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Motivation of Academic Success and its Relation to Smartphone Addiction and Stress Related to Academic Expectations in Turkish High School Students

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This article examines three subjects concerning teenagers. First, consider the psychological condition of motivation, which pushes individuals to pursue and achieve goals, and how it affects teenagers. Second, smartphone addiction may disrupt daily activities and have a detrimental impact on well-being. It further adds that using a smartphone might cause difficulties such as decreased concentration in class and bad effects on physical and mental health. The article also discusses the phenomena of stress associated with academic expectations, as well as how distress caused by discontent or awareness of approaching failure is a substantial source of stress for students and may lead to mental health problems. This paper emphasizes the importance of being aware of these issues of adolescents. We present six possible hypotheses and analyse our variables to determine them. First, we use correlation to see whether there is a significant relationship between these three variables. Secondly, we discovered a strong positive association between motivation for academic performance and stress over expectations (p=.002). We also discovered a positive and significant correlation between stress regarding expectations and smartphone addiction (p=.026). Thirdly, we run an independent t-test to see whether there are any gender differences in our variables. Fourthly, we revealed a gender difference in the level of stress about expectations (p=.005). Additionally, we discovered a significant connection between our variables and demographic characteristics. We established a strong correlation between academic motivation and having a private space: Adolescents with rooms for themselves ranked significantly higher in motivation than those without private rooms (p=.015). Furthermore, we discover a difference in smartphone addiction between students whose parents are married and those whose parents are divorced (p=.016). Moreover, we discovered a significant effect of siblings on stress levels (p=.036). Furthermore, we discover a significant difference between grades in motivation for academic performance (p=.042) and stress linked to expectations (p=.048). We also found that age had a substantial influence on motivation for academic performance (p=.010) and stress related to expectations (p=.005). Overall, in this study, we looked at some of the impacts on students' psychology, the significance of family attitudes in the student's life, a variety of factors that influence the student's academic life, and a few of the issues and consequences they face today.

Keywords: *Adolescents, motivation, stress, academic success, smartphone addiction.*

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Introduction

The subjects of studies concerning students change with the evolution of generations. In other words, nowadays, teenagers are so different than they were 30 years before. Interest and attention among adolescents have also changed since the internet become a part of their lives. In particular, they have been influenced by the addition to their life of cell phones and tablets. As such, their education and how they are spending their time have also changed. When it comes to the usage of smartphone, adolescents may use it in an exaggerated and unhealthy manner. As a result, now we have a phenomenon called smartphone addiction. Smartphone addiction is basically an exaggerated usage of smartphones. However, its effects are not simple as its definition. Basically, this kind of addiction is not easier than other types of addictions. It can be so dangerous, based on the level of dependency, that it could affect other areas of social life. Moreover, it is possible to assume the education is the most affected part of adolescents' lives. It is difficult for adolescents to concentrate on their school life and education, given that internet and social media are the main concerns of these age groups. This is where we are seeing a reduction in motivation levels for academic success. Perhaps the addition of smartphone is not the only reason for the drop in motivation for academic success. Moreover, there are still many factors for social life that we need to discuss such as stress. Stress, most of the time, is related to the expectations of the social relations. Parents and teachers are the most common relations that their expectations of success in academic life may lead to higher level of stress in adolescents. In summary, this paper examines the definitions of motivation of academic success, smartphone addiction and stress related to academic expectations for adolescents.

Motivation of Academic Success in Adolescents

To begin with, motivation is a key psychological condition or force that pushes and energizes a person to act, develop and fulfil goals, or engage in certain actions. Motivation is influenced by four factors: context "the environment and external stimuli," temper "the internal condition of an organism," objective "the behaviour's aim, purpose, and preference", and instruments "the tools used to attain the goal". It might be extrinsic "influenced by incentives or punishments" or intrinsic "driven by personal preferences or values" (Amari et al., 2011). The idea of intrinsic vs. extrinsic motivation is certainly common in social-cognitive motivation frameworks (Linnenbrink et al., 2002). Pintrich and Schunk (2002) defined intrinsic motivation as the desire to execute an action simply for the purpose of executing it. Extrinsic motivation, on the other hand, is the desire to do something in order to achieve a goal. Furthermore, the shift in motivational theories from conventional achievement motivation models to social cognitive motivation models made the integration of motivational and cognitive aspects easier (Pintrich & Schunk, 2002). Additionally, social cognitive models stress that there are several ways in which students might be motivated, and that understanding the reasons and mechanisms underlying students' desire for academic achievement is critical (Linnenbrink et al., 2002). For many years educational

