

AN ANALYSIS OF PERSONAL FACTORS AFFECTING LEARNING MOTIVATION: A RESEARCH ON THE ONLINE EDUCATION PROCESS DURING COVID-19 PERIOD IN TURKIYE

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ABSTRACT

In 2019 Covid-19 appeared and spread quickly all over the world, affecting every structure of society, as well as the education system. One of the measures taken to prevent the further spread of the disease was mandatory online education at universities in Turkiye. This sudden change has significantly affected students' learning motivations for face-to-face education. In this context, this study aims to determine the factors of arousal, beliefs, goals, and needs that affect the students' learning motivations as personal factors during online education in Turkiye during the Covid-19 pandemic. For this aim, a semi-structured interview technique was used on a sample of 34 students. According to the findings, the internal factors on arousals were; mainly interest/curiosity/attention and the external factors on arousals were mainly; compulsory attendance requirements. Also, the internal factors on success beliefs were mainly; determination, and the external factors mainly include motivational speeches. Besides, the internal factors on goals were mainly; the need to learn for the future and the external factors on goals were mainly; homework and studies. Lastly, findings indicated that the internal needs of the students were mainly; success, and the external needs were mainly; communication.

Keywords: Learning motivations, arousal, beliefs, goals, needs, online education.

INTRODUCTION

The new coronavirus disease (Covid-19), which first appeared in China in December 2019, then spread rapidly worldwide and was declared a pandemic by the World Health Organization (WHO). Pandemics, which can be defined as infectious diseases that spread to very large areas such as the whole world or the continent, can spread very quickly among people, and the consequences can go up to death. In Turkiye, the T.C. Ministry of Health declared the first case of Covid-19 in March 2020, and the disease began to spread to the whole country. To prevent the further spread of the disease in Turkiye, many significant restrictions have started to be applied, starting from wearing masks everywhere and ending with the curfew in April 2020. Covid-19 has affected every

field in the public sector and the field of education. Council of Higher Education decided that universities must switch online from face-to-face education by using digital formats until the danger is reduced. The execution of online education in universities ended in the academic year of 2021-2022.

This compulsory online education process has been a factor affecting the learning motivation of its students'. Motivation is expressed as the readiness and willingness of a person to learn within the scope of behavioral sciences and educational processes. Motivation is considered concerning such concepts as need, motive, desire, and hope (Kesici et al., 2008). Motivation reflects in students' persistence on learning tasks and in their coping with the obstacles, the encounters in the learning process and the choices of learning tasks, and the time and effort they devote to them (Bakar, 2014, p. 723). Learning motivation is the most important driving force of learning behavior that facilitates students to actively engage with the learning content. Additionally, learning motivation guides students grasping the learning direction as well as continuously engaging in a learning activity to complete tasks and achieve the preset learning objectives (Zhang & Chen, 2021, p. 2). Learning motivation can be divided into intrinsic and extrinsic. For students to be active in the learning process, understand the courses, and achieve the requirements of their studies, learning motivation is highly needed. There are psychological, social, and cultural factors that affect internal and external learning motivations, and personal factors are one of them. Arousal, beliefs, goals, and needs are the prominent individual factors essential in forming motivation to learn.

A gap in the literature was found. There wasn't any research in the literature about the internal and external factors affecting the learning motivations of Turkish students during the Covid-19 period that examines 4 dimensions (arousal, beliefs, goals, needs). Based on this gap in the literature the aim of the study was created.

This study aims to determine the internal and external factors on arousal, beliefs, goals, and needs that affect the students' learning motivations as personal factors during online education in Turkiye during the Covid-19 pandemic. Based on this aim, 4 different research questions were created that are identified to reveal the internal and external factors affecting students' arousals, beliefs, goals, and internal/external needs during the Covid-19 online education process. Within the scope of the aim and research questions, a semi-structured interview technique was used on a sample of 34 students. The questionnaire consisted of 4 parts and 8 questions about the factors of arousal, beliefs, goals, and needs of the students' in the online education process. The data obtained were subjected to descriptive analysis, and in the findings, similar parts of answers from the students were compiled, and the others were tabulated. Additionally, the statements that are different and noteworthy are quoted.

THE FACTORS AFFECTING LEARNING MOTIVATIONS

It is a well-known fact that motivation is an essential factor affecting success in educational processes. The motivation was inspired by the Latin term 'move,' which means movement. Motivation is a force that causes people to behave particularly. Predominantly, motivation is the driver of control, guidance, and persistence in human behavior (Tohidi & Jabbari-Mohammad, 2012, p. 820-821). Also, motivation, defined by needs, is high impulses, such as the desire to achieve. The more the individual wants and considers his needs and desires necessary, the more the motivation is formed. According to Gerrig & Zimbardo, motivation is (2012); all kinds of processes that involve starting, managing and continuing physical and psychological activities. Motivation includes the processes that energize and guide behavior, and there are different approaches to explaining the concept. (Santrock, 2018, p. 438). Each of the approaches treated motivation from a different aspect; hence all concluded that motivation is an important factor influencing learning processes. These approaches are divided into behavioral, humane, and cognitive processes. The behavioral approach focuses on the extrinsic motivation of students. Behavioral learning emphasizes concepts such as reinforcement, conditioning, and alternatives to punishment, and using reinforcement to increase behavior and removing reinforcement to extinguish behavior can be applied to motivation. In addition, humanitarian approaches focus on the intrinsic motivation of students, and they were developed as a reaction to behaviorism. These approaches take into account important affective characteristics of students and how they feel about themselves and others. In the education field, the humanitarian approach emphasizes the human side of learning and the teacher's need to consider students' personal choices, needs, and growth. One of the

most influential theories reflecting the humanistic approach to motivation is Maslow's need theory, which emphasizes positive qualities like the student's capacity for self-development, orientation to one's destiny, and being more sensitive to others. On the other hand, cognitive approaches are based on the assumption that students' perceptions and thoughts about activities and events, or intrinsic sources, influence the way in which they respond. They also suggest that students can be motivated to perform well, not only because of rewards such as grades or praise but also because of the need to obtain information or solve a problem, which can help them to understand (Hodo, 2016, p. 23-24). These behavioral, humane, and cognitive approaches are essential at showing the importance of learning motivation.

