

## Attitudes of Prince Faisal Technical College Cadets towards Online learning Platforms

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### Abstract

This study aimed at exploring cadets' attitudes toward online platforms, "Royal Jordanian Air Force Platform and Microsoft Teams platform". In order to achieve this aim, a questionnaire was developed, which consisted of two dimensions. Each dimension consisted of twenty items to measure cadets' attitudes towards each of the previously mentioned online learning platforms, and its validity and reliability indicators have been verified. The population of this study consisted of all cadets at Prince Faisal Technical College in Jordan. The sample of the study comprised a total of 406 cadets, chosen randomly. The findings revealed that cadets' attitudes toward the Royal Jordanian Air Force Platform were medium, while cadets' attitudes toward the Microsoft Team Platform were high. Moreover, the results indicated that the effectiveness of the Microsoft Teams platform in developing cadets' attitudes towards online platforms compared to the Royal Jordanian Air Force platform.

**Keywords:** Online learning, attitude, online platforms, Prince Faisal Technical College, Microsoft teams platform, Royal Jordanian Air Force Platform.

### Introduction

that online learning is learner-centered, so learners can control their own learning speed, and learning activities should be flexible so as to match students' learning styles. Dolence and Norris (1995) highlight that online learning provides good opportunities for an active learning process. Harasim et al., (1996) pointed out that with suitable online learning applications, learners have opportunities to participate in the classroom discussion, express meaningful opinions, and share ideas equally regardless of the size of the classroom.

Online learning differs from traditional or face-to-face learning where learners are expected to get in classroom physically. In a face-to-face classroom, some learners do not have

Internet technologies have become a vital part of all aspects of our life as personal, social, academic, commercial, or professional. In particular, using Internet technologies in the education process has expanded in recent years (Kember et al., 2010). Learning by integrating internet connections and applications with educational processes is identified as online learning or virtual learning (Bentley et al., 2012). Providing all courses of distance learning over the internet is called online learning (Nguyen, 2015). Online learning has become an important part of the education process, and it can provide many advantages in the learning and teaching process (Katz, 1999). Clarke and Hermens (2001) posited

Regarding the student's attitude toward online learning, it is considered a critical factor in the learning environment for all educational stages supported by online learning tools. Moreover, student attitudes relate to students' thinking and what they feel about, and how students behave toward an attitude object (Triandis, 1971). Students' strong attitudes can guide positive attitudes and behavior towards learning and can contribute to the efficient employment of teaching and learning strategies (Maio & Haddock, 2009).

Students' attitudes towards the Microsoft Teams platform and the Royal Jordanian Air Force Platform are critical in determining the extent to which these platforms are successfully used in improving the teaching and learning process, especially in emergency cases like the COVID-19 epidemic. The findings of this study may help to enhance the online learning process in Jordan's present higher education system. So researchers conducted this study to explore cadets' attitudes toward an online platform: "Royal Jordanian Air Force Platform and Microsoft Teams platform".

### **Statement of the problem**

The study's problem is that the COVID-19 pandemic affected higher education institutions in many countries, which caused all educational institutions to close to avoid the spread of this pandemic (Wong et al., 2020). Because of these closures, higher institutions were required to use online teaching platforms such as Moodle, Zoom, and Microsoft Teams, regardless of students' and teachers' experience in technology use, as well as to move from traditional face-to-face education to distance education (Bonafini et al., 2017). Researchers felt that it was indispensable to explore Prince Faisal Technical College's cadets' attitudes toward online learning platforms: "Microsoft Teams platform and the Royal Jordanian Air Force Platform". To find out the effectiveness of each of them and the possibility of continuing to use them in the learning of college students in the future.

### **Purpose and questions of the study**

The present study aims to explore cadets' attitudes toward an online platform: "Royal Jordanian Air Force Platform and Microsoft

opportunities to communicate, unless, they can respond quickly and have self-confidence, whereas the learner is provided with the flexibility and proper learning environment to reach information and knowledge anytime by online learning (Bakerson et al., 2015). In online learning, learners are offered unique opportunities for an engaging learning environment, besides, in an online learning environment, face to face interaction is replaced by virtual interaction which provides convenience and flexibility (Smith et al., 2019). Bower et al., (2015) added that online learning supports unique advantages of a learning management system, for example, feedback tools, rubrics, authoring tools, chat discussion, assignment submission, and comment field.

Technological progress and the increasing amount of knowledge have forced most institutions and teachers to change their techniques of teaching and learning to provide students with knowledge and meet their diverse needs. So recently, there has been a serious demand for various educational institutions and teachers to integrate technology into their techniques and methods of teaching and learning to meet students' demand for using online learning, thereby supporting their access to higher education (Kroder et al., 1998).

An online platform is one of the technological tools that enable a teacher to design a learning course using multimedia pedagogical materials, personalize it according to each student's requirements and skills, and support students' actions. A student organizes their work, completes duties, and learns on the network or by downloading the pedagogical meaning that has been provided to them. They may track their progress, perform self-assessment exercises, and turn in completed assignments for evaluation by their teacher. Teachers and students converse individually or in groups, offer discussion topics, and work together to learn or create shared documents. An administrator maintains the system, regulates teacher and student access and privileges, and establishes linkages with external information systems (administrative documents, catalogs, pedagogical resources, etc. (Benta et al., 2014; Martynova et al., 2020).