specialists and psychologists studied the impact of motivation on student learning and accomplishment (Graham & Weiner, 1996). Furthermore, through an educational understanding, motivation has a multidimensional structure that is linked to academic motivation and learning (Reev, 2006). To summarize, motivation is an essential component of effective teaching and learning. As a result, educational research has concentrated substantially on the motivation of teens in learning contexts during the last 20 years (Nicholls et al., 1985). Understanding teenage motivation is critical for ensuring that students fulfil their academic potential. Examining the motives underlying students' success behaviours through the goals they pursue in educational settings has been demonstrated to be a useful technique of understanding student motivation (Mansfield, 2010). Scholarly interest in understanding motivation and learning about motivation has increased (Turner & Patrick, 2008). External incentives, inspirations, sentiments, needs, and desires may all have an impact on motivation. Furthermore, the relationships between the individual, situation, and ultimate accomplishment are mediated by personal, social, or ethnic characteristics rather than by the contextual features of the classroom environment that shape motivation and achievement, or by the individuals' active management of motivation, thinking, and behavior (Linnenbrink et al., 2002). Overall, a person's motivation determines how willing and ready they are to pursue objectives, overcome difficulties, and succeed in many areas of life. As a consequence, motivation explains the origins of people's activities and explains why they behave the way they do. Motivated actions, on the other hand, are lively, goal-oriented, and persistent (Omidiyan, 2006). Numerous studies have also shown that self-efficacy, one of the most potent motivators for student accomplishment is conviction in one's capacity to complete a task or activity. Self-efficacy is described as people's assessments of their own ability to achieve in a given situation, task, or area (Bandura, 1997). Depending on their past accomplishments and failures, a student may have a high level of self-efficacy while solving algebraic issues but a low one when dealing with geometry difficulties or challenges in other academic areas (Linnenbrink et al., 2002). These self-efficacy beliefs differ from views regarding one's general self-concept or self-esteem (Linnenbrink et al., 2002). Finally, students who feel they can complete the assignment and have greater levels of positive self-efficacy beliefs are more willing to work more, persevere, and eventually achieve at a higher level (Linnenbrink et al., 2002). In conclusion, adolescents require motivation to reach their full potential, to behave effectively, to concentrate, to develop critical thinking and creativity, and to create resilience and self-assurance.

Smartphone Addiction in Adolescents

The mobile phone is one of the most common technological tools in the market. It has gone from almost non-existent to the most popular (and desired) item among youths in less than ten years (Choliz, 2012). Furthermore, the mobile phone appeals to youngsters and encourages its use owing to a range of functions and attributes. Adolescents' use and ownership of mobile phones, in reality, serves a range of functions (Choliz, 2012), such as maintaining individual liberty and providing social

life status and identity. In other words, cell phones are getting increasingly popular. They are particularly popular among young people, who use them to increase the frequency of their social connections and to widen their social networking choices (Matsuda, 2000). A cell phone, on the other hand, can bring a slew of problems. Students' ability to focus on class, for example, is reduced when they use their phones in class (Selwyn, 2003). In India, Orissa government made mobile phone use on college campuses illegal on September 16, 2008. "Cell phones have been discovered to be an unsettling feature on college campuses. As a result, we have made it illegal on campus," Minister of Higher Education Samir Dey added. Furthermore, again in India, the Gujarati government prohibited mobile phone use in schools, citing worries that it hampered pupils' capacity to learn. Smartphone use has several detrimental effects on the physical and emotional health of youth such as musculoskeletal problems, fatigue, a hot sensation, headaches, and earaches (Goswami et al., 2016). Furthermore, whether or not excessive cell phone usage promotes cancers is still being debated. Additionally, adolescents who use their phones excessively are more likely to feel stress, restlessness, and sleep disruption. Soderqvist et al. (2008) looked precisely at the association between cell phone use and health problems in 2000 Swedish youths. They discovered that mobile phone users regularly complained about health difficulties such as exhaustion, stress, headaches, anxiety, trouble focusing, and sleep disruption. According to Ozturan et al. (2002), the ear is the first organ to be impacted by cell phones, with increased energy deposition and variable effects on hearing. Loughran et al. (2005) discovered that pre-bedtime exposure to electromagnetic fields enhanced spectral power while decreasing REM. Furthermore, sperm deterioration was observed by Agrawal et al. (2008). However, in order to diagnose mobile phone addiction clinically, it must be compared to existing addiction criteria. The American Psychiatric Association has established objective and quantitative criteria for diagnosing drug dependency in The Diagnostic and Statistical Manual of Mental Disorders (5th ed.; DSM–5; American Psychiatric Association, 2013). In other words, Bianchi and Phillips (2005), excessive mobile phone use can be viewed as a compulsive gambling-like impulse control problem. Addiction to mobile phones is frequently diagnosed using seven dependency criteria. Some of these include tolerance, withdrawal, unintentional use, cutting back, amount of time spent, substituting other activities, and persistent use. The term "addiction" was used in Roman law to characterize a dependence relationship and a constraint on human freedom, particularly subjugation to an owner or lord (Choliz, 2012). When they are unable to use their phones, some youths display the core symptoms of dependence disorders, such as problems with their parents, difficulty limiting their use, disruption of other activities, and mental discomfort. People reported extreme worry and annoyance when their mobile phones were unavailable for an extended length of time, according to the findings of a few studies (Park, 2005). These behaviours may be suggestive of abuse, according to The Diagnostic and Statistical Manual of Mental Disorders (5th ed.; DSM–5; American Psychiatric Association, 2013) Technology addictions should not be dismissed, even if the human consequences are not as severe as those associated with drug misuse. To summarize, several research have found that teen mobile phone addiction has detrimental consequences (Subba et al. 2013). According to research, the most