Learning motivation is the most important driving force of learning behavior. It guides students to understand the learning direction and continuously engages in learning activities for completing tasks and achieving the preset learning objectives. Learning behaviors and motivation are the main factors in learning effectiveness; education could induce students' innovation capability and enhance educational effectiveness (Brinkman, 2010; Brettel & Cleven, 2011). In other words, learning motivation is one of the factors that determine the effectiveness of learning, and students will learn well if there is a driving factor, namely learning motivation (Lao, 2021, p. 461). Many factors affect the learning motivation of a student. It is significantly essential for a student to believe that he can succeed in his motivation. Additionally, if a learning activity or a course is beneficial to the student, then the student may consider this activity or course valuable and make efforts to achieve it. Besides, if the teacher who guides the student in the learning process is also willing, makes an effort, is energetic, and enthusiastic. He can increase the motivation of the student. And not only a student-centered education increases motivation, but also the positive classroom atmosphere contributes to this process (Ergun et al., 2002, p. 102). In twenty-first-century education, student-centered education have gained weight instead of teacher-centered approaches to create a learner-centered learning environment for increased student motivation (Zeybek, 2021, p. 17). In this context, the student's belief to succeed and learn, the attitudes of the teacher, the classroom climate, and a student-centered education based on students' needs can be listed as the main factors that increase motivation.

Motivation is divided into 2 different groups; internal and external motivation. Internal motivation is an individual's motivation to accomplish goals from within them, whereas external motivation is an individual's motivation to attain his goal from a source outside himself. From the learning perspective, intrinsically motivated students' study because they want to understand the content and view learning as worthwhile, whereas extrinsically motivated students may study for a test because they believe studying will lead to a good grade (Eggen & Kauchak, 1994). There is no need to use external motivation for learning processes that students consider interesting and meaningful. In this context, the teacher must know the needs of the students and use external motivation in the right place.

According to Gopalan et al. (2017) internal motivation depicts an activity done only for own contentment without any external anticipation. The challenge, curiosity, control, and fantasy are the key factors to trigger internal motivation. In education, lots of willpower and a positive attitude are required to sustain motivation. Additionally, internal motivation and academic achievement share significant and positive bonding. Internal motivation directs a student to participate in educational activities only to experience fun, challenge, and uniqueness without any external pressure or compulsion rather than expecting external rewards, gifts, or under any compulsion or pressure. Attitude in learning is considered prominent, and it influences academic achievement. Internal motivation can spread positivity and sustain the gained knowledge for a long time. Conversely, external motivation depicts external activities such as reward, compulsion, and punishment. Students are extrinsically motivated if they receive any reward or under any pressure or compulsion. The motivation can be cultivated extrinsically at the initial stage and transformed into intrinsic motivation in the learning process as it goes deeper. This kind of motivation provides a high level of willpower and engagement, yet it would not be able to sustain longer than intrinsic motivation can do. If they are continuously motivated through external rewards or compliments, it could be habitual for students to perform only to gain the rewards and not for their own sake or mastery of skills or knowledge.

Additionally, when a student cannot perform either intrinsically motivated or extrinsically motivated, then amotivation occurs. Amotivation is a state where intrinsic motivation and extrinsic motivation no longer exist. Both intrinsic and extrinsic motivation have unique features to motivate students, and both intrinsic and extrinsic motivation are needed in a learning process.

Similar to internal and external motivation that affects learning motivation, personal factors like; arousal, beliefs, goals, and needs also have an essential role in forming motivation to learn (Eggen & Kauchak, 1994). These 4 personal factors are influenced by internal and external conditions and directly affect the individual's learning level. Since this study's main subject, it is essential to examine these factors in detail.

Motivation and Arousal

According to Berlyne (1960), arousal is a motivational state pertaining to an individual's level of alertness or activation, ranging from extreme drowsiness to extreme wakefulness. Besides, arousal is the basis of emotions, motivation, information processing, and behavioral reactions (Groeppe-Klein, 2005, p. 428). Motivational arousal can decrease and increase with its level of intensity being guided by how a person perceives a task. If the task is expected to be easy, then the motivational arousal will decrease. On the contrary, if the task is expected to be difficult, the need for motivational arousal will increase. Arousal is highly related to learning motivations. If the student has a deficient level of arousal, like thinking about something else or sleeping, he will learn very little. To resolve this, the teacher should do things likely to increase the arousal level. The learning outcome will again be the same if the student has a very high level of arousal, like panicking, and to resolve this problem, the teacher should do things that are likely to reduce arousal. In this context, it is safe to say that the students tend to learn best at a medium arousal level. According to Eggen & Kauchak (1994), arousal is a physical and psychological reaction to the environment, including anxiety and curiosity motivation. If a teacher hands out a test, the students are sitting nervously and curious about the content of the test, which increases blood pressure and creates fast breathing and sweaty hands. This situation means that the students are aroused, and their motivation is high. So, an optimal level of arousal is needed for the peak students' performances. Also (Pluck & Johnson, 2011, p. 24) curiosity is an essential aspect of intrinsic motivation that has excellent potential to enhance student learning; if the teacher gives importance to students' curiosity, then the desired level of arousal can be formed. In this context, contents, and activities that may cause curiosity can be considered the main parameters in creating motivation for learning.

Motivation and Beliefs

Beliefs are about ability as individuals evaluate their competence in different areas. In the expectancy-value model, ability beliefs are conceived as broad beliefs about competence in a given domain, contrary to one's expectancies for success on a specific upcoming task (Eccles et al., 1983). According to Zimmerman (2000) and Pintrich (2000), motivational beliefs have their roots in self-regulation, which can be defined as a process where the learner undertakes an active and constructive mission through which he blends internal and external components. He constitutes their own goals and strategies. Also, the self-regulation process consists of planned and circular thoughts, feelings, and behaviors, and during this process, the individual uses the feedback taken from previous performances as a component to regulate new learning attempts (Nasser, 2015, p. 2510). In this context, self-regulation can be seen as a process of constantly monitoring the progress towards a goal, checking the results and redirecting unsuccessful efforts.

