

## Comparing the Academic Motivation of Conventional and Distance Education

### Students: A Study about a Turkish University

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#### Abstract



Distance and online education are becoming increasingly common in the current era. Along with many purely online and distance education universities, many conventional universities are also offering programs through distance education. Students studying in distance education programs have a different environment, culture, study habits, and other factors that may influence them and their motivation level. This study compares academic motivation levels between conventional and distance education students studying in a Turkish university program. Data were collected from 218 students through the Academic Motivation Scale. Independent T-test and Chi-square tests were used to analyze the data with the help of the SPSS program. The results show that the academic motivation level of the students in a conventional program is statistically significantly higher than those studying through a distance program. Moreover, while there were differences based on all three demographical variables (age, gender, and grade), statistically significant differences were found only based on age and grade. The study suggests that there is a need to add motivational materials and strategies for distance education students. This especially becomes important for those conventional education students who have been forced to learn through distance/ online education during Covid-19.

**Keywords:** Distance Education, Online Education, Conventional Education, Academic Motivation, Higher Education

#### Introduction

University education marks a time of change in a student's life. It typically takes place at a period when one encounters various changes in one's life, and seeks to understand them. These changes and shifts in emotional growth and social cues can influence in both positive and negative ways (Berge, 1995). Students face a new environment and freedom in universities. Often, they need to cope with the pressure of separation from family and old friends. This may cause a high level of stress which could adversely affect their academic performance (Hartley, 2011). Research points out that stress management of students is important at this level (Deckro et al., 2002). It is important to consider the protective factors which usually promote courage and determination, and mitigate stress level amongst the students so that they can go through these challenges to complete their studies.

Many protective factors may help the students in such situations. One of them, which is also the focus of attention in this study, is academic motivation. It is considered an important factor behind students' academic success (Hustinx et al., 2009).

ODL (online and distance learning) has been growing rapidly in size and influence especially at the higher education level (Goodman, Melkers, & Pallais, 2016; Noreen & Malik, 2020). Covid-19 has especially pushed the education systems across the world towards online and distance education. Although this trend is the same across the world, its speed and intensity are much higher in the countries from the North. Turkey, with its unique geographical position, often follows modern technological changes much faster than most of the other Asian countries. Although computers and the internet were already used in the education system in Turkey, systematic use of distance and online education was first employed in 1996. Since then, most universities have been using distance education techniques. The number of distance education programs has also been growing. Universities are either incorporating some aspects of ODL or offering programs purely online and distance mode. Often, these distance education programs have a completely different environment, culture, and teaching-learning strategies. Common motivating factors for students like teachers,

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school environment, fellow students, and co-curricular activities like sports and other festivals either do not exist at all or in a completely different way. As a result, the motivation level of online and distance education students is likely to be different than that of conventional education students.

### **Research Objective**

The main objective of the research is to compare the academic motivation level of the students in online and conventional education programs.

### **Research Hypothesis**

To achieve the above-mentioned research objective, one main hypothesis ( $H_1$ ) and three secondary hypotheses ( $H_2$ ,  $H_3$ , and  $H_4$ ) have been developed. These hypotheses are as under.

*H<sub>1</sub>: There is no statistically significant difference in the academic motivation level between distance and conventional education students.*

*H<sub>2</sub>: In academic motivation, there is no statistically significant difference based on gender between distance and conventional students.*

*H<sub>3</sub>: In academic motivation, there is no statistically significant difference based on age between distance and conventional students.*

*H<sub>4</sub>: In academic motivation, there is no statistically significant difference based on grade between distance and conventional students.*

### **Literature Review**

The literature review for this study has been divided into three main parts: motivation, distance and online education, and students' academic motivation in the distance and online education.

#### **Motivation**

Many studies have stated the importance of motivation as it helps towards achieving the established goals, sustainability, self-satisfaction, and overall performance (Geldard & Geldard, 2005; Hart, 2012; Bembenuddy & White, 2013). Academic motivation is the motivation for achievements in studies. Students' academic motivation has become one of the most important concepts in education (Turabik & Baskan, 2015). It has been reported to be an important construct in the academic performance and success of a student (Martin, 2005). A significant number of research articles have shown that academic motivation is linked to various outcomes including persistence, curiosity, learning, and performance (Pintrich & DeGroot, 1990; Martin, 2005); and fulfillment of research and academic goals (Busato et al., 2000; Ning & Downing, 2010; Areepattamannil et al., 2011). Motivation is also closely related to other important factors for students studying in universities such as analyzing arguments (Yang & Wu, 2012), achievement (Scales & Leffert, 1999), evaluation (Case, 2005), problem-solving (Willingham, 2007), lifelong learning (Dickinson, 1995), social integration (Noyens et al, 2019) and self-determination (Volk, 2020). All of these factors have a clear impact on a student's personal, academic and social growth and development.