prevalent psychological indicators of smartphone addiction include difficulties focusing and low academic achievement.

Stress Related to Academic Expectations

A specific level of stress is required for success, and it may be divided into four categories: work-related, marital, familial, and academic stress. This study focuses on academic stress, which is defined as mental suffering caused by approaching discontent or awareness of impending failure. Stress may be caused by both external and internal factors, such as harsh parental demands and attitudes. These stresses must be controlled for general well-being. To put it another way, because teens spend so much time in school, academic concerns are among the most often stated sources of stress for them (Genshaft, Broyles, 1991). Academic pressure from parents, teachers, and other individuals can also be a substantial source of stress for many teenagers (Tan et al., 2011). Dramatic outbursts in the form of stress, dissatisfaction, or even suicide can occasionally result from parents having unrealistic expectations for their kids (Hazari, 2013). Moreover, a person's belief that they are unable to handle a perceived past, present, or future incident is said to be the source of stress (Lazarus & Folkman, 1984). Students are expected to handle heavier workloads, which causes self-doubt and failure (Jones, 1993). According to various large-scale surveys and interviews, adolescents face an extremely stressful school environment (Ho and Yip, 2003). The pressure to perform well in school and attain a job that pays well reflects the stress of academic performance. Academic performance, according to Wong et al. (2005), was perceived as a filial obligation and a source of pride for the family, but school failure was associated with sentiments of familial guilt. As a result, the primary sources of stress for Hong Kong Chinese teenagers were their desire to flourish personally and satisfy their parents. Asian students in Singapore, for example, appear to be more stressed as a result of the cultural emphasis on meeting family obligations and maintaining one's dignity, as they place pressure on themselves to perform well in school and work hard to meet the expectations of important people like parents and teachers. Furthermore, "stress is a lifestyle crisis" that can be caused by any internal or external factor that makes it difficult for an individual to adapt to their surroundings and increases their effort to maintain a state of equilibrium with themselves as well as the outside world (Humphrey, Bowden, 2000). Stress, on the other hand, is viewed as a loss of inner tranquillity in eastern philosophies (Seaward, 2008). However, empirical data reveals that excessive academic pressure is a significant cause of stress for students and may exacerbate mental health difficulties (Shek, 1995). More specifically, research on Asian and Asian-American children has revealed that, while aiming for academic achievement has great effects, it also has obvious drawbacks, such as excessive stress and mental health issues (Shek 1995). Individuals, on the other hand, are occasionally prepared to forego their current satisfaction in order to attain other culturally meaningful goals (Diener et al., 2003).

To sum up, this study addresses three issues concerning teenagers' motivation, high academic expectations, and the influence of mobile phone addiction to their

motivation and well-being. Motivation is an emotional condition that pushes people to seek and achieve their goals. It can be extrinsic or intrinsic. Understanding students' motivation is critical in education for effective teaching and learning. Self-efficacy, which relates to one's conviction in one's capacity to succeed in specific tasks, is a powerful motivator for student achievement. Teenagers must be motivated in order to attain their full potential, develop critical thinking, creativity, resilience, and self-confidence. The report also covers the extensive use of smartphones among young people, as well as the possible harmful implications of excessive smartphone use. While mobile phones have grown in popularity among youngsters owing to their numerous functionalities, their usage can result in issues such as decreased concentration in class and detrimental effects on physical and emotional health. We also address the stress linked with academic expectations, particularly among adolescents. Stress may be caused by both external and internal factors, such as strong parental demands and attitudes. These demands must be controlled if general well-being is to be maintained. To put it another way, because teens spend so much time at school, academic concerns are frequently highlighted as sources of stress for them. Academic pressure from parents, teachers, and others may be a major source of stress for many teenagers. Unreasonable parental expectations for their children can occasionally lead to severe acts of tension, and dissatisfaction.