A student's optimistic belief about one's ability in learning can help increase motivation. In an incremental view of the beliefs about ability, individuals can hold the beliefs that ability can be improved with effort. Although students tend to be influenced by teachers' evaluation of their ability in participating activities, they have an optimistic view of their ability to a certain extent which causes their self-confidence originally. They also react strongly to failure and self-doubt. A linking theory is attribution theory (Kong, 2009, p. 147), and according to Weiner (2005), attributions are perceptions about the causes of success and failure. If a student gets a low mark on a test and wonders what caused the low mark, he can construct various explanations/attributions for this failure. Studying was not very hard; the test itself was difficult; being unlucky could be an example of these explanations, and each explanation attributes the failure to a different factor. The explanations that the students settle upon could reflect the truth accurately or not. But it is important about attributions is that they reflect personal beliefs about the sources or causes of success and failure and tend to affect motivation in various ways, depending on the nature of the attribution (Weiner, 2005). So, teachers can help students attribute their successes to ability and effort while failure, bad luck,

and task difficulty and provide them more opportunities to experience success to set an optimal belief of the learning ability and enhance learning motivation. (Kong, 2009, p. 147). In this context, it may be the responsibility of teachers to provide an environment that best suits the learning abilities of the students and to provide more opportunities to increase their learning motivation and mobilize internal factors. This situation will have a significant impact on students' motivation to learn.

Motivation and Goals

Goals are defined as what an individual is planning to accomplish, and they are the aim or the object of an individual's actions (Brown & Harvey, 2006). According to Weiner (1986), the type of academic goals students pursue is one of the essential variables in motivational research in educational contexts. A goal may be defined as a model or integrated pattern of beliefs, attributions, and affects/feelings that guide behavioral intentions (Valle et al., 2003). Also student motivation as goal-directed behavior which involves different ways of thinking and is elicited under various internal and external conditions and also indicates that motivational goals provide the mechanism for filtering perceptions and other cognitive processes (Ames, 1992). In this context goal can be defined as a model of beliefs and feelings that guide behavioral intentions, is the most basic parameter that provides goal-oriented behavior.

There are four different mechanisms of how goals affect students' performances. Firstly, goals lead students to focus on goal-relevant activities, and secondly, students adjust their effort level according to task difficulty when they have goals. Thirdly, students become more persistent in achieving the tasks thanks to goals, and lastly, students pursue appropriate strategies to achieve their goals (Dornyei, 2001). The learning goals of students affect their motivation levels, but many students fail to create effective goals. Sometimes students set very easy, sometimes very difficult goals, and these situations negatively affect their level of motivation. An effective learning goal should be short-termed and specifically related to the subject to be learned. By looking at the students' goals, teachers can make assessments about their motivation levels and the level of realization of their goals, and they can help them create effective goals (Akbaba, 2006, p. 352). In this context, it can be said that this situation provides support in creating students' goals and contributes to their learning motivation.

Motivation and Needs

Seward & Seward (1937) defined drive as "an activity of the total organism resulting from a persistent disequilibrium," with a disequilibrium usually created by an insufficiency of certain things like; water, food, and rest. Thus, a drive reflects a 'need' that arises from the lack of some particular thing, such that a 'need' can be characterized by, and defined as, a lack of something essential to a person's existence or well-being. (Taormina & Gao, 2013, p. 156). Abraham Maslow developed a psychological model to identify what motivates people and assumed that people are motivated by various needs. Maslow's Hierarchy of Needs is organized as a pyramid, grouping human needs into five categories: physiological, safety, love/belongingness, esteem, and self-actualization (Lester, 2013, p. 15). For students to succeed in the classroom, they must be motivated to learn, and Maslow's model is directly related to learning through motivation. When all levels of Maslow's Hierarchy of Needs are met, students are at their full learning potential. Each student has needs that must be met to maximize learning, and the higher up in the hierarchy a student is, the better the motivation and learning that the student will have.

In classrooms, students who are threatened by potential embarrassment are less motivated to learn; until they study in a secure and relaxed environment, they will move to the need for competence that is related to competence motivation which is an innate need in individuals that energizes them to master tasks and skills. The need for achievement drives students to fulfill their goals. Students with a high need for achievement tend to be motivated by challenging assignments, high grading standards, explicit feedback, and the opportunity to try again. On the contrary, students who need to avoid failure avoid challenging tasks and experience anxiety in testing situations. If the teachers are aware of these differences, then they can respond to different students with different needs and, as a result, teach all students more effectively (Kong, 2009, p. 147). According to Akbaba (2006, p. 352), belongingness need, approval need, reducing

anxiety need, autonomy need, and need for achievement, which are from social and emotional needs, are essential for learning motivation. Firstly, the belongingness needs of students are significant for learning motivation. If students sense being accepted, valued, and included by teachers and peers in the classroom setting and feel they are an important part of the class, this would positively affect their learning motivation (Goodenow, 1993). Approval need is a critical factor for developing academic motivation. The quality of interaction between teachers and their students and between classmates is balanced by many dimensions of extrinsic motivations. In this context, approval motivation is one with a big impact (because of the teacher - a figure with authority at an early age of the pupil and, secondly, because of evaluation necessity through a person's evaluation of adolescent or young adult/social evaluation. These can influence positively or, in contrast, destabilize academic motivation (Panisora et al., 2015, p. 1216). Additionally, reducing anxiety is one of the crucial need since it can negatively affect academic performance. Eccles & Wigfield (2002) and Eysenck et al. (2007) indicated that anxiety impairs the effective functioning of students' attention systems and increases the degree to which processing efficiency depends on attention control. This explains the effect of anxiety on students' attention processes and cognitive functions. In this context, anxiety can reduce academic performance. Feelings (affective) and anxieties (cognitive) are sources of decreased student performance. Students' achievements can be improved by educating them on how to deal with stressful situations in academic life. If students can cope with their emotional anxiety, it can help them achieve better results (as cited in Majali, 2020, p. 976). Also, autonomy is the need of an individual to manage himself and his environment by controlling them. Teachers can increase the sense of autonomy by shifting the responsibility to the student and enabling him to make decisions (Akbaba, 2006, p. 353). Finally, the need for achievement is behavior directed toward competition with a standard of excellence. McClelland (1961) found that people with a high need for achievement perform better than those with a moderate or low need. Sardiman (2000) states that several factors to successful learning achievement. Giving grades in the form of learning outcome grades, teachers giving gifts such as morality and materiality, competition between students, ego-involvement, giving tests frequently, students knowing the results immediately after the exams, praising students, and punishment can provide students a force to be more active in studying, desire to learn and lastly student interest in certain subjects is needed in fostering achievement motivation.