Motivation can be intrinsic, extrinsic, or both (Stipek, 1996; Malik, Azmat & Bashir, 2020). Both intrinsic and extrinsic motivations are aim-oriented. Intrinsic motivation refers to motivation within an individual, which is rooted in the sheer joy or satisfaction of engaging in an activity, or personal fulfillment. Extrinsic motivation, on the other hand, is derived from external factors or influences such as rewards, promotions, and encouragement, etc. (Ryan & Deci, 2000; Essam & Al-Ammary, 2013). Skinner's (1976) behavioral theory focused primarily on extrinsic motivation such as rewards. Ryan and Deci (2000), on the other hand, indicated that intrinsic goals were significantly associated with psychological stability. Intrinsic motivation is related to better academic success (Kaufman et al., 2008; Ning & Downing, 2010), a better understanding of academic work satisfaction (Hanus & Fox, 2015), academic performance (Soenens & Vansteenkiste, 2005), and better quality learning (Grolnick & Ryan, 1987). Extrinsic motivation, in comparison, is said to be linked to a limited coping ability (Ryan & Deci, 2000).

The literature clearly shows that academic motivation plays an important role in a student's academic success and achievements. A motivated student is likely to face academic stress and challenges more successfully, and focus, and perform better.

#### **Distance and Online Education**

The advances in IT (information technology) have created an array of opportunities for today's learners, especially in higher education institutions. Moore and Kearsley (1996) reviewed distance education research and found that the research about distance education went back to more than 50 years. Ehrmann (1999) said that the first transformation of higher education began when learners and

scholars started to focus more on reading and writing, and less on oral communication. He added that it brought significant changes to the learning process. In 1989, Kaye predicted that online education would eventually emerge as a new educational paradigm, gaining momentum alongside conventional education. He also suggested that eventually, it may even change the nature of education (Kaye, 1989). This prediction has almost come to fruition in 2020. Malik, Azmat, and Bashir (2020) said that online education especially at the higher education level was growing at a great pace. Noreen and Malik (2020) echoed the same, but also highlighted the challenges that online education was facing in Pakistan. The use of online learning is transforming the education sector to meet the current challenges and needs (McFadzean, 2001). The current crisis of Covid-19 has further forced universities across the world to go online (Bao, 2020).

Distance and online education can benefit students in multiple ways (Akkaya, 2018). It gives opportunities to especially those students who are employed, have family commitments, lack time, or do not have access to go to conventional universities for higher education. Guri-Rosenblit (2005) noted that the students in online mode needed to spend less time as compared to those in conventional mode. Additionally, they could also sit at home or cafe instead of going to the campus. An online student can have access to more classes, and have higher chances to study independently as compared to a conventional one. This kind of education also provides flexibility to the students in multiple ways (Tricker et al., 2001; Noreen & Malik, 2020).

Online and distance education not only provides opportunities to the students but also the universities. It may also improve enrolment and revenue as they could attract students from any part of the country and beyond. As a result, universities' feeding area is increased a great deal. Distance and online universities usually have a much higher number of enrolled students than conventional (face-to-face) ones which leads to much higher income and revenues for them. Milheim (2001) stated that other than becoming a more important part of the teaching-learning process, it had the potential for bringing higher financial returns.

#### **Students' Academic Motivation in Distance and Online Education**

Research on distance and online education is currently fairly limited in nature and scope. Most of the research on online and distance education is focused on tools, software, and platforms. Several studies have illustrated the need for research to be carried out in other areas of online education (West, 1999). Merisotis and Olsen (2000) support this view in these words "Although there is a wide range of literature on the trend of distance education, original work on distance learning is minimal" (p. 62). Sociological research about it has especially been quite limited (Heath, Knoblauch, & Luff, 2000; Malik, Azmat & Bashir, 2020). One of those areas which should be explored more is academic motivation amongst distance and online education students, especially comparing the motivation level of distance education students with that of conventional ones.

