Assessing instructors' usage of emojis in distance education during the COVID-19 pandemic.

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Abstract

This research assessed instructors' usage of emojis in distance education for high diploma students. A quantitative approach was employed comprising an e-survey consisting of 11-items, one closed-ended question, and two open-ended questions. The participants were a randomly selected sample of 343 high diploma students, 243 attending Al al-Bayt University (AABU) in Jordan and 100 students attending the Arab Academic College in Haifa (AAC). The results indicated that instructors' usage of emojis in distance education was moderate in both universities. All students strongly preferred instructors to use emojis to express what is on their minds as an alternative to facial expressions, and female instructors were more active in using emojis in virtual lectures. The emoji used most frequently by distance education instructors for the sample was the thumbs-up emoji (👍). Based on the results, several recommendations are put forth that will be of value to researchers and workers in this field.

Keywords: Distance Education; Emojis; COVID-19

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1. Introduction

The COVID-19 pandemic breakout has forced countries to rely on distance education to achieve social distancing, with the technical and informational capabilities varying from one country to another, depending on the willingness to use this method, the training of teachers on it, the nature of students, and their familiarity with this method. It is the era of digital transformation in education against everyone else, to continue the educational process, and not to stop it. COVID-19 has put billions of people around the world face to face with the "distance education" system (UN, 2020; Arkorful & Abaidoo, 2015). However, this has affected the direct interaction between the instructor and the students, which, in its absence, reduces the effectiveness of the educational process. 45% of the direct interaction is based on verbal interaction, while non-verbal interaction constitutes 55%, and this includes gestures and facial expressions. Arnousi (2014) believes that the non-verbal message is more expressive and sincere, therefore, the teacher should not limit the interaction process to the verbal one but he should use different forms of non-verbal gestures to make his teaching more effective. But what about distance education, what is the alternative to using body language in this type of education?

In the digital space, most Internet users need to convey their facial expressions and feelings through what are known as emojis: these are visual representations of an emotion, object, or symbol used in computer-mediated communication (Bai, Qi Dan, Mu & Yang, 2019; Da Costa, 2019; Bellis, 2020). They are used widely in social media, text, email, and instant chat apps such as WhatsApp as a pictorial substitute for body language gestures in electronic environments. Abdullah (2019) believes emojis have now become the first global language for human communication to the extent that some consider them a true language that transcends cultural barriers as it conveys certain meanings without the need for a common language. However, the absence of rules and limited expressive connotations means it lacks the basic language functions that allow for deep and complex communication between human beings. Nevertheless, emojis greatly reduce the complexity of the readable text, successfully fill expressive gaps, and give a different interpretation of written speech.

An Emoji is not just a picture or even an expression of a word, it is a reference to the emotional state you experience while talking to someone you cannot see; it is an alternative to body language, facial expressions, and the intensity of your voice as you speak, giving more information than is contained in the language and thus satisfying our desire to communicate (Abdulhafez, 2019). Whether people like them or hate them, emojis will not disappear from the language of communication and electronic messaging as they are brief and descriptive signs that express the feelings and experiences of people at the touch of a button, substantially saving both time and space. Instead of writing a mass of words, an emoji can do the job equally as well (Dader, 2019).

There are countless emojis' categories to choose from (e.g., smileys, people, families, hand gestures, clothing, and accessories). Statistics show that approximately 5 billion emojis are sent daily via Facebook Messenger and nearly 60 million emojis are employed in comments on Facebook. If people use emojis in the right context, it can be a powerful tool for visual expression. Users should therefore be sure that the recipient is an expert in the culture of decoding and thus understands the meanings of emojis (Suresh, 2018).

1.1 Emojis in Distance Education

Miller (2005) believes that a large part of the communication that occurs inside the classroom is, in fact, non-verbal and it is through this that the teachers express what they like and dislike to their students. The use of body language helps teachers to teach and to control the behavior of students. It

also helps them to be receptive to the non-verbal signals which students send in return. Some students may communicate using eye contact, smiles, eyebrows, nodding, and head movements to express their approval or disapproval of what they hear; this will provide the teacher with appropriate feedback regarding the content of their mutual communication. Teachers have to master the skill of non-verbal communication because this facilitates classroom communication. The use of nonverbal messages along with verbal messages is one of the factors that help capture the attention of students and increases the clarity of the verbal message (Abunamira, 2006). But what about distance education where teachers and students are not in the same classroom? Keegan (1980) defined distance education in terms of the following:

- The teacher and students are not together in the same place.