**Online learning:** "is a form of education realized over a browser or applications without a need for additional software and learning resources" (Horton, 2000. P.9). In this study, it can be defined as one of the online learning modes that was used at Prince Faisal Technical College, which used some educational platforms (Microsoft Teams platform, Royal Jordanian Air Force platform) without the need for cadets to attend a college.

**Attitude:** "a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor" (Eagly & Chaiken, 1993, p. 1). In this study, it can be defined as the perspective of Prince Faisal Technical College cadets toward using online platforms (Microsoft Teams platform, Royal Jordanian Air Force platform).

**Online platforms** are the use of a computer network to present or distribute some educational content, which provide two-way communication via a computer network so that students may benefit from communication with each other, teachers, and staff. (Desmond, 1988). In this study, it can be defined as platforms which are used in teaching cadets of Prince Faisal Technical College, including the Royal Jordanian Air Force platform and Microsoft Teams platform).

**Prince Faisal Technical College:** It is a college located in Amman whose aim is to graduate military personnel who are experts in aircrafts, engineering, electricity, and other professions in many sectors in Air Force.

**Microsoft Teamsplatform** is a collaboration platform from Microsoft. Introduced in 2017, Microsoft Teams offers file storage, chat, video, and voice calling with Office 365 integration. It is available both for free and paid, and replaced Skype for Business and Microsoft Classroom "(Microsoft Teams, 1981-2019). In this study, it can be defined as an educational application used by Prince Faisal Technical College cadets as an alternative to face-to-face learning, enabling cadets to attend lectures, conduct discussions, view educational materials, record data, submit required assignments, take exams, and other matters related to the educational process.

**Royal Jordanian Air Force Platform:** It is an online application that was created by Prince

Teams platform". It seeks to answer the following research questions:

1. What is the level of the cadets' attitudes whom studying on the Royal Jordanian Air Force Platform toward the Platform?
2. What is the level of the cadets' attitudes whom studying on the Microsoft Team Platform toward the Platform?
3. Is there a significant difference in the level of attitudes toward the platform at the level ( $\alpha = 0.05$ ) between the groups of cadets studying on the Microsoft Team Platform and those studying on the Royal Jordanian Air Force Platform?

### Significance of the study

The result of the study may hopefully benefit Prince Faisal Technical College and higher education institutions in developing educational patterns and plans for online learning as an alternative to face-to-face learning. Thus, the present study may be one of the handfuls of studies, to the best knowledge of the researcher. It may increase curriculum designers', decision-makers', and tutors' awareness of the real needs of students during the learning process. Additionally, it may be significant as it attracts the attention of researchers towards conducting more future studies related to online learning management. So the study derives its importance because it is contemporary with a realistic phenomenon, which is the spread of the Corona virus, and the results of this study can be used in similar phenomena, such as wars and crises. Moreover, previous studies mentioned in this study may benefit those interested in distance learning and the results of its global application.

### The Limitations of the study

The current study is limited to Prince Faisal Technical College cadets enrolled in the first semester of the academic year 2021–2022. The findings are limited to the instruments and time that were used in this study. Targeting a different sample might yield different results.

### Operational definition of terms

The following terms will have associative meanings whenever they appear in the study:

online learning, which is flexible enough to bring interactivity to learning by employing new technologies that appeal to all students, whether they are on campus or at home. Furthermore, online learning enables students to be self-sufficient in terms of obtaining experience and knowledge as well as the use of active learning technologies (Mohammadi et al., 2011).

Many students use online learning because it provides many distinguished features and advantages. Furthermore, online learning will remain a vital component of higher education (Croxtton, 2014). Whether you like utilizing technology for learning or not, the truth is that it is here to stay. Technology has evolved into a critical tool for meeting the education, training, and retraining demands of a growing knowledge society (Berge, 2007). It was discovered that online learning gives students good opportunity to learn and enhance their computer skills for the reason that students are expected to have a basic comprehension of computer literacy skills and, for that purpose, the more students learn by using the internet applications, the more students learn information technology skills (IT) (Pollard & Hillage, 2001).

Nowadays, online platforms have become widespread in higher education in both learning and training; these educational platforms have become more usable and sensible than traditional techniques. Educational platforms have been considered in many studies and research because they allow students to address the most serious problem in higher education and support equal and full access to learning for all students who have the same learning level (Tarasov et al., 2020). Moreover, these platforms enable students to have good flexibility in the learning process in terms of the educational schedule, the homework that students can perform, and the delivery of assignments on time (Sahin & Shelley, 2008). Furthermore, online platforms can provide students with an interactive, thoughtful, collaborative, and representative learning environment while also saving on time, costs, and effort (Maor, 2003). Platforms also encourage students to enhance their learning skills and knowledge in cooperative and collaborative

Faisal Technical College in cooperation with the Computer Directorate at the beginning of the spread of the Corona virus. It enables the cadets to see and follow up on the recorded lectures that the teachers have uploaded in advance, and it enables them to upload their assignments. It also enables teachers to set exams and follow up on students' attendance.