As a result, we propose:

H1: Students with smartphone addiction have low motivation of academic success.
H2: Students with high levels of stress regarding academic expectations have low motivation of academic success.
H3: Smartphone addicted students have high stress levels regarding academic expectations.
H4: Smartphone addiction is different in men and women.
H5: The motivation of academic success is different in men and women.
H6: The level of stress regarding academic expectations is different in men and women.
These are our major hypothesis, however we tested some others to provide a more comprehensive overview, as can be seen in the Results section below.

Methods

Participants and Procedure

For this study, eighty-four high school students were selected from a private educational institution in Istanbul, Turkey. 60.7% of the participants in this research were female, and 39.3% were male students aged 14 to 19. The participants had an average age of 16.35 years and a standard deviation of 1.517 years. Furthermore, 25% of the students were in the eleventh grade, while 29.8% were in the twelfth. 14.3% of the students were in their gap year, with 16.7% in ninth grade and 14.3% in tenth grade. In summary, the student's average grade was 11.11 over 13 with a standard deviation of 1.299. Table 1 summarizes the demographic information of all participants, detailing their gender, age, family background, and parental status. All participants in our study are high school students, including those currently on a gap year who are still preparing for college.To collect data, participants were asked to complete

online surveys on stress linked to academic expectations, mobile phone addiction, and the motivation for academic accomplishment. These questions were administered to them without explaining the real purpose of the study. The research participants gave their approval and completed the questions in around 10 minutes.

Table 1. *Demographics Variables*

Variable	n (84)	Frequency	%
Gender	Female	51	60.7
	Male	33	39.3
Age	14	13	15.5
	15	9	10.7
	16	26	31.0
	17	18	21.4
	18	8	9.5
	19	10	11.9
Grade	9	14	16.7
	10	12	14.3
	11	21	25.0
	12	25	29.7
	13	12	14.3
Private Room	Yes	68	81
	No	16	19
Parents	Married	73	86.9
	Divorced	11	13.1
Siblings	0	8	9.5
	1	31	36.9
	2	18	21.4
	3	12	14.3
	4	6	7.1
	5	2	2.4
	6	7	8.3
Father Employment Status	Working	68	81.0
	Not Working	4	4.8
	Retired	12	14.3
Mother Employment Status	Working	29	34.5
	Not Working	46	54.8
	Retired	9	10.7

Measures

One of the purposes of this study was to alter the expectancy-value theory-based motivation scale for use in high school to measure the motivation for academic accomplishment. To attain this purpose, we used the motivating scale created by Saritepeci (2016) (see appendix 1). It was based on the work of Eccles et al. (1993) and Wigfield and Eccles (2000), who investigated expectancy-value theories. Rather than focusing on a specific class, the test was redesigned to measure overall motivation across all classes. Additionally, the questions were presented in Turkish. This scale is divided into two subdimensions and contains nine components, both the value and expected sub-dimensions. The scale has a minimum potential score of 8 and a maximum value of 40. The scale can produce a score ranging from 8 to 40. The

rating ranged from 1 to 5 (1 strongly disagreed, 5 strongly agreed). The Cronbach Alpha internal consistency coefficient for the whole scale was 0.74.

We used the Turkish cultural adaptation of the smartphone addiction scale—the short version for adolescents—to assess the level of teenage smartphone addiction (see appendix 2). The Smartphone Addiction Scale-Short Version (SMAS-SV) contains only one subdimension. Self-evaluation, as one type of assessment tool, was used to measure teenagers' "smartphone addiction". The measure's original version consisted of ten components on a 1-6 scale (1: strongly disagree, 6: strongly agree). This scale allows for the acquisition of points ranging from 10 to 60. The Cronbach Alpha coefficient was used to examine the scale's reliability, and it was found to be .90.

We used the Academic Expectations Stress Inventory (AESI) to assess stress associated with expectations (see appendix 3). The AESI is a Likert-type measure developed by Ang and Huan (2006) for Asian middle and high school students. AESI classifications range from one (never) to five (always). The nine-item measure has two dimensions: self-expectations (4 items) and family/teacher expectations (5 items). Higher scores indicate an increase in academic-related stress. We determined that the Cronbach's alpha internal consistency coefficient, which we utilized to assess AESI consistency, was .85.

