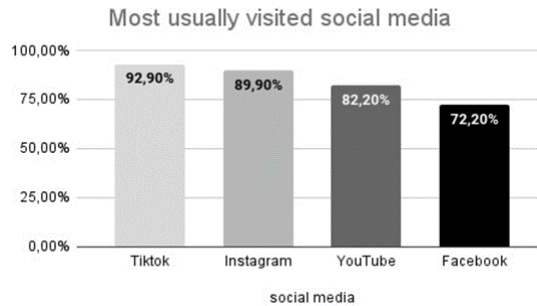


Figure 9: Mostly preferred social media.

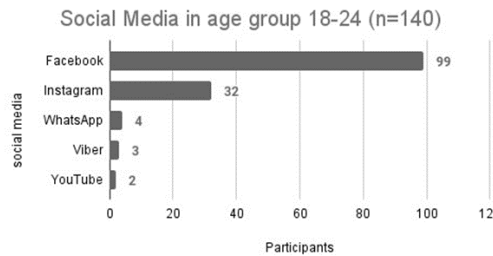


Figure 10: Mostly preferred social media by participants of age group 18-24.

Table 1: Questionnaire of psychological scale FoMOs.

Fear of Missing Out scale (FoMOs)		From 1 (totally false) to 5 (totally correct)				
Questions		1	2	3	4	5
1	I fear others have more rewarding experiences than me.					
2	I fear my friends have more rewarding experiences than me					
3	I get worried when I find out that my friends are having fun without me.					
4	I get anxious when I do not know what my friends are up to.					
5	It is important to understand my friends' jokes.					
6	Sometimes I wonder if I spend excessive amount of time keeping up with what is going on.					
7	It bothers me when I miss an opportunity to meet up with my friends.					
8	When I have a good time, it is important for me to share the details on social media.					
9	It bothers me when I miss a scheduled meet-up.					
10	When I go on vacation, I continue to keep tabs on what my friends are doing.					
Total score :		... / 50				
Score & FOMO level classification :		10 – 20	Mild FOMO			
		21 – 35	Moderate FOMO			
		36 – 50	Severe FOMO			

Table 2: Questionnaire of psychological scale SWLS.

Satisfaction with Life Scale (SWLS)		From 1 (totally disagree) to 7 (totally agree)						
Questions		1	2	3	4	5	6	7
1	From most perspectives, my life is almost ideal for me.							
2	My life conditions are perfect.							
3	I am satisfied with my life.							
4	Until now I have accomplished all the important things that I wanted.							
5	If I had the chance to live my life again, I wouldn't change anything.							
Total score :		... / 35						
Score & satisfaction with life classification :		05 – 09	Highly disappointed					
		10 – 14	Disappointed					
		15 – 19	Slightly disappointed					
		20	Neutral – neither satisfied nor disappointed					
		21 – 25	Slightly satisfied					
		26 – 30	Satisfied					
		31 – 35	Highly satisfied					

Table 3: Hours dedicated to internet surfing daily (only one choice accepted).

Hours per day	%	Participants
< 2	11,8%	20
2 – 4	33,7%	57

4 – 6	32%	54
> 6	22,5%	38
	100%	169

Table 4: Distribution of the sample regarding the preferred type of communication based on the daily hours of surfing the web.

Hours per day	Participants in favor of face-to-face communication	Participants in favor of long-distance communication	Total
< 2	17	3	20
2 – 4	39	18	57
4 – 6	41	13	54
> 6	21	17	38
Total :	118	51	169

Table 5: Mean score of FoMOs questions.

FoMOs Question No.	Mean score of participants' replies per question
Question No.1	2,095
Question No.2	1,930
Question No.3	2,170
Question No.4	1,700
Question No.5	2,940
Question No.6	2,320
Question No.7	3,330
Question No.8	1,590
Question No.9	3,510
Question No.10	2,510
Total sum of mean scores :	24,095

Table 6: Mean score of SWLS questions

SWLS Question No.	Mean score of participants' replies per question
Question No.1	4,26
Question No.2	4,46
Question No.3	4,85
Question No.4	4,00
Question No.5	4,03
Total sum of mean scores :	21,60

As a result, the FOMO level of students of the School of Dentistry of Aristotle University of Thessaloniki can be considered as moderate and this answers to the 2nd research question. At the same time, there was no statistically significant difference regarding the level of FOMO in correlation to demographic factors, which answers to the 4th research question. In order to examine the level of the sample's satisfaction with life, based on the given replies in SWLS questions of section C of the questionnaires, the total sum was calculated to be 21,6 and so, it is within the range 21 – 25 (Table 6). Consequently, the sample seems to be slightly satisfied with life and this finding answers to the 3rd research question.