- The existence of an advanced technological means of communication between the student and the teacher through which the educational tasks and duties are exchanged.

- The Reliance almost entirely on the student himself in understanding the academic subjects. (p. 33).

Thus, distance education is the opposite of 'direct education' or 'face-to-face' education that takes place through direct contact between lecturers and students. Previous studies largely agree that distance education involves a distance between teachers and students that has to be compensated by using technology (Keegan, 1996). Furthermore, Simonson and Seepersaud (2019) argued that distance education involves bi-directional communication, personalized teaching, and belonging to an educational institution. However, such claims have been vigorously debated as institutions strive to reach a consensus on a unitary definition. The amount of online contact teachers have with students is increasing as students are digital natives, thus teachers are obliged to use emojis to assess and interact with students. Students often use emojis to express emotions or visually enrich text communications to establish a general level of informality with their peers. Conversely, teachers can utilize emojis to make remote teaching more visual, accessible, and interactive. For instance, instructors may use emojis to introduce activities students do every day in a more engaging format, and to help students understand the aims of a virtual teaching session (Na, Lavoué, Aritajati, Tabard & Rosson, 2019). Teachers of humanities are more adept at using body language because they have a better appreciation and empathy for humanity, and are more effective communicators (Hameed, 2019; Strauss, 2017).

In terms of gender, females are better than males in interpreting body language and physical gestures. As well as being able to pick up on minute details, they have an inherent capacity to detect and interpret nonverbal cues. Researchers attribute this to a role in society that requires them to have enhanced sensitivity to people's feelings and a capacity to convey their own emotions. This may be manifested most strongly in mothers who have to communicate non-verbally with their children when they are young. It is reflected in the communication style of female instructors which has been described as being more emotional than that of men (Sokolov, Krüger, Enck, Kragelöh-Mann & Pavlova, 2011; Shahbaz, Tabassum & Gohar, 2017; Alqunayeer, & Rahmt-Allah, 2019; Calin, 2019; Abdelghafoor, 2020). It is also manifested in problem-solving, where men take a straightforward approach in comparison with women who tend to establish intimacy, show concern, and empathize. It is preferable to avoid the use of certain specific symbols because they are inappropriate in educational environments due to religious, cultural, psychological, and sexual connotations (e.g., teachers cannot use certain animal or fruit and vegetable emojis in virtual lectures as they have evolved to acquire sexual meanings). The emojis most commonly prohibited in distance education have been cited by

several researchers (Notopoulos, 2015; Bosch, & Revilla, 2018; Komando Staff, 2020; Brantz, 2019; Emojipedia, 2020) and are presented in Figure 1.

Figure. 1. *Some Banned Emojis in Distance Education*

2. Problem, Purpose, and Questions of the Study

Due to the COVID-19 pandemic, e-learning platforms have been developed for universities in many Middle Eastern countries. The Egyptian, Saudi and Palestinian governments provided free internet to university professors and free SIM cards for students to access the learning platforms via their devices. In Jordan, universities have turned to education platforms like Moodle, in addition to social media platforms as supportive platforms to ensure the interaction between instructors and their students, such as Facebook, WhatsApp, and other applications (e.g., Zoom, Microsoft Teams) (UNESCO, 2020). We anticipated that due to the COVID-19 pandemic, instructors have been using emojis in virtual lectures as a substitute for body language and physical gestures, therefore, the researchers sought an assessment of university instructor's usage of emojis in distance education as an alternative to the body language used in face to face education. The following are the sub research questions addressed in the study:

- To what degree do instructors use emojis in distance education for two universities (Al-Bayt University in Jordan and the Arab Academic College in Haifa)?

- Are there statistically significant differences (at α=0,05) in students' perceptions of their instructors' usage of emojis attributed to gender and bachelor specialization?