Some recent literature studies reveal the relationship between the conditions that emerged during the Covid-19 pandemic period and students' motivation. Ozel et. al. (2021) studied whether the anxiety experienced/felt by university students towards the COVID-19 epidemic has any effect on their motivation is, the main purpose of the study. According to their study, the coronavirus anxiety levels of the students were not very high, but their general motivation was quite high, except for their external motivation. Also, it was seen that the coronavirus disease concerns certainly did not affect their motivation. Another study (Tekin, 2020) aimed to investigate the effect of anxiety that developed due to the Covid-19 pandemic on the motivation of Generation Z youth. According to Tekin (2020)'s research results, socialization anxiety caused by the Covid-19 pandemic is higher than individual anxiety, and intrinsic motivation is lower than extrinsic motivation. In addition, it was concluded that socialization anxiety arising from the epidemic in generation Z negatively affects both internal and external motivation. Also, another study by Camacho et. al. (2021) investigated whether anxiety and perceived social support from teachers and classmates were predictive of changes in students' academic motivation during the first wave of the COVID-19. Their study showed that students' anxiety and teachers' social support were important predictors of academic motivation changes. One of the similar researches by Sabanci & Yilmaz (2021) investigated the effects of distance education on teachers' motivation in the Covid-19 period. Their results have shown that distance education negatively affected the motivation of students and teachers. Also, the study revealed that distance education was more inefficient than face-to-face education for the teachers. Cetinel & Gurcuoglu's (2022) research determined the academic motivation levels of university students in terms of demographic factors during the pandemic period. According to the research data, the level of academic motivation differs in terms of demographic factors. It was found that there was a gap in the literature from Turkiye. There wasn't any research in the literature about the internal and external factors affecting students' learning motivations during the Covid-19 period that examines 4 dimensions (arousal, beliefs, goals, and needs). Based on this literature gap, the study's aim was created. The fact that the internal and external factors affecting students' learning motivations during the pandemic period have not been discussed in any previous study in Turkiye shows the importance of this study.

AIM OF THE STUDY

The main aim of this research to fill the gap in the literature was to determine the internal and external factors on arousal, beliefs, goals, and needs that affect the students' learning motivations as personal factors during online education in Türkiye during the Covid-19 pandemic.

4 research questions were created for the aim of the study

1. What Are the Internal and External Factors Affecting Students' Arousals during Covid-19 Online Education Process?
2. What Are the Internal and External Factors Affecting Students' Beliefs on Success during Covid-19 Online Education Process?
3. What Are the Internal and External Factors Affecting Students' Goals during Covid-19 Online Education Process?
4. What are Students' Internal and External Needs during the Covid-19 Online Education Process?

METHOD

The research was based on a methodology in which a qualitative research method was used to achieve the aim of determining the learning motivations of university students in the Covid-19 days' compulsory online education process. The qualitative research method, which was used in the study, is a type in which qualitative data collection methods such as observation, interview, and document analysis are used as a research approach to the interpretive paradigm, in other words, the understanding of epistemology. Qualitative research aims to provide a realistic and holistic presentation of perceptions and events in the natural environment. Qualitative researchers also use various tools to serve this purpose, as it puts interpretation and deciphering in front when explaining the relationships between events and phenomena. Interview forms, observation forms, audio recorders, analyzer, paper, pen, various documents, written materials, etc., are the tools that will make it easier to interpret and make sense of this method (Yildirim & Simsek, 2005). Additionally, according to Merriam (2013, p.14), qualitative research aims to understand how people make sense of their lives and describe how people interpret their experiences. Therefore, this study was also conducted for this purpose.

In this study, a semi-structured interview technique was used. According to Ekiz (2009), in the semi-structured interview technique, the researcher prepares the interview questions in advance but gives partial flexibility to the participants during the interview, allowing the created questions to be rearranged, and discussed.

Data Collection and Analysis

There are 8 questions prepared based on research questions in the interview form. In devising the questionnaire, existing scale items of learning motivations and personal factors (Deci & Ryan, 1985; Deci & Ryan, 1991; Martin, 2001; Malone et al., 2021; Vallerand, 1992) were examined, and appropriate items were modified to suit the context of this research. Since the validity and reliability of these scales are high in the literature, the use of the scales in the creation of the questionnaire form contributed to the validity and reliability of the study. 3 experts examined the semi-structured questionnaire in the specific field, and the final version was given. According to Aung et al. (2021) it is safe to implement a questionnaire with the qualitative experts' suggestions on paraphrasing unclear questions and eliciting redundant information and pilot interview. So, this process also contributes to increasing the reliability of the study. Then, the pilot interview was conducted with 4 participants, and the confusion of meanings and wordings was organized. The data of the study were collected between 15.09.2021 and 10.11.2021. The semi-structured questionnaire was audio recorded with the participant's permission during the face-to-face interview. The interviews lasted between 25-30 minutes. The participants' statements were transferred as they are, and the data were then deciphered. By evaluating the interview texts, it was ensured that there is a common language between the texts.

The data obtained through face-to-face interviews were subjected to descriptive analysis based on the purpose of this study. According to Yildirim & Simsek (2005); descriptive analysis is an approach to summarizing and interpreting the obtained data according to previously determined themes. This approach, where direct quotations are often included, is aimed to reflect the views of the participants in a striking way. Besides, the

descriptive data analysis was examined with the model of Miles & Huberman (1994), which consists of data reduction, data presentation, and inference. Also, the data were categorized and revealed based on personal factors affecting learning motivation (Eggen & Kauchak, 1994).

Participants

Unlike quantitative research, the sampling methods used in qualitative research have great flexibility. In this study, purposive sampling, one of the qualitative research methods, was used. Purposive sampling is a method designed to represent some special groups for a purpose, and in this study, the participants were determined based on this method. In this context, 34 participants studying at Sakarya University Faculty of Communication were selected. The genders of these participants were determined to be equal, and the prerequisite for participation was identified as 'having received online education during the Covid-19 process'. Table 1. given below, shows the characteristics of the participants.