Despite distance and online education becoming increasingly common and popular with time, many students are still dropping out or not completing their courses (Phipps & Merisotis, 1999; Meister, 2002; Park & Choi, 2009). Research has shown that one of the more important factors for these drop-outs is students' lack of motivation (Wolcott & Burnham, 1991). Contrary to a conventional learning environment where lack of academic motivation may be detected by a teacher, trainer, or counselor; such issues are likely to remain largely undetected for distance and online learners. As a result, there may be no help for them in such cases. Some researchers, on the other hand, have suggested that students' motivation and satisfaction level does not vary a great deal between the students studying through conventional mode and those through distance and online mode (Allen et al., 2002). Researchers have also suggested some strategies such as using motivational techniques and lessons in the learning materials for online and distance learners (Visser et al. 1999). Still, the research about the academic motivation level of distance and online education is quite limited. There is a great need to carry out studies to compare the academic motivation level between students of distance and conventional programs. This study tries to contribute to this area by carrying out a comparative study between distance and conventional education students studying in a Turkish university program.

#### **Methodology**

##### **Research Method and Tool**

As the research intends to gather data from a large number of participants, the quantitative research method is used. Some of the previous studies comparing academic motivation of conventional and

distance/online students also used the same research method (Whiting, Liu, & Rovai, 2008; Stewart, Bachman, & Johnson, 2010).

This research uses Academic Motivation Scale. The scale was developed by Bozanoğlu in 2004 (Bozanoğlu, 2004). It consists of 20 items. All items are measured on a five-point Likert-type scale (1=strongly disagree to 5 = strongly agree). Five questions were added to inquire about the demographic and background information.

### **Research Population and Sample**

This research plans to compare academic motivation levels between Turkish university students studying through distance and conventional mode. To ensure that the other factors were similar, it was decided to gather data from the students from the same program in the same university. There are many universities in Turkey which offer both distance and conventional mode of education for its students in the same program. One of such programs from a Turkish university was selected for this research.

At the time of data collection, 476 students were studying in that program. Out of the 258 were studying through conventional mode and 219 through distance one. All of them were given the questionnaires. 218 students (117 conventional and 101 distance education ones) returned the questionnaires indicating a return rate of 45.8%. Comrey and Lee (1992) provided some guidelines for inferential statistics. According to them, a sample of 200 is adequate, and 300 is good. So as per their criteria, the current sample of 218 is adequate (Comrey & Lee, 1992).

### **Data Collection and Analysis Techniques**

Data were collected through questionnaires (consisting of the Academic Motivation Scale and background questions). Students were asked to return them in two to three days after filling them out. Those who had not returned the questionnaires were reminded once. As the participation was voluntary, they were not forced to return the research tool.

To compare the academic motivation level between conventional and distance education students, an independent t-test was used. The Chi-Square test was used for finding the relationship between gender, age, and grade with education type (conventional and distance). SPSS 21 was used for this purpose.

### **Data Analysis and Interpretation**

Findings and interpretations of the data are given below.

### **Personal and Background Information**

There were 218 participants in total. 134 of them (61.5%) were female and 84 (38.5%) male. Participants belonged to four age groups. 82 (37.6%) belonged to group 1 (18-20 years old), 87 (39.9%) to group 2 (21-23 years old), 24 (11%) to group 3 (24-26 years old), and 25 of them (11.5%) belonged to group 4 (over 27 years old).

35 students (16.1%) were from grade 1 (13 years of education), 159 (72.9%) from grade 2 (14 years of education), 19 (8.7%) from grade 3 (15 years of education), and 5 students (2.3%) belonged to grade 4 (16 years of education). While 53.7% of the participants (n=117) studied through a conventional system, 46.3% (n=101) were getting their education through distance education.

Students were then asked whether they had any information about that program before coming to the university, 47.7% of them (n=104) answered yes, and 20.2% (n=44) in no. Another 32.1% (n=70) stated that they had partial information about it. 46.3% of the participants (n=101) had come to know about the program through self-search, 10.1% (n=22) through teachers, 16.1% (n=35) through friends, and 9.6% (n=21) through relatives. 39 students (17.9%) cited other sources.

28% of the participants (n=61) stated that they had selected the program as they liked the department. 32.1% of them (n=70) cited high job opportunities, 18.3% (n=40) just wanted to graduate from a university, and 4.1% (n=9) simply wanted to go away from their environment. 17.4% of them (n=38) did not report any reason.

### **Comparing Academic Motivation Level between Distance and Conventional Education Students**

First and the main hypothesis was that there was no statistically significant difference in the academic motivation level between distance and conventional education students. Based on Cohen's argument (1988) that multivariate tests usually have lower power than univariate tests, it was decided to proceed with t-tests to test this hypothesis (Stanz, 2005). The results of the t-test are given in Table 1.