- Why do students in both universities (Al-Bayt University in Jordan, and Arab Academic College in Haifa) need their teachers to use emojis in distance education?

- Which emojis are used most frequently by instructors in distance education?

- Who uses emojis more in distance education- female instructors or males?

2.1   Study Significance and Limitations

With the COVID-19 pandemic ongoing, educators are increasingly embedding their practice in virtual and distance learning practices. This paper examines the impact of emojis to substitute them as a method of communication that has been lost in distance learning (nonverbal) with a graphical representation. Many educators mourn the loss of contact with students and vice versa, so we want to find a way to replace those missed connections with emojis to bring other indicators otherwise used in

nonverbal communication. This article makes a case for why it is relevant to study emojis. Even after the health crisis ends, there will remain a need for communication between teachers and students, whether through educational platforms or social media, which highlights the need to study emoji and select the most appropriate ones for communication in digital educational settings.

Nevertheless, this study is limited to post-graduate students in the Middle East. Furthermore, an added potential limitation is brought about by the fact that only a questionnaire was used to collect the data, the use of other instruments (e.g interviews) would have added more depth to the study results.

2.1.1 Review of Related Literature

Several studies have investigated why emojis are used in digital communication, how to interpret them, and how they are used differently according to variables such as gender.

For instance, a mixed-methods approach was employed by Wirza, Hnifah, Nurbaeti, Hanifa, and Hanifah (2020) to assess gender differences in the use of emojis among 40 Indonesian college students. Their results indicated that all participants used emojis to enhance the meaning of the messages they send. Although there was no difference in the intensity of use, there were differences in the selection of emojis.

A similar study on gender and emoji use was conducted by Butterworth, Giuliano, White, Cantu, and Fraser (2019). They found that perceptions of messages are influenced by both gender and the emojis selected. For instance, affectionate emojis were considered more acceptable when sent by women.

A study conducted by Haji and Bakir (2019) at Salah-Addin University- Erbil aimed to determine whether university students can differentiate between emoticons and emojis and whether females use emoticons more than males or vice versa. The results indicated that participants were aware of the differences between emojis and emoticons and that females used emojis more than males. Additionally, they found that students were less likely to use emoticons with their teachers due to the nature of the student-teacher relationship, which increases the likelihood of misinterpretation.

Somewhat different results were obtained by Feng, Lu, Zhou, Wang, and Cao (2020), who investigated how emojis reflect people's internal emotional expressions by asking 100 participants to display and rate their most recently used emojis. The results indicated that emojis were more likely to express positive emotions. Continuing the focus on gender, Herring and Dainas (2018) conducted an online survey of 523 participants (352 females, 121 males, 50 'other') to assess how males and females differ in their interpretation of the functional use of emojis in specific discursive environments. The results indicated no substantive differences in understanding (or indeed misunderstanding) of the use of emojis on Facebook

People's understandings and perceptions of emojis concerning emotional states were also investigated by Brants, Sharif, and Serebrenik (2019). Through an online survey of 386 people, they found that emojis depicting surprise, happiness, anger, sadness, and a neutral expression were understood appropriately by all users, irrespective of gender and age. There were, however, age differences in the interpretation of Unamused Face and Face Screaming in Fear emojis. Conversely, there were gender differences in the interpretation of the Face with Rolling Eyes and inconclusive findings regarding the Nauseated Face emoji.

A study exploring how emojis can influence perceptions of individuals was carried out by Wibowo, Tsiqoh, Sangadah, Komala, and Utomo (2017) with 48 college students. Controlling for mood, the

results indicated that a smiling emoji leads to positive perceptions of a person as genuine and friendly. This effect was blocked by a negative emoji. Importantly, however, such perceptions were affected by the context in which they were used, which has implications for different work and teaching environments.

Focusing specifically on the latter, Algharabali and Taqi (2018) identified college students' reasons for using different emojis in different academic contexts. To achieve this, questionnaires were administered and interviews were conducted with 163 students at a college of Basic Education in Kuwait. The results indicated that emojis were perceived to be a safe and effective means of diverting or avoiding negative or critical messages.