Discussion

FOMO is a dynamic, complicated and multidimensional social phenomenon. It is considered to be a socio-cultural condition that

usually triggers a permanent feeling of jealousy for the achievements and experiences of others [11,12]. This is mainly observed in social media, where the positive aspects of people's lives are being constantly publicized. This leads many users in a condition of long-lasting sadness and deprivation.13 Sometimes, FOMO provokes fear towards the so-called definite failure.3 FOMO has two components, one sentimental and one cognitive [14]. It has been correlated with undesired sentimental and social conditions, such as loneliness, sense of deficiency and aggression, excessive anxiety and the lack of sentimental stability [15-18]. Nevertheless, it has been stated that FOMO may also bring positive feelings in some cases, such as wellness and satisfaction with life [19,20]. This means practically that FOMO may rarely be associated with a highly pleasant experience [21]. This fact has been attributed to FOMO's indirect positive influence that urges the users of social media to seek for social communication [22].

In general, FOMO is affected by various factors. Indicatively, such factors are age and gender, with women and young people showing more serious FOMO consequences, as well as sociability and the way of using social media [23-24]. Previous research on university students showed that factors that can possibly influence FOMO's level are: age, daily hours and frequency of smartphone use, the time spent each time on being logged-in in social media, the number of social media accounts and the total daily hours of visiting social media [25].

Obviously, the higher the FOMO level someone experiences, the lower their satisfaction with life.²⁶ This is also confirmed by studies that indicate an inverse statistically significant correlation between FOMO level and satisfaction with life [27,28]. Four specific self-referential questions have been suggested as sufficient to determine people's FOMO level: [29]

- Do you feel depressed or disappointed when your friends meet and have fun without having invited you?
- Do you feel nervous when you do not know what your friends are doing?
- Do you feel the need to share whatever you do with others on the internet?
- Do you face any difficulty to focus when studying or working?

Usually, people who experience high level of FOMO in their lives face difficulties in handling situations, such as lack of concentration, sleep disorders and productivity reduction, as well as sentimental disorders, like anger, constant psychological disturbance, anxiety, and disappointment from life, low level of self-esteem and sense of inferiority. Such feelings urge people to an extremely active presence in social media and as a result, they spend excessive amount of time exposing themselves to the danger of addiction [30-31]. The unfortunate consequences of severe FOMO in people's lives exacerbate overconsumption. Consumers enjoy receiving commercial offers as they do not wish to miss any special offer. So, marketing based on FOMO works as a motive, as it urges consumers to impulsive purchases through FOMO's negative impact on their lives [32]. Furthermore, in an effort to be socially accepted and be integrated in social groups in order to fight the feeling of isolation, many people proceed to more purchases than those really required [33]. Over the last years, various ways have been proposed to deal with FOMO. One of the main suggested measures is the limitation of the use of social media. More specifically, 30 minutes is the proposed time to be spent on them [34]. Also, one can improve the level of well-being by embracing the principles of JOMO (Joy Of Missing Out), which is the exactly opposite of FOMO and brings pleasure when a person's life is intentionally not correlated to others' lives [35]. For sure, it is more than essential to learn the proper way of using social media, so that users interact with each other avoiding

the danger of experiencing FOMO's consequences. As far as any limitations of this research are concerned, it was conducted with self-referential questionnaires and thus, the validity of the answers was at the participants' discretion. Moreover, researchers chose to hand out and collect the questionnaires in a post-COVID period. This may have influenced the sample's answers, as COVID-19 pandemic has brought significant changes regarding social interaction and its limitations.

Conclusions

The results of the present research confirm the research hypothesis, as the sample seems to experience moderate level of FOMO and slight satisfaction with life. Keeping in mind that the sample is representative for the population under examination, it can be stated that the results refer to all students of the School of Dentistry of Aristotle University of Thessaloniki. Another important aspect is that the lower the FOMO level of each student, the higher their satisfaction with life. However, there is a lack of such surveys examining FOMO phenomenon in Greece and, as a result, we do not fully understand the level of satisfaction with life of people who are more connected with social media. The influence of FOMO phenomenon on people's lives is the result of their contact with internet and social media, as well as their level of self-control. This explains the correlation between the FOMO level and a person's satisfaction with life. The feeling of active presence in social media offers satisfaction, as it fulfils the natural desire to belong in a social group, even a digital one. Certainly, the higher the FOMO level experienced by a person, the more serious the organic, psychological and social consequences of FOMO on their daily routine and personality. Concurrently, COVID-19 pandemic has brought enormous modalities in people's lives and one of them is social distancing. This has led to a «forced» termination of face-to-face social contacting for a significant period of time. Priorities changed and so, in an effort to fulfil their desire for sociability, people started using only the social media. For all those reasons, it is crucial to further investigate FOMO as a social phenomenon, not only in education but also in other market sectors as well, in order to estimate any possible influence of FOMO on working efficiency.

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