Table 1. Characteristics of participants

| PARTICIPANTS | SEX | AGE |
|--------------|---------|-----|
| P1 | Male | 22 |
| P2 | Female | 21 |
| P3 | Female | 19 |
| P4 | Male | 20 |
| P5 | Male | 20 |
| P6 | Female | 21 |
| P7 | Female | 24 |
| P8 | Male | 21 |
| P9 | Female | 22 |
| P10 | Male | 21 |
| P11 | Female | 22 |
| P12 | Male | 20 |
| P13 | Female | 21 |
| P14 | Male | 21 |
| P15 | Male | 22 |
| P16 | Male | 22 |
| P17 | Male | 22 |
| P18 | Male | 20 |
| P19 | Female | 20 |
| P20 | Female | 19 |
| P21 | Female | 20 |
| P22 | Female | 33 |
| P23 | Male | 23 |
| P24 | Female | 22 |
| P25 | Male | 22 |
| P26 | Male | 32 |
| P27 | Female | 22 |
| P28 | Male | 20 |
| P29 | Female | 21 |
| P30 | Female | 19 |
| P31 | Male | 21 |
| P32 | Male | 22 |
| P33 | Female | 23 |
| P34 | Female | 19 |
| TOTAL:34 | 17F+17M | |

FINDINGS

To ensure the anonymity of the answers given by the participants, the names were placed in the form of “Participant 1, Participant 2 ...”. Each participant answered all 8 questions in the questionnaire. However, the similar and repetitive answers of the participants were compiled and put together, and the others were tabulated. In addition, statements that are different and noteworthy are quoted. Hence the questionnaire contains open-ended questions; the answers have more than one expression. Therefore, the total number of statements is more than the number of participants. Additionally, personal factors like; arousal, beliefs, goals, and needs that affect learning motivation are grouped in this section.

Arousal

Research Question 1. What are the Internal and External Factors Affecting Students’ Arousal during Covid-19 Online Education Process?

The responses on internal factors affecting arousal, which have an essential place in learning motivation, are presented in detail below in Table 2 and the texts.

Table 2. Internal Factors on Arousal

| | Number |
|------------------------------|--------|
| Interest/curiosity/attention | 19 |
| Responsibility | 11 |
| Wanting to learn new things | 9 |
| Wanting to be successful | 3 |
| Boredom | 3 |

The majority of the students stated that one of the important elements that stimulated them to participate in online courses was their curiosity, interest and attention about/to the course’s subject. The statement of P5 in this regard is noteworthy.

“I was so curious about some courses; they took my attention and interest, I was looking forward to them every week.” (P5)

Most of the students stated that as a student, they felt responsible for joining the courses and learning from them, as represented in P11’s statement below.

“...even though we were in the Covid-19 period, my academic life was going on, I had to take classes, learn. We switched to online education doesn’t mean that the education is over. After all, isn’t it the responsibility of a student to take classes...” (P11)

Interestingly, few participants stated that the absence of any other activity and boredom in Covid-19 made them join the courses. The statement of P31 in this regard can represent this noteworthy factor.

“...there was nothing to do during the Covid period, we couldn’t get out, so I was bored, so I joined the lessons.” (P31)

The responses on external factors affecting arousal, which have an essential place in learning motivation, are presented in detail in Table 3 and the texts.

Table 3. External Factors on Arousal

| | Number |
|---------------------------------------|--------|
| Attendance requirements | 18 |
| Homework/quizzes | 16 |
| Announcements | 9 |
| Uploaded documents | 9 |
| Creating interest/curiosity/attention | 8 |
| Examples from real life | 6 |
| Flexibility | 4 |
| Teachers' way of lecture | 3 |

The participants identified the factors listed above as external stimuli coming from the teachers that affect their arousal. The majority of the participants stated that they felt they had to attend online classes because the courses had compulsory attendance requirements.

"...of course, the content of the course was important, but I attended because the course had a requirement of attendance, so I was obligated" (P12)

Another visible external arousal factor is the homework and exams given by the teacher. It can be said that homework and exams are among the main arousal factors that motivate the student to study in the online process. Regarding this, P31 makes the following statement:

"Normally, I never liked homework, but in the online process, homework, quizzes connected me to the lesson; I felt connected to the school as I made the homework/quizzes and got feedback in return (P31)

In addition to homework and quizzes, the activities that the teacher does to increase the interest and curiosity and attention levels of the students in the lesson are also influential in arousal formation. The statement of the P30 is of interest at this point.

"The teacher often increased our curiosity about the lesson's subjects, attracted us to the lesson with videos and photos, and showed remarkable examples. These always made me alert to class."

Among the stimuli used by the teacher, few participants stated that the teacher's energetic and enthusiastic way of the lecture was effective in arousal. The next statement can represent their opinion:

"...we had a few teachers who turned on the camera and conducted the courses energetically... I and a lot of my friends loved going to those classes; online was already boring; we weren't bored when that happened". (P2)

Beliefs

Research Question 2. What are the Internal and External Factors Affecting Students' Beliefs on Success during Covid-19 Online Education Process?

Student responses on internal factors affecting their beliefs that have an essential role in learning motivation are presented in detail below in Table 4 and the texts.

Table 4. Internal Factors on Beliefs

| | Number |
|---------------------------------|--------|
| Determination | 15 |
| Safety and comfort of homes | 12 |
| Loneliness | 11 |
| Trust on online format on exams | 6 |
| Anxiety of technical problems | 6 |

In the online education process, it was seen that the comfort and the safety of the home environment increased the students' beliefs that they could succeed and most of the students shared that. The statement of P34 in this regard can represent this noteworthy factor.

“I was very afraid of contracting the coronavirus and getting sick. If there were face-to-face education in the Covid period, I would have dropped out of school, but I was very relieved when I had online education; I felt safe at home... Well, the teacher talked, I listened in my comfortable seat... When a person is safe and comfortable, I found out he understands the lesson better”. (P34)

Participants are more confident in themselves that they will succeed in the exams held online. Because they could look at the course notes online during the exam, which creates a belief that the exam will be easier than a face-to-face exam; in other words, it can be said that; the ability to open course documents in an online exam reduces exam anxiety and increased success beliefs among students.

“...I mean, it's not like cheating, but when I opened the course notes in the exams, it seemed to me that I answered more comfortably; the answers were easier, and that was what made me believe in myself that I could succeed in online exams...” (P31)

Also, the fear caused by the feeling of loneliness was prominent in students' beliefs that they could succeed in courses. Regarding this, P19 makes the following statement:

“...not being able to meet with teachers and friends made me feel very lonely spiritually as if I was left without support, which reduced my sense of accomplishment, not being able to communicate comfortably, not being able to talk about class with friends made me feel very lonely, it feels like I can't do it” (P19)

Student responses to external factors affecting their beliefs are presented in detail below in Table 5 and the texts.