### **Theoretical background**

All terms associated with Online learning have been defined as an educational environment that employs Information Communication Technology (ICT) to boost communication and connection between learners themselves, "between learners and teachers, between a community and its materials and learning resources" (Jones and Steeples, 2002, p.2). Online learning has been explained as: "a model for teaching and learning that uses technology as a tool to facilitate independence in learning through accessibility, flexibility, convenience and control. Those characteristics could instigate a holistic approach to learning which ultimately leads to critical thinking, and raises standards of achievement in terms of outcomes" (Mehanna, 2006, p.8).

In most cases, "online learning is a learning process in which students learn far from the sources by accessing many learning resources at the same time in an environment that is different from traditional learning-teaching activities and in which they interact more than in the traditional classroom environment" (Çalışkan, 2002, p.37). Furthermore, online learning is considered as a type of education that is delivered through a browser or application without the use of extra software or learning tools (Horton, 2000). It was clarified that Online learning points out to all forms of supported electronic learning, which aimed to have an impact on knowledge based on learners' practice, experience and knowledge (Tavangarian et al., 2004).

One of the goals of online learning is to extend the educational process outside the classroom. This type of learning helps students reduce their class load by lowering contact hours and replacing interactive tools with ones that they can use wherever and whenever they want (Mohammadi et al., 2011). Students may use their spare time for

According to the attitude concept, it is not easy to formulate a suitable definition for it; however, it is defined as "a presumptive construct that represents a person's degree of "like or dislike" for an item. It is generally a positive or negative opinion of a person, thing, event, or place" (Baker, 1992, p. 10). Wenden (1991), on the other hand, assumed that this concept "attitude" has three components: affective, cognitive, and behavioral. The affective component refers to feelings and emotions towards an object. The cognitive one consists of beliefs, opinions, or ideas, and the behavioral aspect refers to "intentions" towards the object (p.23). Scientists and researchers have defined attitudes with many definitions, but there is a common agreement that an attitude towards an issue or an object represents a propensity on her or his part to approve or disapprove of this issue or object, and therefore behave in a related way. For instance, a learner who is not able to use online platforms may have a negative attitude towards online learning and even towards the material taught through online platforms (Mortera- Gutierrez, 2006).

So far, they have seen that the concept "attitudes" can be thought of as a general evaluation (for example, like or dislike) of an attitude object. This definitional viewpoint has created many conceptual models of the attitude concept. One of the most effective models of attitude has been the multicomponent model (Eagly & Chaiken, 1993). In accordance with this point of view, attitudes are precise evaluations of an object that have cognitive, affective, and behavioral components. Some scientists and researchers have considered how these elements contribute to the expression of attitudes (Zanna & Rempel, 1988).

The affective component of attitudes refers to emotions or feelings related to an attitude object. Affective responses affect attitudes in some ways. A main way in which emotions or feelings influence attitudes is due to the affective reactions that are impassioned in the person after periphrasis to the attitude object. For example, some people feel that some insects like snakes or spiders scare them, so these negative affective responses may be causing a negative attitude towards these insects. These negative responses

environments (Pymm & Lyn, 2014). Platforms enable students to spend their time learning in an efficient way (Ried & Byers, 2009). Many online platforms are based on the student-centered learning approach, where the teacher takes on the role of the guide and facilitator of the learning process while the students are immersed in learning by themselves or in peer-to-peer activities. Students can make significant progress online by utilizing a student-centered approach in platforms (Sahin & Shelley, 2008).

The concept of the platform is based on some procedures that have been established at different educational institutes for students who are rarely on campus because of their remote place of residence; these procedures have authorized educational institutes to develop their quantity and quality of services (Liu et al., 2020). Nowadays, using online platforms is no longer limited to serving students who suffer from distance from their schools, colleges, or universities; they have been used during the recent pandemic (COVID-19), which allowed students to continue their educational paths despite these difficult circumstances (Eldokny & Drwish, 2021).

The goal behind using online platforms is to improve students' cognitive skills and their efficiency, especially in education or training, and to achieve this, learners should be encouraged to use them (Al-Rahmi et al., 2015). Generally, we find that behavioral intention and satisfaction in online learning have been discussed in many educational studies, as both of them play a vital role in measuring platforms' ability to achieve educational goals (Almaiah et al., 2020). Simultaneously, there is a gap in those studies as far as the extent to which learners' intentions to use online platforms have not been attended to (Almaiah & Alyoussef, 2019). Furthermore, many studies and research have used a variety of theoretical models to assess students' intentions to use online learning (Ibrahim et al., 2017). But there is still insufficient in the discussion of theoretical models for platforms; moreover, there is an immediate need to determine the crucial factors for platforms' success in higher education, especially in terms of knowing the factors affecting their ease of use (Liu et al., 2020).

other students had mixed feelings about the platform. Also, students preferred time-saving features and the real-time accessibility of the platform as compared to face-to-face learning.

Wea and Kuki (2021) carried out a study to determine the Faculty of Education and Teacher Training students' attitudes toward the use of online learning (Microsoft Teams application) during the COVID-19 pandemic. The study's sample included 176,000 students from Nusa Nipa University. To collect data, the researcher used a questionnaire. The results showed that learners had positive attitudes toward using the Microsoft Teams platform. Students hope that the Microsoft Teams platform will continue to be used by learners and teachers during online learning with some improvements so that learning takes place more effectively and efficiently.