Li and Yang (2018) explored the practical use of emojis in internet-based communication. They asked 10 volunteers (aged 20–40) to compile a 3000-word corpus derived from the WeChat groups in which they were most active. In the final corpus, which totaled 34,047 words, 46 different emojis were categorized as having the following seven functions: humor, irony, turn-taking/giving, attitude/emotion signal, attitude/emotion intensity enhancer, illocutionary force modifier, and backchannel device. Emojis were used frequently (1908 in 34,047 words), primarily as signifiers of emotion (attitude/emotion signal and attitude/emotion intensity enhancer, 50.8%) and to facilitate interaction (turn-taking/giving, backchannel device, and illocutionary force modifier, 47.8%). The three emojis employed most often were thumbs-up (477 times), a rose (222 times), and the standard form of greeting and thanking people in China (108 times). Their use was standardized and exaggerated and thus differed a little due to people's culture. Participants were also more likely to employ positive emojis. The results thus indicate that emojis are utilized frequently, effectively, and pragmatically as part of communication on the internet. Notably, the online use of emojis differs slightly from non-verbal communication that takes place face-to-face. Moreover, positive emojis are often employed to generate a positive social and atmosphere that enhances rapport between groups of users. Adams (2013) conducted research to assess expectations related to the use of emoticons by the instructor. Teachers can use three emoticons to enhance their perceptions of the study promotes the use of no more than three emoticons per text. The author believes that teachers should not become tired of the use of emoticons.

However, few studies have assessed teachers' or instructor's usage of emojis in distance education. Due to the COVID-19 pandemic, most of the countries in the Middle East have had to make a remarkable transition from face to face education to distance education using different virtual platforms. As far as the researchers are aware, no previous research has investigated instructors' usage of emojis in distance education during the COVID-19 pandemic, or what types of emojis are used in virtual lectures. The present study, therefore, addresses the empirical gap on this topic in Middle Eastern's higher education.

3.   Methodology

A quantitative approach was employed as this was the most appropriate for the research. The population comprised all 462 high diploma students at AABU and all 250 high diploma students at the Arab Academic College in Haifa for the academic year 2019-2020. From these, a random sample of 343 high diploma students was selected. This was made up of 243 AABU students (55 males and 188 females, 219 of whom were studying for a BA in humanities and 24 in science), and 100 AAC students (24 males and 76 females, 56 of whom were studying for a BA in humanities and 44 in science). Based on a thorough review of the literature, the researchers designed an electronic questionnaire in accordance with the guidelines developed by Suresh (2018) and Brants (2019) using the SurveyPlanet

application. The questionnaire, in its initial form, comprised three demographic questions, 15 standard items, one closed-ended question, and two open-ended questions. The validity of the tool was established by a jury of four educational professors and two experts in social networking. In response to their comments, the researchers deleted four items and retained 11. An exploratory factor analysis was then performed on the data using both the KMO (Kaiser-Meyer-Olkin) and Bartlett's test, as shown in Table 1:

Table 1

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.913
Bartlett's Test of Sphericity	Approx. Chi-Square	1517
	df	55
	Sig.	.000

As indicated in Table 1, the sample size is adequate as the Kaiser-Meyer-Olkin value is equal to 0.913 and the tool is statistically significant (p = 0.000). Using the rotated component matrix, two factors were extracted. As shown in Table 2, the results indicate that all items are loaded onto two factors with values higher than 0.30. Specifically, 6 items out of 11 have large positive loadings on factor 1 (Q7, Q4, Q1, Q3, Q9, Q6) and 5 items out of 11 have large positive loadings on factor 2 (Q5, Q8, Q11, Q10, Q2).
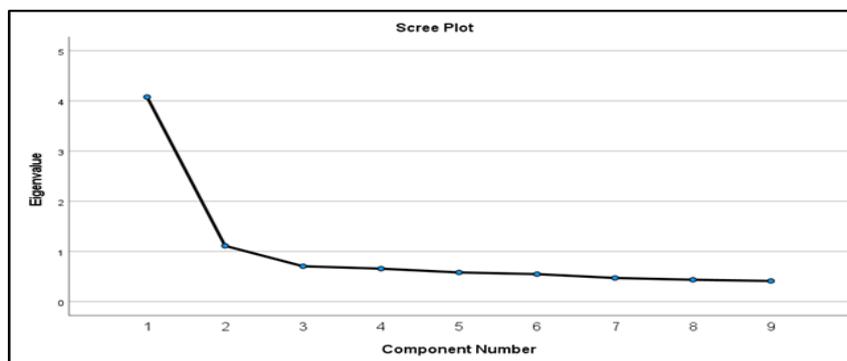
Table 2