Table 5. External Factors on Beliefs

| | Number |
|--------------------------|--------|
| Motivational speeches 20 | 20 |
| Appreciation 10 | 10 |
| Encouragement 9 | 9 |
| No support 2 | 2 |

Teachers encouraging feedback and appreciation of homework, showing the students that she confides in them, directly contribute to the students' beliefs positively as positive reinforcers. The following P3's statement is a good representation of the participants who mentioned other similar factors too;

“...our teachers were saying that we were good at the end of our projects and presentations. There were positive conversations about how we could get to better points. When that happens, I feel that teachers trust us, and this feels very good, so I believe in myself more...” (P3)

On the other hand, statement of P18 has previously stated that the online education process makes him feel very lonely. Unlike many participants, P18's statement shows that he seemed unenthusiastic about the entire online education process. It is obvious that the online education process was a mandatory process that was not in demand, and the adverse climate of the Covid-19 era had its share in this. His statement can be seen below:

“In the online process, our teachers and we were unhappy, and I didn't get anything from the teachers that guided my belief that I would succeed” (P18).

Goals

Research Question 3. What are the Internal and External Factors Affecting Students' Goals during Covid-19 Online Education Process?

Student responses on internal factors affecting their goals that have an important role in learning motivation are presented in detail below in Table 6 and the texts.

Table 6. Internal Factors on Goals

| | Number |
|------------------------------------|--------|
| To learn for the future | 18 |
| To pass the courses | 12 |
| To get high grades by online exams | 8 |
| To reinforce the knowledge | 6 |

It is determined that the most prominent internal factors that affect the goals in the online educational process is that the students want to learn the course to build their careers. P9's statement is a good representation of the participants who mentioned this is in below:

"...during this period, I tried to understand the lessons in depth because I aimed to create a solid foundation for myself."

On the contrary, it is also identified that most of the students were result-oriented, and they just aimed to pass the courses. Regarding this, P2 makes the following statement:

"passing the courses was my only goal; I didn't need high grades; it was enough to pass."

Students considered taking the exams online attractive during the online education process because there was a perception that online exams are easier than face-to-face. Therefore, students consider online exams an opportunity to keep their grades high. The statement of P10 in this regard can represent this noteworthy factor.

"I decided to get high grades while the exams were online because I didn't know what I would face after Covid period; I wanted to pass with the best grades" (P10)

Student responses to external factors affecting their goals that have an essential role in learning motivation are presented in detail below in Table 7 and the texts.

Table 7. External Factors on Goals

| | Number |
|-----------------------------|--------|
| Homework/studies | 16 |
| Clues on future | 6 |
| Being active during courses | 6 |
| Communicative support | 5 |
| No support | 2 |

Research data indicates that teachers giving homework and studies was important for the students to reach their goals. The homework given by the teachers has largely provided interaction that has not been established to a sufficient degree because of online education. The following statement by P11 can represent most of the students' opinions:

"...my teachers gave me a lot of homework by offering various resources, which always kept me interested in the lesson. If it weren't for the homework, I would not have felt connected to the lesson" (P11).

Besides, some of the students mentioned being active during classes. Accordingly, turning on the microphone and talking, asking questions, and commenting on the lesson are desirable situations for students to achieve their goals. The statement of P9 in this regard can represent this noteworthy aspect.

“...Isn't it our primary goal to be able to learn in lessons? being able to actively participate in classes and sharing my ideas has helped me achieve my goal of success a lot, sometimes I turned on my voice or wrote a comment, and I really enjoyed it”(P9)

Although very few participants stated that they did not see any contribution from their teachers in achieving or setting their goals. P34's statement can be a good representation of their opinion.

“It was my first year, and I had no idea what kind of goal I should have. I expected the teachers to help me more with this, but I've never seen anything like it. I can say that my online education period was aimless” (P34).

Needs

Research Question 4. What are the Internal and External Needs of Students' during Covid-19 Online Education Process?

Student responses on internal needs, which have an essential role in learning motivation, are presented in detail below in Table 8 and the texts.

Table 8. Internal Needs

| | Number |
|------------------|--------|
| Success | 18 |
| Belongingness | 16 |
| Reducing anxiety | 10 |
| Approval | 9 |

Among the needs of the participants in the online education process, the need to be successful is mostly expressed, and this condition is represented in P15's statement below:

“...the pandemic had already scared me a lot, an unknown online education had also worried me, at least I wanted to succeed in my classes, get over with this semester...”(P15)

In addition to the need for success in the online education process, the students' need to feel like they belong to the class and belong to the group they are studying with have come forward in the study. The concept of 'loneliness,' which has previously appeared in the 'belief' section, is also at the forefront of the needs section. The emergence of 'loneliness' again in this section and the need for belongingness caused by this concept confirms the data integrity of the research. In this context, the statements of P22 and P33 are noteworthy.

“...I was trying to learn a topic from the screen with friends I don't know enough, I felt alienated and distant, I didn't feel we were a class. I thought if something happened and I couldn't connect to the lesson or if I missed something, no one could help, I knew nobody, I was worried that I was learning alone...”(P 22), “...it is complicated to feel like a class member online because there is no interaction with your friends, there is no sound coming immediately, so little written from the chat is the screen, over time I felt part of the class ...”(P33)

On the other hand, some students have expressed that they needed approval and praise. The need for support was greater in in-course activities. The statement of P11 can represent these students;

“... normally I become very worried talking in front of people and then if the teacher heard me, I would feel approved then and enjoyed the process more” (P11)

Student responses to external needs that have an important role in learning motivation are presented in detail in Table 9 and the texts.