Herguner et al., (2020) conducted a study to determine the effect of the online learning attitudes of university students on their online learning readiness. (306) university students participated in this study. Data for the research was collected through the "Online Learning Attitude Scale". Findings of the study revealed that the online learning attitudes of learners have a positive effect on their online learning readiness.

Hussein et al., (2020) conducted a study to explore the attitudes of undergraduate students towards their experience of using online learning during the COVID-19 pandemic (Corona Virus). The sample of this study consisted of 45 students who participated in this study. Data was collected through semi-guided essays asking learners to express their experiences with online learning during the pandemic and to determine the advantages and disadvantages of this experience in the second semester of the academic year 2019–2020. Findings of the study revealed that improved interaction and participation, convenience to use, low cost, safety, and time effectiveness, were the most frequently cited positive aspects of the online learning experience.

Rojabi (2020) conducted a study to explore the students' attitudes toward online learning via the Microsoft Teams platform. The study sample consisted of 28 students from the Open University. The data was collected by using a questionnaire to get information about the English

probably produce a negative attitude towards these insects (Krosnick et al., 1992). The cognitive aspect of attitudes refers to thoughts, attributes, and beliefs that are associated with a specific object. In some cases, people's attitudes might be based mainly on a consideration of the attributes (positive (good) and negative (bad)) of the attitude object. For instance, when someone recently bought a new laptop, he paid great attention to some factors, such as the laptop's processor, installed memory (RAM), and system type. In this example, attitudes towards the different laptops were created via a conscious consideration of the characteristics (positive and negative) of each laptop (Fishbein & Ajzen, 1975). The behavioral component of attitudes refers to past behaviors with respect to an attitude object. For example, people might deduce that they have a negative attitude towards petroleum refinery plants if they recall having already signed a petition against having a petroleum refinery plants built near their homes (Nisbett & Wilson, 1977). According to Bem's (1972) "self-perception theory, people do not constantly have access to their views or opinions about different objects like outside observers, he discussed that this is particularly likely when the person's' attitude is especially ambiguous or weak".

To sum up, the concept of "attitudes" is seen as a social and psychological basis for sustaining motivations. So, students' positive attitudes towards the online learning system could keep positive motivation. According to Gardner and Lambert (1972), "individual motivation to learn L2 is controlled by his attitudes toward the other group in particular or by his orientation to learning itself" (p.7).

### **Review of the Related Literature**

Lee and Hassel (2021) conducted a study to present findings on the application of Google Docs as a collaborative writing platform for a research report assignment. Thirty-four first-year students participated in this study. To collect data, two sets of questionnaires, pre and post-assignment, were used. The study's findings revealed that students with no prior experience found the Google Docs platform to be a positive experience and useful for their learning, whereas

platform at the University of Jordan. Also, the study revealed that students showed positive attitudes toward using Moodle as an online platform, because of its ease of use, not for the desired benefit.

Zue et al., (2013) conducted a study which aimed to examine various factors' influence on university students' attitudes toward online learning and their online learning attitude changes in a blended course. (120) Australian university students participated in this study. To collect data, the researchers used a questionnaire survey, pre- and post-test, and interview. The finding revealed that students showed a positive attitude toward online learning by the end of the course. Also, motivated students who were in the course appeared to understand the importance of the subject knowledge.

Okwumabua (2011) carried out a study that aimed to explore African American students' attitudes toward online learning. A total of 124 African American students participated in a positive youth development program. A questionnaire was conducted while participants were participating in a positive youth development programme in Memphis, Tennessee. Findings revealed that African American students' attitudes toward computers are inconsistent with their attitudes toward online learning. Also, students showed positive attitudes toward computers, but their attitudes reflected a lack of confidence, anxiety, and little use of online learning.

Mitchell and May (2009) conducted this study to explore attitudes towards and effects of online learning implementation. (382) respondents, of which (346) were faculty and (36) were academic administrators. To collect data, three instruments were used (a questionnaire, interviews, and document content analysis). The finding revealed that positive attitudes have an important impact on online learning implementation. Also, faculty acceptance of online learning is affected by attitudes related to some variables such as: intellectual reluctance, support, change, and cost-benefit.

Tekinarslan (2008) conducted this study to develop an attitude scale toward the Internet and to investigate if the levels of students' attitudes in the faculty of education differ significantly

language students' attitudes towards online learning via the Microsoft Teams platform. The findings of the research revealed that online learning via the Microsoft Teams platform is categorized as something new for students, but this interaction and learning environment motivates students to participate in online learning. As a result, they can easily understand the learning materials.

Obeidat et al., (2020) carried out a study to evaluate students' perceptions of the effectiveness of e-learning during the COVID-19 pandemic at Hashemite University, Jordan. The study sample consisted of 399 students who completed the online survey. A researcher collected the data by using a questionnaire. The findings of the study showed that students' overall evaluation of their e-learning experiences was generally positive. Microsoft Teams was the platform most preferred by students for e-learning, and the majority of students.