Rotated Component Matrix

#	Items	Factors	
		1	2
Q7	The teacher uses this emoji to indicate that he/she likes the student's answer 👍.	.750	
Q4	The teacher uses this emoji to indicate student's alertness 🤓	.746	.318
Q1	The teacher uses this emoji at the end of a conversation 🌹	.730	
Q3	The teacher uses this emoji when he/she likes the student's unique answer❤️	.719	
Q9	The teacher uses this emoji to exchange feelings of love with students.😍	.701	.376
Q6	The teacher uses this emoji to denote approval and support for an idea presented to them🙏	.695	.337

| Q5 | The instructor uses this emoji to indicate that he\she does not wish to comment 😐 . | .771 |
| Q8 | The teacher uses this emoji to indicate that what they have read made them happy 😄 | .717 |

#	Items	Factors	
		1	**2**
Q11	The teacher uses this emoji to denote his/her frustration and sadness that a student does not understand what he or she has explained 😟		.711
Q10	The teacher uses this emoji to indicate that he/she is joking with the student 😉	.465	.623
Q2	The teacher uses this emoji when a student answers inconspicuously 🤔	.323	.592
	Eigenvalues	3.525	2.837
	% of Variance	32.043	25.792
	Cumulative %	32.043	57.835

The scree plot in Figure. 2 indicates that the two factors account for most of the total variability in the data as they have eigenvalues greater than 1 and explained 57% of the total variance. This suggests that the validity of the tool is at an acceptable level.

Figure. 2. *Scree Plot of the Eigenvalues for Both Factors*.

As indicated in Table 3, the Cronbach Alpha Coefficients for the two factors were greater than 0.7, which confirms the reliability of the tool.

Table 3

Reliability Analysis

Factor	Alpha coefficient
1	0.862
2	0.789

To test the internal consistency of the tool, a test-retest with a 22-day interval between the two administrations of the tool was then conducted with twenty high diploma students, who were later excluded from the sample. Cronbach's Alpha was calculated and found to be 0.89, which indicates a high level of internal consistency. The questionnaire was distributed to the study's sample in its final form between 21st June and 10th of September electronically due to the COVID-19 pandemic (see the appendix).

3.1 Statistical Methods

The researchers used the following statistical methods:

1- Factor analysis to test the tool's validity
2- Cronbach Alpha Coefficient to measure the value of the tool's reliability.
3- Calculating the means, standard deviations, frequencies, and percentages in dealing with data.
4- Two-way ANOVA to reveal any statistically significant differences in students' perceptions regarding the degree of emojis' usage by faculty members attributed to the gender and bachelor specialization variables.

4. Findings

The first research question: To what degree do instructors use emojis in distance education for two universities (Al-Bayt University in Jordan and the Arab Academic College in Haifa? To answer this question, the means and standard deviations for each item were calculated and are presented in table 4.

Table 4

The Means and Standard Deviations for Emoji's Usage in Distance Education

#	Item	Emoji	AABU		AAC	
			Mean	SD	Mean	SD
1-	The teacher uses this emoji at the end of a conversation.	🌹	2.11	0.71	1.91	0.77
2-	The teacher uses this emoji when a student answers inconspicuously.	🤔	1.95	0.69	1.75	0.72
3-	The teacher uses this emoji when he/she likes the student's unique	❤️	2.43	0.70	2.07	0.84