Table 9. External Needs

| | Number |
|----------------------|--------|
| Communication | 14 |
| Reducing anxiety | 10 |
| Seeing understanding | 9 |
| Meets were not met | 3 |

Considering the external needs of the students met by the teacher, it has been revealed that the communication channels should be open in the teacher-student relationship was the most desirable situation. Students consider that effective and close teacher-student communication in the online process is the main factor in meeting the needs of learning the course and being successful. In addition, it has been identified that students also request close and friendly communication with their teachers outside the course. P33's statement can be a good representation of the student's communication needs:

"...when I emailed the teacher and when the teacher answered me then my expectations and enthusiasm for the lesson increased, even more, comfortable communication was the most supportive thing in this process..." (P33)

In addition, reducing the needs of the in-course and out-of-course concerns and anxiety are also included in the scope of teacher-student communication and interaction. The statement of P23 can represent these students' opinions;

"Even when I explained my anxiety about the pandemic, the teacher was very understanding and helpful. She listened to me, said she understood, told me to be patient; it was very good to see empathy from the teacher" (P34)

On the other hand, few of the students stated that their needs were not met during the online education process, and P18's can be a good representation of these students. The same participant has previously stated that he completed the process unhappily and could not take any behavior from the teachers that guided his beliefs in success. (See Table 5).

"...I didn't mention any of my needs, no one asked me about my needs either, my need for the class was also not met, we entered, left, did homework, and that was basically it..." (P18)

DISCUSSION AND CONCLUSION

In 2019 coronavirus disease (Covid19) appeared and spread rapidly to the world. The education system had also been affected as every structure of the societies had been. In Turkiye, universities executed online education from 2019 to the academic year of 2021-2022 by necessity. This period of online education, where everyone from teachers to students is affected, has affected learning and teaching motivations. But this study was especially interested in the learning motivation part to determine the internal and external factors on arousal, beliefs, goals, and needs that affect the students' learning motivations during online education while Covid-19 pandemic.

The concept of motivation which can be explained as the processes that include starting, managing, and continuing physical and psychological activities, is a significant factor affecting students' successes in educational processes. Although there are a lot of factors that affect a students' learning motivations, this study reveals the distinctiveness of personal factors like; arousal, beliefs, goals, and needs in students' learning motivations during online education. 34 students who had received online education during the Covid-19 process were interviewed to achieve the aim of the study. A semi-structured interview technique was used in the research, and the data obtained through face-to-face interviews were subjected to descriptive analysis. The findings were given in 4 parts; arousal, beliefs, goals, and needs.

To answer research question 1, the results have shown that the internal factors that affect students' arousals were; interest/curiosity/attention, wanting to learn new things, feeling responsible, wanting to be successful, and boredom. As stated in the literature review, according to Pluck & Johnson (2011), curiosity is an

essential factor in arousal and intrinsic motivation, which leads to enhancing a student's learning. So, based on the data, it is safe to say that students' interest and curiosity in the online education process could have increased their learning motivations. According to Blotenberg & Schmidt-Atzert (2019) attention allowed students to persistently focus on a task and maintain effort over extended periods of time. This study found that the majority of the students stated that one of the substantial elements that contributed them to participate in online courses was their attention to the course's subject. In this manner it can be said that the online courses and materials that took students' attention made them focus more on the tasks and maintain their effort longer. Additionally this study found that most of the students felt responsible to join the courses and learn from them. Based on Sapan & Mede's (2022) research; if the students felt responsible for their learning then their motivation also increased. In this context, it is safe to say that most of the students' feeling of responsibility contributed to increased learning motivations. Also, the research has shown that; the external factors that affect students' arousals were; compulsory attendance requirements, homework/quizzes, announcements, creating interest/curiosity/attention, examples from real life, uploaded documents, passing the lessons, easy access to documents, recorded courses, flexibility, teachers' way of lecture. As mentioned in the literature, according to Eggen & Kauchak (1994), the role of teachers in creating arousal externally in students is very important. The more the teacher gives importance to students' arousals, the more the student's motivation for learning will increase. So, based on the data, it is safe to say that the teachers aroused students more with homework and exams, creating interest/curiosity/attention in the course by using content according to, making attendance compulsory, giving the lectures energetically despite the structurally boring nature of online education. According to Hofer et. al. (2021) teachers' use of digital technology on their courses could create valuable learning opportunities and motivate their students. Similarly to Hofer et. al. (2021), Yu (2022) found that online learning platforms could allow teachers to supervise students' learning progress and learning behaviors such as attendance, time span, discussion, interactions, question answers, and completion of assignment. In addition, the learning achievements could then be enhanced due to teachers' supervision. This study found that the students are motivated because of their teachers' uploaded their documents/courses to online system and way of lecture in the online education platform. In this context, it can be said that Covid-19 as a negative period, had created also positive outcomes because it made education move to digital and the teachers had contributed to students' learning motivations by using the digital environment effectively. In addition, it can be said that the teachers' interest, feedback, discussions, etc. course processing techniques had also contributed to students' motivation to learn online.

To answer research question 2, the results have shown that the internal factors that affect students' success beliefs were; determination, safety, the comfort of homes, and online formats of the exams. Also, this question resulted in some answers about ideas in failure. Although positive answers were received about the success beliefs in the pilot interviews conducted, it was found that some of the answers focused on failure at the end of the study. The majority of the participants felt alone and thought that this feeling would decrease their success beliefs. Besides, the anxiety about having technical problems during the courses made them feel insecure and decreased their success beliefs. According to Reinhold et.al's (2021) research, students with higher anxiety were less intrinsically motivated in the Covid-19 period. From this point, it can be said that most students' anxiety about being alone or technical problems during the online courses made them less intrinsically motivated. Additionally, Mubita (2021) stated that if the students felt safe and secure, they would more likely focus on their academic activities. In this context it can be said that most of the students felt safe in online education process it would lead them to focus more and gain learning motivation. As mentioned in the literature, according to Kong (2009), students have optimistic beliefs about their abilities that cause their self-confidence originally. Similar to the literature, participants described more positive internal factors which affect their learning motivations. Also, literature has indicated that students can hold the beliefs that ability can be improved with effort. Congruently, the participants indicated that they would believe more in themselves if they were determined to be successful. Additionally, Weiner's Attribution Theory (2005) and the theory's explanation of how attributions reflected individuals' beliefs about the causes of success and failure were mentioned in the literature of the study. In this context, it can be said that students attribute their belief that they will fail to feel lonely and their fear that they will have technical problems in the online education process. As a result, these attributions can affect the students' learning motivations. The research has also shown that the external factors affecting students' success beliefs include; the motivational speeches made by the teacher, appreciation, and encouragement, which tend to increase

the students' belief that they can succeed in the course. As mentioned in the literature, according to Kong (2009) if the teachers help students attribute their successes to ability and provide them more opportunities to experience success for the sake of setting an optimal belief of their learning ability, then this could enhance their learning motivations. Also, Huber and Helm (2020) indicated that teaching quality was essential during online education. Establishing or maintaining close contact with the students, including regular and timely feedback, was particularly important to help students learn and gain motivation (Hofer et. al. 2022). In this context, it can be said that during the online education process, the teachers' motivational speeches, feedback, encouragements, and appreciation positively impacted the students' beliefs about themselves and their learning motivations.