Istifci (2017) conducted this study to examine the perceptions of EFL students studying English at the School of Foreign Languages, Anadolu University, on blended language learning and online learning platforms. The study sample consisted of 167 students. A questionnaire was used to collect the data. The results of the study showed that students liked the idea of blended learning in terms of course format and attendance, and they liked the flexibility of online learning, but they preferred face-to-face communication with their teacher and classmates. The results also revealed that students were mostly positive about using online language learning platforms.

Almarabeh et al., (2014) conducted this study to find out the impact of the online learning management system at the University of Jordan, examine the students' acceptance of this new system, and address the challenges facing the students while using the e-learning management system. Data was collected through a small paper scan which researchers developed and delivered to students at the University of Jordan. (240) students from the University of Jordan participated in this study. The study showed the students' satisfaction with using an online platform (Moodle) and provides real evidence to move forward towards using Moodle as an online

faculty and students have positive attitudes toward online instruction. Additionally, the results showed that female students' access to a personal computer (home computer) was significantly correlated with their attitudes toward online learning.

### Methods and procedures

This section elucidates all of the design, participants, and instruments, along with their reliability, validity and data analysis.

#### The participants of the Study

The study sample consisted of 406 cadets of Prince Faisal Technical College, enrolled in the first semester of the academic year 2021–2022. They were selected randomly and distributed as follows: (201) cadets who studied by using the Royal Jordanian Air Force platform; and (205) cadets who studied by using the Microsoft Teams platform, as shown in table (1).

**Table (1): Distribution of study sample according to platform.**

Platform	Students number	percentage
Royal Jordanian Air Force platform	201	49.5%
Microsoft Team platform	205	50.5%

#### The Validity of Instruments

To establish the validity of the questionnaire, a jury of five university professors specializing in TEFL, along with five Ph.D. students specializing in TEFL, moderated the tools. The jury's suggestions, comments, and recommendations were taken into consideration. Internal consistency validity was also used on the exploratory sample (n = 30), as shown in table (2).

according to their gender, Internet experience, their preferences between Internet-based learning and face-to-face learning, and their views about the Internet as an instructional approach. The sample of the study was composed of 249 undergraduate students, divided into 149 females and 100 males, from a faculty of education. Findings indicated that students' willingness to participate in an internet-based course and their online experience had major effects on their attitudes toward the internet.

Alaugab (2007) carried out this study, which aimed to investigate faculty and student (female) attitudes toward adopting distance learning and the benefits of implementing online instruction. The study's sample consisted of 310 female students from two institutions affiliated with the Kingdom of Saudi Arabia's Ministry of Higher Education; data were gathered through survey questions. The results revealed that both female

#### The Instrument of the Study

The instrument of this study was a 5-point Likert Scale questionnaire. The items of this questionnaire have been derived from the theoretical background of the study and from the literature review of the study. They were divided into two domains. The first part consisted of 20 items to explore cadets' attitudes toward the Royal Jordanian Air Force platform, whereas the second part consisted of 20 items to explore cadets' attitudes toward the Microsoft team platform.

**Table (2): The internal consistency validity coefficients of the questionnaire.**

Item	correlation coefficient	item	correlation coefficient
1	.437	11	.424
2	.588	12	.651
3	.566	13	.427
4	.483	14	.538
5	.576	15	.571
6	.539	16	.476
7	.475	17	.413
8	.475	18	.503



9	.633	19	.445
10	.410	20	.698

### Reliability of the study

In order to find out the reliability of the questionnaire, the Test-Re-Test method of analysis was employed on thirty students who were not involved in the study. A questionnaire was applied to an exploratory sample, and after two weeks, the same tool was applied to the same sample. In addition, Cronbach's alpha statistical method was used. Table (3) shows that.

**Table (3): Questionnaire reliability coefficients.**

Variable	Test Retest	Alpha Cronbach
Attitude	.91	.88

deviation, and the T-test. The means and standard deviation were used to explore cadets' attitudes toward the online platforms "Prince Faisal Technical College platform" and "Microsoft Teams platform". The T-test was used to show if there were significant differences at the level ( $\alpha = 0.05$ ) of the attitude toward the platform between the groups of cadets studying on the Microsoft Team Platform and those studying on the Royal Jordanian Air Force Platform.

### Findings and Discussion Related to the First Question:

To answer the question, "What is the level of the cadets' attitudes whom studying by the Royal Jordanian Air Force Platform toward the Platform?" Means and standard deviation were calculated as shown in table (4).

### Data Analysis

The present study sought to explore cadets' attitudes toward an online platform: "Prince Faisal Technical College platform and Microsoft Teams platform". Before data collection, the required permissions were taken from Prince Faisal Technical College in order to conduct the research. The quantitative data was collected from the closed items of the questionnaire. Then, administering a questionnaire to measure cadets' attitude toward using online platforms. After that, the data collected from the questionnaire was analyzed in terms of means, standard deviations, and t-tests using the Statistical Package for Social Studies (SPSS).