**Table 1: Comparing Motivation Level between Distance and Conventional Education Students**

Items of Academic Motivation Scale	t	Prob.	Education Type	N	Mean
Overall	-2.692	0.008	Distance	101	3.45
			Conventional	117	3.66
1. I look for opportunities for what I have learned to use outside the school.	-2.154	0.032	Distance	101	3.86
			Conventional	117	4.10
2. What I learn gives me the curiosity to learn more.	-2.212	0.028	Distance	101	3.98
			Conventional	117	4.22
3. As soon as the lesson starts, I focus on it.	-2.347	0.020	Distance	101	3.39
			Conventional	117	3.68
4. I am not interested in what's taught at school.	-0.154	0.878	Distance	101	2.39
			Conventional	117	2.41
5. I am glad to see so many things I have learned when I look back.	-1.010	0.314	Distance	101	4.18
			Conventional	117	4.29
6. I think I am more willing to learn than other students in my class	-0.603	0.547	Distance	101	3.29
			Conventional	117	3.37
7. When I have a chance to choose, I usually choose homework that will force me to work more.	-2.492	0.013	Distance	101	2.65
			Conventional	117	3.04
8. I like things that make me think more.	-4.379	0.000	Distance	101	3.14
			Conventional	117	3.75
9. The goals I set for myself are those that require a lot of work for a long time.	-3.032	0.003	Distance	101	3.57
			Conventional	117	3.98
10. I would rather work on things that are a little difficult	-2.397	0.017	Distance	101	3.05
			Conventional	117	3.39
11. Sometimes I focus so much on the lesson that I do not even notice that the bell has rung	0.302	0.763	Distance	101	2.76
			Conventional	117	2.72
12. I have always liked working on new and different topics.	-1.643	0.102	Distance	101	3.93
			Conventional	117	4.12
13. To learn more, I prepare more homework and projects than the teacher wants	-1.915	0.057	Distance	101	2.91
			Conventional	117	3.20
14. I am excited to learn something new.	-1.683	0.094	Distance	101	4.17
			Conventional	117	4.34
15. I like to help others with what I've learned.	-0.880	0.380	Distance	101	4.22
			Conventional	117	4.32
16. When I come across a difficult subject, I enjoy trying to understand it.	-2.002	0.047	Distance	101	3.57
			Conventional	117	3.84
17. I have been working hard to learn something, even though it will not be graded in return	-1.222	0.223	Distance	101	3.52
			Conventional	117	3.69
18. I do not realize how quickly time passes when I am learning something	0.129	0.897	Distance	101	3.69
			Conventional	117	3.68
19. If I cannot find enough information about any topic in my textbook/notes, I will look at other books right away.	-0.386	0.700	Distance	101	3.74
			Conventional	117	3.79
20. I feel like I am solving an enjoyable puzzle in exams.	-1.104	0.271	Distance	101	3.15
			Conventional	117	3.32

As it can be seen from Table 1, not only are the mean scores of the two samples different, they are statistically significantly different. Items numbered 1, 2, 3, 7, 8, 9, 10, and 16 have significant differences ( $p < 0.05$ ) while items numbered 4, 5, 6, 11, 12, 13, 14, 15, 17, 18, 19 and 20 do not have significant differences between the two groups.

While item number 14 (*I am excited to learn something new*) has the highest mean ( $m=4.34$ ) and 4 (*I am not interested in what's taught at school*) the lowest mean ( $m=2.41$ ) for conventional education students; item number 4 is negative item. That means that the students studying through the

conventional system were generally quite excited and interested in what is taught in the classroom. It can be due to the personality of the teacher, the presence of the fellows, the overall environment and culture of the conventional education system, or students' intrinsic motivation. After item 4, the second-lowest item is item 11 (*Sometimes I focus so much on the lesson that I do not even notice that the bell has rung*). There is also logic about it. The ringing of the bell is one of the most important parts of a conventional educational institution. It indicates the start and end of a lesson. Students become so used to it that ignoring it becomes quite tough. Also, as there are so many students in the class, no matter how absorbed one might be in one's work; commotion created by the others in the class is not likely to allow one to remain absorbed into it.

For the distance education students of the program, item number 15 (I like to help others with what I've learned) has the highest mean value (m=4.22). It may be because distance education students do not have regular classes like the conventional ones. As a result, they are likely to seek help from others. This would, in return, motivate them to help others. Item number 4- a negative item- (*I am not interested in what's taught at school*) is again the lowest one (m=2.39). The second-lowest is item 7 (*When I have a chance to choose, I usually choose homework that will force me to work more.*). It shows that distance education students are not into long, difficult, and demanding homework. It may be because whatever distance education students do, is homework (they stay at home and do the given tasks). As a result, homework does not have any additional meaning or charm for them.