Results

We started with testing our first hypothesis: it was that adolescents who are addicted to smartphones are not much motivated for success academically. We investigated possible relationship between smartphone addiction and being motivated to achieve success academically. The Pearson correlation analysis findings revealed no significant link between the two variables r (82) =.127, P=.251. The hypothesis was not supported. According to our second hypothesis, adolescents who are very stressed about academic expectations are less likely to be motivated to achieve academically. We find a significant relationship between these two variables after testing our second hypothesis and examining whether stress associated with high expectations and motivation for academic achievement are connected. The Pearson correlation analysis found a moderately significant positive relationship between academic achievement motivation and stress related to expectations r (82) =.328, p=.002, erroneous hypothesis. According to our third hypothesis, students who were addicted to their smartphones face high level of stress regarding expectations. According to the data, stress regarding to academic expectations and smartphone addiction have a positive and significant relationship r (82) =.243, p=.026, but the correlation was low. Our fourth hypothesis examines if there is any difference between genders among the three scales that we are measuring (stress related to expectation, smartphone addiction, and motivation for academic success). We began by testing if there was any difference in the motivation for success between male and females. The mean score for male students was 34.9, SD=5.81, while for female students it was 36.8, SD=4.43. The t-test revealed no significant difference between the two groups, t (82) =-1.73, p=.87. Next, we looked at how students' smartphone addiction is

impacted by their gender. The mean score for male students was M=27.1, SD=8.61, whereas the mean score for female students was M=27.9, SD=9.85. T test findings, t (82) = -.400, p=.108, showed that there was no significant gender difference in smartphone addiction. For testing our last hypothesis, we also looked to see if there was a difference between the two genders in terms of expectation-related stress. Male students had a mean score of M=32.9, SD=7.45, while female students had a mean score of M=37.1, SD=5.80. The t-test revealed a significant gender difference in the level of stress related to expectations t (82) = -2.89, p=.005.

We also investigated how students with private rooms differed from those without private rooms in terms of expectations-related stress, smartphone addiction, and motivation for achievement. First, the mean academic success motivation score was M=36.7, SD=5.07 for those who had a private room and M=33.3, SD=4.20 for those who did not. The t-test results showed a significant difference t (82) =2.47, p=.015 in the motivation for academic accomplishment between these two groups. Next, we examined for any differences in phone addiction between students who had private rooms and those who did not. The mean score for those with a private room was M=27.2, SD=9.2, and the average score for those without one was M=29.3, SD= 10.01. According to the results, there is no difference in students' phone addiction between those who have private rooms and those who do not t (82) = -.798, p =.427. In examining the stress that students experience in associated with expectations, we also looked at whether having a private room makes a significant difference or not. The average score for those with a private room was M=35.4, SD=6.9, whereas the average for those without one was M= 35.6, SD= 5.9. The findings showed that students' stress levels regarding expectations are the same whether they have a room or not t (882) = -.107, p=.915.

We also tested if there were any distinct differences in expectations-related stress, smartphone addiction, and academic success motivation between adolescents whose parents were married and those whose parents had divorced. First, we looked at how the motivation for academic accomplishment changes between teenagers whose parents are married and those who are divorced. Individuals with married parents had a mean score of 36.1, SD=4.9, whereas those with divorced parents had a mean score of 35.9, SD=5.9. This data suggests that there is no significant difference in the motivation for academic accomplishment between students with married and divorced parents t (82) =.146, p=884. Second, we looked at the differences in smartphone addiction between students whose parents were married and those whose parents were divorced. Mean score for students with married parents was M=26.6, SD=8.7, whereas mean score for those with divorced parents was M=33.9, SD=10.9. The results show that there is a significant difference in smartphone addiction between students whose parents are married and those whose parents are divorced t (82) =-2.461, p=.016. Finally, we looked at any difference in expectations-related stress between adolescents whose parents are married and those whose parents are divorced. The mean score for those with married parents was M=35.4, SD=6.7, whereas the mean score for those with divorced parents was M=36.2, SD=6.9. The t-test revealed no significant differences in stress related to expectations between students whose parents are married and those whose parents are divorced t (82) =-.391, p=.697.

We also tested whether mother's job status influences their children's motivation to succeed academically. The findings of a one-way ANOVA revealed that the mother's work level had no noticeable influence on the students' motivation to succeed F (2,81) =.262, p=.770. Second, we examined the possible influence of the mother's employment on her children's stress levels regarding expectations. The results show that there is no significant relationship between students' stress levels and their mother's job status F (2,81) =1.371, p=.260. We also investigated the possible impact of a mother's employment position on a student's cell phone addiction. However, the data indicated that there is no significant difference F (2,81) =0.824, p=442.

We also conduct a one-way ANOVA to see if the father's employment status influences the stress regarding expectations in adolescents. According to our data, the fathers' job status had no significant impact on students' expectations-related stress levels F (2,81) =1.19, p=.309. We then investigated whether the father's work position had any significant impact on the children's motivation for academic accomplishment. The findings show that teenagers' motivation for academic success is not significantly influenced by their father's job status F (2,81) =.342, p=.712. Next, we looked at whether the father's work status had any impact on the students' smartphone addiction. The study found no significant relationship between a father's employment level and a child's smartphone addiction F (2,81) =.244, p=.784.