### The Findings and Discussion

This study used particular statistical techniques in the data analysis. They are the mean, standard

**Table (4): Means and Std. Deviations of cadets' responses who studied using the Royal Jordanian Air Force platform on their attitudes questionnaire**

#	Item	Mean	Std. Deviation	Rank	Level
1	Learning on the Royal Jordanian Air Force Platform is a great experience as it improves my language skills.	3.67	.95	1	Medium
2	Royal Jordanian Air Force Platform provides me with technical support for independent learning.	3.43	.98	16	Medium
3	Royal Jordanian Air Force Platform enables me to take part in class.	3.54	.99	6	Medium
4	Royal Jordanian Air Force Platform provides me with many	3.40	.98		

	motivational factors in the process of attaining knowledge.			18	Medium
<b>5</b>	Royal Jordanian Air Force Platform contributes to the formation and development my learning skill.	3.57	.97	2	Medium
<b>6</b>	Royal Jordanian Air Force Platform presents information regarding the goals, objectives, structure and contents of educational materials.	3.53	.95	7	Medium
<b>7</b>	Royal Jordanian Air Force Platform helps me control my personal academic achievements and the whole group as well.	3.50	.99	10	Medium
<b>8</b>	Royal Jordanian Air Force Platform helps me fill the course with various illustrative materials (ppt presentations, documents of various formats, etc.).	3.57	.98	3	Medium
<b>9</b>	Royal Jordanian Air Force Platform gives me a chance to quickly access other online services (YouTube, BBC, online newspapers and magazines, etc.).	3.56	.98	4	Medium
<b>10</b>	Royal Jordanian Air Force Platform enables me to find my learning needs.	3.37	.98	19	Medium
<b>11</b>	Royal Jordanian Air Force Platform helps me understand the materials easily.	3.49	.98	11	Medium
<b>12</b>	In Royal Jordanian Air Force platform class, the learning environment motivates me to actively learn and comprehend the topics.	3.46	.95	14	Medium
<b>13</b>	In Royal Jordanian Air Force platform class, I felt very at ease answering questions.	3.43	.91	17	Medium
<b>14</b>	Using the Royal Jordanian Air Force platform makes it simpler to resolve complication between students.	3.52	.99	8	Medium
<b>15</b>	Some assessment tools can be effectively used in the Royal Jordanian Air Force platform.	3.45	.96	15	Medium
	My studies are greatly aided by the	3.48	.92		

<b>16</b>	learning environment provided by the Royal Jordanian Air Force platform.			12	Medium
<b>17</b>	By using the Royal Jordanian Air Force platform, it is easy for me to express my problems.	3.55	.99	5	Medium
<b>18</b>	Royal Jordanian Air Force platform allows for meaningful dialogue between the teacher and students.	3.51	.99	9	Medium
<b>19</b>	Royal Jordanian Air Force platform enables me to master target language skills efficiently.	3.47	.94	13	Medium
<b>20</b>	Royal Jordanian Air Force platform develop my critical thinking skills.	3.33	.98	20	Medium
<b>Total</b>		3.49	.22	----	Medium

level, while the item (Royal Jordanian Air Force platform develop my critical thinking skills.) ranked last with a mean = (3.33) and Std. Deviation = (0.98), with a medium level.

There is also one sample test with a cut score of 3 for cadets' responses on the attitude scale toward the Royal Jordanian Air Force platform, as shown in table (5).

**Table (5): One Sample t Test with cut score (3) for cadets' responses on attitudes' scale toward Royal Jordanian Air Force platform.**

N	Mean	Std. Deviation	df	T	Sig.
201	3.49	.22	200	31.760	000

environment by knowing the students' understanding of the factors that affect their beliefs about online learning.

The finding related to the first question showed that the Royal Jordanian Air Force platform improved cadets' attitudes at a medium level. This level of attitudes' students towards using the Royal Jordanian Air Force platform is attributed to the ease of use and not to the expected benefits, which makes the decision makers at Prince Faisal Technical College interested in raising awareness of the usefulness of the Royal Jordanian Air Force platform. This result is in correlation with Almarabeh, et al., (2014) who found that students showed positive attitudes toward using Moodle as an online platform because of its ease of use, not for the

Table (4) shows that the level of the cadets' attitudes toward the Royal Jordanian Air Force Platform was medium with a mean of (3.49) and a standard deviation of (0.22), where the item (Learning on the Royal Jordanian Air Force Platform is a great experience as it improves my language skills.) ranked first with a mean of (3.67) and a standard deviation of (0.95), with a medium

Table (5) shows that there were significant differences at the level ( $\alpha = 0.05$ ) for the attitude toward the Royal Jordanian Air Force Platform for the cadets studying on it. This is due to a reduction in the calculated mean, which reached (3.49), where the (t) value equals (31.760).