To answer research question 3, the research results indicated that the internal factors affecting students' goals were; the need to learn for the future, pass the courses, get high grades in online exams, and reinforce their knowledge. As mentioned in the literature, according to Akbaba (2006) if students' goals are very easy or very difficult, these goals negatively affect their level of motivation. Also, an effective learning goal should be specifically related to the subject to be learned. In this context, it can be said from the data; students need to learn for their future careers and reinforce their knowledge to create effective learning goals. Additionally, Guerrero-Roldan, et. al. (2021)'s data indicates that if the students felt insecure about passing the online courses, then their learning motivation decreases. This research results have shown that most students wanted to pass the courses and believed in themselves on this subject. In this context, it can be said that the goal of passing the courses contributed to the students' learning motivation. Also, the research results showed that the external factors affecting students' goals were; homework and studies, clues, being active during courses, communicative support, and care. Also, data showed that few but there were teachers lack of assistance/help in achieving students' goals. According to Wigfeld & Eccles (2000) if the teacher overwhelms the students during instruction, their negative evaluations of their capacity to handle the learning situation might result in lower motivation. In this case, it can be safely said that if the homework and assignment capacity is excessive, then the students' motivation can decline in online education process. Additionally, as stated before, teachers could assess the students' motivation levels and the level of realization of their goals by looking at their goals. Also, the teachers could help their students in creating effective goals. In this context, it is safe to say that the teachers helped their students achieve their goals and, in this way, benefited their learning motivations.

To answer research question 4, the research results indicated that the internal needs of students were; success, belongingness, reducing anxiety, and approval. Also, the research data showed that the external needs of the students were; communication, reducing anxiety and seeing understanding. Considering internal and external needs, some common needs have appeared in the research. The common needs determined internally and satisfied externally will be discussed here. As stated before, belongingness need, approval need, reducing anxiety need, autonomy need, and need for achievement are essential for students' learning motivations. Similarly, with the literature, these needs have also been revealed in the research results. According to Ryan & Deci's (2020) research data, if the students entered the course with satisfied autonomy needs, then they had more positive experiences in the course, as indexed by higher perceived competence and interest/enjoyment and by lower anxiety. In this case, it can be said that students have positive experiences in courses and gain learning motivation; the teachers can increase the sense of autonomy and satisfy the need for autonomy by shifting the responsibility to students and enabling them to make decisions themselves. Also, Reinhold et al.'s (2021) data showed that students with higher anxiety were less motivated. Additionally, Kuhfeld et. al.'s (2020) research has shown that if the students worry and have anxiety about health issues related to the virus and have psychological stresses, then it would affect their academic growth and learning motivation. In this context, it can be said that the teachers who help ease the anxiety of their students would help their learning motivation. Additionally, as Goodenow (1993) indicated that if a student felt included by teachers in the classroom setting, this would positively affect his learning motivation. The research showed that; due to the structure of online education systems-which can't provide face-to-face communication and interaction-students have felt lonely and felt like they didn't belong to the class. Also, they did not express that either teachers or friends did something to meet their belongingness needs. Additionally, similarly to Panisora et al., (2015) the approval needs of the students emerged in the research. According to the data, the students felt their need for approval was met by their teachers; thus, their learning and academic motivation could be influenced positively. As well to belongingness and approval needs, reducing anxiety needs was revealed in

the research results, similarly to the literature. The students emphasized this need in the internal and external needs sections of the study, and they indicated that their teachers' efforts met the need for anxiety reduction. Because anxieties are sources of decreased student performances and learning motivations, in this context, it can be said that the teachers' helped their students' learning motivations by listening to them, showing empathy, and teaching them how to cope with their feelings in a global pandemic environment.

The findings should be interpreted within limitations. The fact that the research had to be limited to only one university and faculty-led to many different opinions that could not be reached. In addition, it is a fact that a theoretically oriented faculty such as the faculty of communication cannot represent the students of all faculties during the online education period.

The impact of the mandatory changes in the education system during the Covid-19 period was reflected in both students and teachers. The present study's findings suggest that personal factors on learning motivations have had their share from this period because almost all the answers contained the impact of the pandemic. For further research, it can be suggested that qualitative research can be done on the teachers' teaching motivations during the Covid-19 online education process to understand the other side of the mirror. Also, it can be suggested that quantitative research would represent more students than qualitative research and with that more. In addition, a different type of faculty students can be the new sample to understand if the course types affect the learning motivations in the Covid-19 environment.

The findings provide theoretical and practical implications for researchers and universities/teachers. Covid-19, which has affected the whole world, has also led to many changes in the education system. Students and teachers have had their share of this change and have tried to keep up with the changing situation. They had to adapt to the online education system suddenly, and it affected students' learning motivation. This study focused on internal and external motivation that affects learning motivation and personal factors like; arousal, beliefs, goals, and needs that have an important role in forming learning motivation during the Covid-19 pandemic in Türkiye. For the learning motivation to be formed with whole meaning, it must be realized both internally and externally, and they must be mutually supportive. Students can be motivated both internally and externally by many personal factors. Teachers and educational staff need to know that they are students' social support and the students' arousal, beliefs, goals, and needs are essential for their learning motivation. This study can guide universities and teachers to update and redesign their teaching plans according to the new norms faced by students and teachers during other crisis periods such as the Covid-19 pandemic. The teachers should motivate their students to improve their self-esteem and think creative and flexible about any problems they face when dealing with online learning platforms. They also have to consider that motivating their students with their course contents and maintaining their interest and curiosity contributes to their learning motivation. Teachers can offer coping strategies for their students to cope with pandemic anxiety and this will allow them to promote the psychological well-being of students and their motivation to learn. It is important that students are supported by their teachers in providing materials and resources to motivate them to continue working even when schools are closed. The contact established with the teacher through direct or indirect communication can positively affect students' perceived motivation and success. Also, it is important for university infrastructure employees to focus more on the interaction function of educational software, ease of use, and quality of the online learning platform to increase their motivation to learn.

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