Next, we look at whether the number of siblings has an impact on children's motivation of being academically successful. The data show that the number of siblings had no significant effect on academic success motivation F (6,77) =.797, p=.575. Furthermore, we examine if the number of siblings affects smartphone addiction. The results show that there is no significant association between a student's smartphone addiction and the number of siblings they have F (6,77) =.640, p=.698. We also tested how the number of siblings affects children's stress levels in response to expectations. The number of siblings has a significant impact on stress regarding expectations, as shown by the one-way ANOVA result F (6,77) =2.387, p=.036. In addition, because our data is not normally distributed, we run the Tamhane post hoc test to see which of the number of siblings had a significant influence on groups' levels of stress linked to expectations. Students with one sibling outperformed those with four siblings significantly according to the Tamhane post hoc test (p=.024). Furthermore, the students with two siblings scored higher than those with four siblings (p=.019). Furthermore, children with six siblings outscored those with four siblings according to post hoc test score (p=.008).

We also use ANOVA to examine if there is a significant difference in smartphone addiction across grades. The data indicate that grades had no significant influence on smartphone addiction F (4,79) =.513, p=.726. However, we checked if there is an influence or difference between grades in terms of motivation for academic performance. The one-way ANOVA test demonstrated a significant difference across grades in terms of motivation for academic success, F (4,79) =2.610, p=.042. Furthermore, because our data is normally distributed, we run the LSD post hoc test to determine which grade has a higher level of motivation. More, 12th grade students scored significantly higher than 11th grade students (p=.024). Furthermore, 12th grade students performed significantly better than 11th grade students (p=.024). We next run one-way ANOVA to see if there were any changes in stress levels between

grades. The results demonstrate a significant difference in stress levels between grades F (4,79) =2.509, p=.048. Furthermore, we used the LSD post hoc test because our data was normally distributed, and the findings demonstrate that the 12th grade scored significantly higher than the 10th (p=.004), and 11th (p=.043) grades.

Finally, we run one-way ANOVA to examine if age influences motivation for academic success, smartphone addiction, and stress regarding expectations. First, the data reveal that there is no significant influence of age on smartphone addiction F (5,78) =.839, p=.526. However, we discovered a significant impact of age on motivation for academic performance F (5,78) =3.270, p=.010. We used the LSD post hoc test to determine age variations in levels of motivation for academic performance. The results of LSD post hoc test showed that the age of eighteen scored significantly higher than the ages of fourteen (.003), sixteen (.005), and nineteen (.003). Finally, we investigated whether age influences stress regarding expectations in high school students. The findings of one-way ANOVA demonstrated that age had a significant impact on stress related to expectations F (5,78) =3.270, P=.010. We also used the LSD post hoc test to identify which ages had a significant influence on high school students' levels of stress related to expectations. The findings of the LSD post hoc test showed that seventeen scored significantly higher than fifteen (.048), and sixteen (.002). Furthermore, the age of eighteen was significantly greater than fourteen (.029), fifteen (.012), sixteen (.001), and nineteen (.013).

Finally, to see the factor analysis, one can look at table-2, table-3, and table-4.

Table 2. *Factor Analysis of the Motivation of Academic Success Scale*

The Motivation of Academic Success Scale	**Factor Load**
Factor 1: Caring about Lessons and Achievement Dimension (Eigenvalue=3.15; variance %39.43)	
Being optimistic about academic success	0.76
Being interested in classes	0.83
Finding the classes useful	0.77
Being interested in being productive in the classes	0.82
Attaching importance to being successful	0.76
Factor 2: Believing in Oneself and Other Factors for Success (Eigenvalue=1.78; variance %22.2)	
Preferring favourite courses to disliked ones	0.82
Believing that being interested in lessons brings success	0.80
The belief of being among the best students in the class	0.64

Table 3. *Factor Analysis of The Smartphone Addiction Scale*

The Smartphone Addiction Scale	**Factor Load**
Factor 1: Thinking of The Smartphone as an Inseparable Part of Life (Eigenvalue=4.70; variance %52.27)	
Having the belief that one cannot live without a smartphone	0.86
Experiencing attention deficit in the absence of a smartphone	0.84
Thinking about the smartphone even when it's not around	0.83
I could never live without a smartphone	0.52
Not being able to stop checking social media	0.54
Other people complain that I use the smartphone too much	0.73
Factor 2: Considering that The Smartphone Causes Bad Experiences (Eigenvalue=1.14; variance %12.67)	
Blame the smartphone for taking too much time	0.86
Experiencing distraction during the classes due to smartphone	0.86
Feeling pain in the head and neck because of the smartphone	0.72