Generally, new systems or applications fail because many users have no desire to use these systems or applications. This happens because they do not find any benefits from using these tools, or they find them complicated, which causes a lot of problems for them. The Royal Jordanian Air Force platform, as a new online learning application at Prince Faisal Technical College, can be accepted or rejected by the students. Academic administrators in colleges can help students accept this new learning

correlation with Hussein et al., (2020); Lee and Hasse, (2021), who found that an online platform improved good interaction and participation among students and that it was convenient to use, low cost, and highly effective. In addition to enabling teachers to follow the attendance and absence of students by the numbers of file views, this result is in correlation with Istifci (2017), who found that students liked the idea of blended learning in terms of course format and attendance, and they liked the flexibility of online learning. For the reasons mentioned previously, the level of attitudes of Prince Faisal Technical College students towards using the Royal Jordanian Air Force platform was medium.

desired benefit. This may also be attributed to the fact that, despite the flaws in the Royal Jordanian Air Force platform (as it doesn't offer holding direct meetings and discussions, it doesn't allow making calls, it doesn't allow chatting for groups and individuals, and it doesn't offer sharing content), it has some advantages, such as offering good interaction and participation among students and providing the feature of uploading assignments, the possibility of following up on indirect (recorded) lectures, providing the feature of uploading exams by downloading the exam file on the platform, which includes the exam for open-ended questions or the multiple-choice exam), and other features. This result is in

#### Findings and Discussion Related to the Second Question.

To answer the question, "What is the level of the cadets' attitude whom studying by the Microsoft Team Platform toward the Platform?" Means and Std. Deviation were used as shown in the table (6).

**Table (6): The Means and Std. Deviations of cadets' responses who studied using Microsoft team platform on their attitudes questionnaire.**

#	Item	Mean	Std. Deviation	Rank	Level
1	Learning on Microsoft Teamsplatform is a great experience as it improves my language skills.	3.82	.96	4	High
2	Microsoft Teamsplatform provides me with technical support for independent learning.	3.73	.96	11	High
3	Microsoft Teamsenables me to take part in class.	3.78	.95	6	High
4	Microsoft Teamsplatform provides me with many motivational factors in the process of attaining knowledge.	3.88	.92	1	High
5	Microsoft Teamsplatform contributes to the formation and development my learning skills	3.77	.99	7	High
6	Microsoft Teamsplatform presents information regarding the goals, objectives, structure, and contents of educational material.	3.75	.98	9	High
7	Microsoft Teamsplatform helps me to control my personalacademic achievements and the whole group as well.	3.76	.93	8	High
	Microsoft Teamsplatform helps me fill the course with various illustrative	3.87	.91	2	

8	materials (ppt presentations, documents of various formats, etc.).				High
9	Microsoft Teamsplatform gives me a chance to quickly access other online services (YouTube, BBC, online newspapers and magazines, etc.).	3.83	.95	3	High
10	Microsoft Teamsplatform enables me to find my learning needs.	3.65	.98	16	Medium
11	Microsoft Teamsplatform helps me to understand the materials easily.	3.61	.99	18	Medium
12	In Microsoft Teamsplatform class, the learning environment motivates me to actively learn and comprehend the topics.	3.60	.98	19	Medium
13	In the Microsoft Teamsplatform class, I felt very at ease answering questions.	3.57	.94	20	Medium
14	Using the Microsoft Teams platform makes it simpler to resolve complication between students.	3.70	.98	13	High
15	Some assessment tools can be effectively used in the Microsoft team platform.	3.67	.99	15	Medium
16	My studies are greatly aided by the learning environment provided by the Microsoft Teams platform.	3.74	.99	10	High
17	By using the Microsoft Teamsplatform, it is easy for me to express my problems.	3.69	.98	14	High
18	Microsoft Teamsplatform allows for meaningful dialogue between the teacher and students.	3.64	.98	17	Medium
19	Microsoft Teamsplatform enables me to master target language skills efficiently.	3.71	.95	12	High
20	Microsoft Teamsplatform develop my critical thinking skills.	3.80	.92	5	High
Total		3.73	.25	----	High

Table (6) shows that the level of the cadets' attitude toward the Microsoft Team Platform was high, with a mean of (3.73) and a standard deviation of (0.25), where the item (Microsoft Teams platform provides me with many motivational factors in the process of attaining knowledge.) ranked first with a mean of (3.88) and a standard deviation of (0.92), indicating a high level, while the item (In the Microsoft Teams platform class, I felt very at ease answering questions.) ranked last with a mean of (3.57) and a standard deviation of (0.94), indicating a medium level.

Also, one sample test with a cut score of 3.00 on the Microsoft Team platform was used as shown in table (7).

**Table (7): One Sample t Test with cut score (3) for cadets' responses on attitudes' scale towards the Microsoft Team platform**

N	Mean	Std. Deviation	Df	T	Sig.
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205	3.73	.25	204	42.417	005
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Table (7) shows that there were significant differences at the level ( $\alpha = 0.05$ ) for the attitudes towards the Microsoft Team Platform for the cadets who were studying by it. This is due to a reduction in the calculated mean, which reached (3.73) where (t) value equals (42.417).

The findings related to the second question showed that the effectiveness of the Microsoft Teams platform in improving cadets' attitudes was high. This may be attributed to many of the features that characterize the Microsoft Teams platform, including:

1. The possibility of holding direct meetings and discussions.
2. The possibility of allowing cadets to communicate and participate well without using e-mail or text messages and to hold conversations by setting up channels.
3. It is now possible to respond to posts with images, animations (GIFs), and links.
4. It allows making calls.
5. It allows chatting for groups and individuals.
6. It shares content with other colleagues.
7. It allows collaborative learning spaces (virtual classroom simulations).
8. The possibility of recording notes related to projects or study materials through a wiki or one note system in order to support and develop content. (Allison & Hudson, 2020).