Out of 20 items, distance education students' mean score was higher in only two items (Item 11: *Sometimes I focus so much on the lesson that I do not even notice that the bell has rung*, and item 18. *I do not realize how quickly the time passes when I am learning something*). Both of these items are about getting involved in work so much that one forgets the passing of time. It is logical as distance education students often work alone at home. As a result, they can remain engrossed in their work. Those studying through conventional mode, on the other hand, are often in groups or classes so even if they want to remain focused, people and the environment around them may shake them up.

T-test indicates that the conventional education students of the program have a higher level of academic motivation than the distance education students.

**Relationship of Gender, Age and Grade with Education Type**

The second, third, and fourth hypotheses were developed to see if there was any difference in academic motivation level between the two groups based on gender, age, and grade. Chi-square tests were used for this purpose.

The first chi-square test was carried out to investigate the relationship between gender and education type. According to the test (Table 2), the relationship between those two variables is insignificant at level 5 ( $X^2 = 2.727$  with  $p > 0.05$ ). It shows that in academic motivation, there is an insignificant difference between conventional and distance education students based on gender.

**Table 2: Chi-Square Analysis for the Relationship between Gender and Education Type**

Gender of the Student * Education Type Cross tabulation									
Gender of the Student		Female	Count	Education Type		Total			
				Distance	Traditional				
			Expected Count	68	66	134			
			Expected Count	62.1	71.9	134.0			
		Male	Count	33	51	84			
			Expected Count	38.9	45.1	84.0			
Chi-Square Tests									
			Value	Df	Asymp. Sig. (2-sided)	Sig. Exact Sig. (2-sided)		Exact Sig. (1-sided)	
			Pearson Chi-Square	2.727 <sup>a</sup>	1	.099			
			Continuity Correction <sup>b</sup>	2.286	1	.131			
			Likelihood Ratio	2.742	1	.098			
			Fisher's Exact Test				.125	.065	
			Linear-by-Linear Association	2.715	1	.099			
			N of Valid Cases	218					

a. 0 cells (.0%) have an expected count less than 5. The minimum expected count is 38.92.

b. Computed only for a 2x2 table

The second chi-square test was conducted to see the relationship between age and education type. According to the test (Table 3), the relationship between those two variables is significant at level 5, ( $X^2= 39.218$  with  $p < 0.05$ ). It shows that in academic motivation, there is a significant difference between conventional and distance education students based on age.

**Table 3: Chi-Square Analysis for the Relationship between Age and Education Type**

Age of the Student			Education Type		Total
			Distance	Traditional	
18-20	Count	50	32	82	
	Expected Count	38.0	44.0	82.0	
21-23	Count	47	40	87	
	Expected Count	40.3	46.7	87.0	
24-26	Count	4	20	24	
	Expected Count	11.1	12.9	24.0	
27+	Count	0	25	25	
	Expected Count	11.6	13.4	25.0	

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	39.218 <sup>a</sup>	3	.000
Likelihood Ratio	49.674	3	.000
Linear-by-Linear Association	34.810	1	.000
N of Valid Cases	218		

a. 0 cells (.0%) have an expected count less than 5. The minimum expected count is 11.12.

A third chi-square test was conducted to see the relationship between grade and education type. According to the test (Table 4), the relationship between those two variables was significant at level 5, ( $X^2= 39.199$  with  $p < 0.05$ ). It shows that in academic motivation, there is a significant difference between conventional and distance education students based on grade.

**Table 4: Chi-Square Analysis for the Relationship between Grade and Education Type**

Class		Level	Education	Type	Cross tabulation	Education Type		Total
						Distance/Online	Traditional	
12 years of	Level 1: education	Count	1	34	35			
		Expected Count	16.2	18.8	35.0			
13 years of	Level 2: education	Count	93	66	159			
		Expected Count	73.7	85.3	159.0			
14 years of	Level 3: education	Count	5	14	19			
		Expected Count	8.8	10.2	19.0			
15 years of	Level 3: education	Count	2	3	5			
		Expected Count	2.3	2.7	5.0			
Total		Count	101	117	218			
		Expected Count	101.0	117.0	218.0			

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	39.199 <sup>a</sup>	3	.000
Likelihood Ratio	47.511	3	.000
Linear-by-Linear Association	6.300	1	.012
N of Valid Cases	218		

a. 2 cells (25.0%) have an expected count less than 5. The minimum expected count is 2.32.