Table 4. *Factor Analysis of the Stress Regarding Expectations Scale*

The Stress Regarding Expectations Scale	**Factor Load**
Factor 1: Family/Teachers Expectations (Eigenvalue=3.78; variance %47.30)	
Blaming myself for disappointing my family when I fail to meet their expectations	0.84
When I fail, I believe I disappoint my family	0.82
When I fail, I believe I disappoint my teachers	0.79
I feel nervous that my family will be disappointed because of my low grades	0.79
I feel bad when I fail to meet my teacher's expectations	0.74
Factor 2: Self Expectations (Eigenvalue=1.48; variance %18.55)	
I feel tense when I cannot live by my own standards	0.89
I think I am not good enough when I do not fulfil my expectations	0.82
I feel nervous when I cannot do what I can do in the exam	0.53

Discussion

We began our data analysis with correlations to identify relationships between our variables. Further, we discovered a significant relationship between motivation for academic performance and stress regarding expectations. Students who appear to be motivated for academic achievement are still stressed about their own and others' expectations. When we examine the data of other research, such as Calaguas (2011), we can see that there is a definite association between these two factors in more than one study (Eccles & Wigfield, 2002; Gonzalez & McMahon, 2019; Gaspard et

al., 2018; Miller & Vela, 2019; Pintrich & Schunk, 2002). Furthermore, we found a significant relationship between stress about expectations and smartphone addiction in teenagers. In fact, the relationship between stress from expectations and smartphone addiction in teenagers has also been explored in several studies earlier (Leung, 2017; Liu & Ma, 2020; Andreassen et al., 2017; Bennett & Tsetsi, 2019; Twenge & Campbell, 2018). As a conclusion, we suppose that excessive expectations are one of the factors that cause stress in teenagers. Furthermore, because smartphone addiction is particularly common among teens, it may be an approach to escaping from the stress. Also, smartphone addiction may be a stress trigger because it results in a significant waste of time as there are some studies that showed how smartphone addiction can trigger stress due to significant time wastage (Kelley et al., 2019; Kuss & Griffiths, 2017; Ravindran & Ross, 2021). However, additionally, earlier studies (e.g., Shen et al., 2021; Iqbal et al., 2023) have also reached similar results and shown a significant relationship between stress and smartphone addiction in general. Next, we found a significant difference between genders in the level of stress about expectations. Females scored higher than males in terms of expectation-related stress. Certainly, this does not imply that females confront significantly higher expectations from themselves or the environment. However, it is crucial to consider how to deal with this stress and how seriously these expectations are taken. Furthermore, Longo (2005) provided support for our findings through his research on gender differences in stress. Our findings also indicated that having a private room has a significant impact on academic motivation. Having a private workspace appears to be helpful for students' motivation. We assume it improves focus, organization, and productivity. Other studies also found that there is a positive impact of having a private room on academic motivation (Becker & Park, 2018; Korpelainen et al., 2019; Miller, 2020; Ting & Tzeng, 2017; Weisz & McCabe, 2021). We also saw significant differences between students from families that divorced and those with married parents. In fact, we also revealed a relationship between smartphone addiction and divorced parents. Since it was shown earlier in multiple research that smartphone use can consume significant time and serve as an escape from feelings of emptiness and stress in home situations (Andreassen et al., 2016; Baker & Oswald, 2010; Elhai et al., 2017; Kuss & Griffiths, 2012). In contrast, we find that siblings have significant impact on stress levels related to expectations. According to our findings, having more siblings reduces stress in contrast to expectations. We also came across other studies showing how having siblings can provide emotional support that helps reduce stress related to expectations (Lindsey & Caldera, 2005; McHale & Gamble, 2009). These findings may indicate that parental expectations are higher when they have fewer children and focus all of their energy, hope, and expectations on them. Furthermore, we found significant variations in grades in terms of academic motivation and stress about expectations. As predicted, the 12th grade had the highest levels of motivation, as well as stress. Additionally, we indicate that age has a significant impact on academic motivation and stress about expectations. Again, the age of eighteen scored much higher than all other ages in terms of motivation for academic performance and stress about expectations. According to the data, when the university test period approaches and students begin to confront all aspects of life and their own and others' expectations, stress levels rise.

Conclusion

The present paper's contributions are included in the discussion and results sections. Still, the results bring up a number of concerns. Furthermore, significant correlations between several components are found; nevertheless, the underlying reasons of the results as well as the mediating variables in these results remain uncertain. We appear to recommend a large amount of more study. However, this study, like many others, had limitations such as the sample size, the restricted scale variations, and the confounding factors that were not examined, as well as examining other environmental or individual consequences that may have led to these findings.