This effect may also be attributed to the privileges provided by the Microsoft Teams platform in collaborative e-learning through the sharing of educational activities among students themselves; this is one of the most prominent things that led to the cadets' interest and increased their motivation towards learning, which positively affected their attitudes. These findings are in correlation with those of Rojabi, (2020); Wea and Kuki, (2021) who found that online learning via the Microsoft Teams platform is categorized as something new for the students, but this interaction and learning environment motivated students to participate in online learning. As a result, they could easily understand the learning materials. Also, learners had positive attitudes toward using the Microsoft Teams platform, and they hope that the Microsoft Teams platform will continue to be used by learners and teachers during online learning with some improvements so that learning takes place more effectively and efficiently.

And since this collaborative learning led to the cadets' acquisition of knowledge (understanding and its use), providing them with written models to understand lectures through groups, which led to competition among students and helped them in social interaction and the development of their abilities through interaction with teachers, this finding is in correlation with Hussein et al., (2020), who found that online experience enables students to interact with each other and participate efficiently. In addition, the use of this platform also helped cadets overcome the fear they had, which gave them confidence and allowed them to develop their skills in different educational situations. This finding is in correlation with Okwumabua (2011) who found that students' attitudes reflected lack of confidence, anxiety, and little use of online learning.

#### Findings and Discussion Related to the Third Question.

To answer the question, "Is there a significant difference in the level of the attitude toward the Platform at the level ( $\alpha = 0.05$ ) between the groups of the cadets whom studying by the Microsoft Team Platform and whom studying by the Royal Jordanian Air Force Platform?" an independent (t) test was used to show the differences between the levels of attitudes of cadets studying on the Microsoft Team Platform and the Royal Jordanian Air Force Platform, as shown in table (8).

**Table (8): an Independent t Test between the cadets whom studying by the Microsoft Team Platform and Royal Jordanian Air Force Platform.**

Group	N	Mean	Std. Deviation	df	T	Sig.	Eta Squared
Royal Jordanian Air Force Platform	201	3.49	.22	404	-10235	.000	

Microsoft Teams Platform	205	3.73	.25				.92
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analyze any information that may be received during the lecture.

3. It doesn't provide a content sharing feature.
4. It doesn't provide the ability to hold audio and video meetings.
5. It doesn't provide the ability to make calls.

These findings are in correlation with (Wea & Kuki, 2021); (Almarabeh et al., 2014); (Obeidat et al., 2020) who found that learners had positive attitudes toward using Microsoft Teams platform, and they hope that Microsoft Teams platform will continue to be used by learners and teachers during online learning with some improvements. Also, Microsoft Teams was the platform most preferred by students for e-learning and the majority of students.

### Recommendations

In light of the findings obtained, the following recommendation can be suggested:

1. Including some features of Microsoft Teams platform to use it in Royal Jordanian Air Force platform, because of its effectiveness in developing cadets' levels.
2. Using Microsoft Teams platform should expand in teaching all materials at Prince Faisal Technical College until the Royal Jordanian Air Force platform is developed to be compatible with the Microsoft Teams platform.
3. Students and teachers should be trained to use the Royal Jordanian Air Force platform and Microsoft Teams platform to benefit from their advantages.
4. Researchers ought to conduct other research studies on cadets' attitudes toward online platforms in other military colleges in and outside Jordan.
5. Researchers should conduct other research studies on the instructors' attitudes toward online platforms.
6. Other research studies ought to be done using other research instruments such as interviews and classroom observation.

Table (8) shows that there were significant differences at the level ( $\alpha = 0.05$ ) of the attitude toward the platform between the groups of cadets studying on the Microsoft Team Platform and those studying on the Royal Jordanian Air Force Platform, which were attributed to the Microsoft Team Platform, where the (t) value equals (-10.236) to reading and writing skills.

The effect size (Eta Squared) was (.92), which means that the use of the Microsoft Teams Platform explained a percentage (20.2%) of the improvement in cadet attitudes compared to the (the Royal Jordanian Air Force Platform) according to the criteria for the size effect (Eta square) presented by Cohen (1988), who stated:

- \* The size of the effect is insignificant when the size of the effect is  $(ES) > 0.20$ .
- \* The size of the effect is small when the size of the effect is  $0.20 \leq (ES) < 0.50$ .
- \* The size of the effect is medium when the size of the effect is  $0.50 \leq (ES) < 0.80$ .
- \* The size of the effect is large when the size of the effect is  $0.80 \leq (ES) < 1.10$ .
- \* The size of the effect is very large when the size of the effect is  $1.10 \leq (ES) < 1.50$ .

The findings indicated the effectiveness of the Microsoft Teams platform compared to the Royal Jordanian Air Force platform; students also showed positive attitudes towards using the Microsoft Teams platform. This may be attributed to the defects in the Royal Jordanian Air Force platform, according to the assessment of the Computer Directorate of the Royal Jordanian Air Force, 2021, which is.

1. It doesn't provide a chat feature between students to benefit and exchange content among them.
2. It doesn't provide the feature of direct lectures and instant communication, so cadets who use the Royal Jordanian Air Force platform are forced to attend the lectures that have been prepared in advance without the ability to

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7. Conducting a similar study to compare the Royal Jordanian Air Force platform with platforms used in the Ministry of Education and Jordanian universities

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