Chi-square tests reveal that whereas within the domain of the research, there is a difference between conventional and distance education students in all three variables, there is a statistically significant difference between the age and type of education, and grade and the type of education. On the other hand, there is no significant difference between gender and education type (conventional and distance education).

**Discussion and Conclusion**

Academic motivation is one of the most important factors that play a significant role in a student's academic success (Busato et al., 2000; Hustinx et al., 2009; Ning & Downing, 2010). Students' motivation level is highly influenced by their environment, learning culture, context, surroundings, and one's mindset (Deci & Ryan, 1985; Salili & Lai, 2001; Lim, 2004). Most of these factors are quite

different in traditional and distance education programs. As a result, the academic motivation level of students studying through distance and conventional modes of learning is likely to be different. This study was carried out to investigate it.

Using the Academic Motivation Scale developed by Bozanoğlu (Bozanoğlu, 2004) data were collected from 218 conventional and distance education students from a program in a Turkish university. The study is based on four hypotheses: the first one to compare academic motivation level of distance and conventional education students, while the other three to investigate the relationship between academic motivation with students' gender, age, and grades respectively. T-test and chi-square were used for these purposes.

Results from the t-test for  $H_1$  reveal that not only two samples' motivational levels differ, but the mean scores also differ statistically significantly for the distance and conventional groups (t-test=-2.692 with  $p=0.008$ ). Therefore,  $H_1$  is proven wrong. This finding is also supported by the literature. Although, some researchers have suggested that the students studying through distance and online programs have a similar level of motivation and satisfaction (Allen et al., 2002); most suggest that the motivation level of distance and online education students is generally lower than that of conventional education students (Russell, 1999; Redding, 2000; Gagne & Shepherd, 2001). Literature also points out that the students in distance and online education systems usually have a much higher dropout rate (Phipps & Merisotis, 1999; Meister, 2002; Park & Choi, 2009). One of its reasons is the lower level of motivation among online and distance education students (Wolcott & Burnham, 1991). The current study also comes up with the same findings. Those students who were studying through distance education showed a lower level of academic motivation. Not only was their overall mean score lower; out of twenty items, their mean was higher only in two items (item 11 and 18). It is likely to be due to the lack or lower level of external factors. As compared to conventional education students who have an environment and are surrounded by teachers, fellow students, and supporting staff who may help the students when they are down and out, distance education students do not have them. Human beings are social animals and tend to thrive in an environment with social interaction (Malik, Azmat, & Bashir, 2020).

Chi-square test and cross-tabulations were used for  $H_2$  (gender),  $H_3$  (age), and  $H_4$  (grade). When it comes to  $H_2$ , findings show that there are no statistically significant differences between the two groups based on gender. The results confirm the findings of Powell et al. (1990). The third hypothesis is also proven as there is a difference between the two groups based on age. Therefore, it is proven that the differences are statistically significant. This result confirms the findings of Johnson (2002), Shachar (2003), and Redding (2000). The same is the case with the last hypothesis about the grade. Findings again suggest that differences between distance and conventional students are dependent on the class group. It is also supported by the literature (Coggins, 1988). There is some rationale behind these findings. It is likely that those students who are young and new to distance education, are more prone to be influenced by this change in the mode of education.

The study shows that the students in distance education mode have a lower level of academic motivation as compared to the ones studying through conventional education. The research also sheds light on expected differences between distance and conventional students concerning the motivation level of students and their demographic characteristics (gender, age, and grade). Whereas there are no statistically significant differences between males and females; the more or less they are exposed to distance education (both in terms of age and grade), makes a difference.

### **Recommendations and Further Research**

The study finds out that the students studying through distance and online education have a lower level of academic motivation. The absence of the physical presence of teachers, class fellows, and classroom environment may play a part in it. There is a need to add motivational materials and short clips/ videos to make up for the lack of the aforementioned factors.

The current study uses Academic Motivation Scale to find out the differences between the two groups based on education type; but due to the nature of the study, it fails to investigate the causes behind it. It is suggested that further qualitative or mixed methods research is carried out on this topic to find the causes behind it. Also, a meta-analysis of existing research might help to explain the differences between distance and conventional students. Based on those findings, strategies and policies might be recommended which may not only improve academic motivation level amongst distance and online students but might also help decrease the dropout rate in it.

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