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Appendix 1. *Motivation for Academic Success Scale*

Alt Boyutlar	Madde No	Madde İfadeleri
Beklenti ve Değer Faktörü	m1	Bu dönem bu derste çok başarılı olmayı bekliyorum.
	m2	Bu derste yeni şeyler öğrenmeyi severek beklerim.
	m3	Okulda öğrenilen bazı şeyler, sınıf dışında bazı şeyleri daha iyi yapmamıza yardımcı olur. Bu derste öğrendiklerim sınıf dışında bazı şeyleri daha iyi yapmama yardımcı olmaktadır.
	m4	Bu derste etkinlik yapmaktan, çalışmaktan, çaba harcamaktan hoşlanırım.
	m5	Bu derste başarılı olmak benim için önemlidir.
	m6	Diğer derslerin çoğuna kıyasla, bu derste bir şeyler öğrenmek benim için çok daha yararlıdır.
	m8	Diğer derslerin çoğuna kıyasla, bu derste bir şeyler öğrenmek benim için çok daha önemlidir.
Başarıya Yönelik İnanç Faktörü	m9	Diğer almış olduğum ya da almakta olduğum derslerin çoğuyla karşılaştırdığımda, bu derste daha başarılı olduğuma inanıyorum.
	m10	Sınıfımdaki öğrencileri bu derste gerçekleştirilen faaliyetlerde en kötüden en iyiye doğru listelediğimde en iyiler arasında olduğuma inanıyorum.

Appendix 2. *Smartphone Addiction Scale*

AKILLI TELEFON BAĞIMLILIĞI ÖLÇEĞİ – KISA VERSİYONU (ATBÖ-KV)

	Maddeler	Kesinlikle Katılmıyorum	Katılmıyorum	Kısmen Katılmıyorum	Kısmen Katılıyorum	Katılıyorum	Kesinlikle Katılıyorum
1	Akıllı telefon kullanımından dolayı planladığım işleri yetiştiremem.						
2	Akıllı telefon kullanımından dolayı, sınıfta ödev yaparken veya ders dinlerken konsantre olmakta zorlanırım.						
3	Akıllı telefon kullanırken el bileklerimde veya ensemde ağrı hissederim.						
4	Akıllı telefon olmadan yapamam.						
5	Akıllı telefonum elimde olmadığında sabırsız ve huysuz hissederim.						
6	Kullanmasam bile akıllı telefonum hep aklımdadır.						
7	Günlük yaşantım çok etkilenmiş olsa bile akıllı telefonumu kullanmayı asla bırakmam.						
8	Twitter veya Facebook'taki diğer insanlar arasındaki konuşmaları kaçırmamak için sürekli olarak akıllı telefonumu kontrol ederim.						
9	Akıllı telefonumu düşündüğümden daha uzun süre kullanırım.						
10	Etrafımdaki insanlar akıllı telefonumu çok fazla kullandığımı söyler.						

Appendix 3. *Stress Related Expectations Scale*

	Faktör1		Faktör2				
	ÖK	YK	ÖK	YK	h^2	Ort.	Ss
Faktör 1:Aile/Öğretmen Beklentileri							
1. Ailemin benden beklediklerini gerçekleştiremediğimde kendimi suçlarım.	**.645**	.706	.134	.425	51.2	3.73	.98
2. Başarısız olduğumda öğretmenimi hayal kırıklığına uğrattığımı düşünürüm.	**.849**	.759	**-**.201	.181	60.8	2.94	1.25
3. Okulda başarısız olduğumda ailemi hayal kırıklığına uğrattığımı düşünürüm.	**.754**	.777	.051	.390	60.6	3.73	1.12
4. Düşük notlarım yüzünden ailem hayal kırıklığı yaşayacak diye gerginlik hissederim.	**.717**	.781	.142	.465	62.6	3.57	1.28
5. Öğretmenlerimin benden beklentilerini gerçekleştiremediğimde kendimi kötü hissederim.	**.694**	.724	.067	.379	52.8	3.32	1.26
Faktör 2: Kendine İlişkin Beklentiler							
6. Kendi standartlarıma göre yaşayamadığımda gerginlik hissederim.	.103	.313	**.466**	.512	27.1	3.53	1.25
7. Beklentilerimi gerçekleştiremediğimde yeterince iyi olmadığımı düşünürüm.	**-**.076	.307	**.852**	.818	67.3	3.90	1.03
8. Kendim için belirlediğim hedefleri gerçekleştiremediğimde genellikle uyuyamam ve endişelenirim.	.000	.340	**.755**	.755	57.0	3.20	1.17
9. Sınavda yapabileceklerimi yapamadığım zaman gerginlik yaşarım.	.040	.351	**.690**	.708	50.2	4.25	.87