	answer.					
4-	The teacher uses this emoji to indicate your alertness.	🤓	2.04	0.71	1.63	0.69
5-	The instructor uses this emoji to indicate that he\she does not wish to comment.	😐	1.76	0.70	1.52	0.69
6-	The teacher uses this emoji to denote approval and support for an idea presented to them.	🙏	2.10	0.77	1.90	0.73
7-	The teacher uses this emoji to indicate that he/ she likes the student's answer.	👍	2.14	0.75	1.73	0.76
8-	The teacher uses this emoji to indicate that what they have read made them happy.	😃	1.89	0.70	1.83	0.78
9-	The teacher uses this emoji to exchange feelings of love with students.	😍	2.13	0.70	1.89	0.80
10	The teacher uses this emoji to indicate that he/she is joking with you.	😉	1.86	0.74	1.61	0.75
11	The teacher uses this emoji to denote his /her frustration and sadness that a student does not understand what he or she has explained.	☹️	1.79	0.72	1.54	0.66
	The degree to which the faculty uses emoji in distance education as a whole.		2.03	0.47	1.79	0.49

Table 4 indicates that the means for emojis' usage by instructors in distance education for Al-Bayt University in Jordan were moderate as they ranged between 1.76 -2.43. Item (3): *"The teacher uses the ❤️emoji when he or she likes the student's unique answer"* ranked highest as it had the top mean of 2.43 and a standard deviation of .70. This was followed by Item (7): *" The teacher uses the 👍 emoji to indicate that he/ she likes the student's answer"* with a mean of 2.14 and a standard deviation of 0.75 and Item (5): *"The teacher uses the 😐 emoji to denote his unwillingness to comment"* scored the lowest mean value of 1.76 and a standard deviation of 0.72. The total mean for emojis' usage by the AABU instructors in distance education was 2.03 with a standard deviation of 0.47. Table 1 indicates that the means for emojis' usage by instructors in distance education for the Arab Academic College in Haifa varied from moderate to weak as they ranged between 1.52 -2.07. Item (3): *"The teacher uses the ❤️ emoji when he or she likes the student's unique answer"* ranked highest with a top mean of 2.07 and a standard deviation of 0.84. This was followed by Item (1): *"The teacher uses the 🌹 emoji at the end of a conversation"* with a mean of 1.91 and a standard deviation of 0.77. Item (5): *"The*

teacher uses the 😐 *emoji to denote his unwillingness to comment"* had the lowest mean of 1.54 and a standard deviation of 0.66. The overall mean for emojis' usage by AAC instructors in distance education was 1.79 with a standard deviation of 0.49.

The second research question: Are there statistically significant differences (at α=0,05) in students' perceptions of their instructors' usage of emojis attributed to gender and bachelor specialization? To answer this question, a two-way-ANOVA was performed for gender and bachelor's specialization for both universities (Al-Bayt University in Jordan and the Arab Academic College in Haifa).

Table 5

The Means and Standard Deviations for Gender and Bachelor's Specialization

University	Variable	Category	N	Mean	SD
AABU	Gender	M	55	2.11	0.52
		F	188	2.00	0.46
AAC		M	24	1.83	0.56
		F	76	1.78	0.47
AABU	Bachelor specialization(BA)	Humanities	219	2.03	2.03
		Science	24	2.02	0.52
AAC		Humanities	56	1.90	0.49
		Science	44	1.66	0.47

As indicated in table 5, there are clear mean differences between students' perceptions of the degree of emojis' usage by faculty members according to gender and bachelor's specialization for the two universities (Al-Bayt University in Jordan, The Arab Academic College in Haifa.). A two-way ANOVA was therefore performed to reveal where these differences lay, as presented in Table 6.

Table 6

Two-Way ANOVA for Gender and BA Specialization

Variable	University	Sum of squares	Freedom degrees	Sum of squares	F	Statistical significance
Gender	AABU	.479	1	.479	2.141	.145
	AAC	.003	1	.003	.014	.906
BA Specialization	AABU	.007	1	.007	.032	.858
	AAC	1.323	1	1.323	5.646	.019
Error	AABU	53.720	240	.224		

	AAC	22.739	97	.234
Total	AABU	54.200	242	
	AAC	24.101	99	

Table 6 indicates the following:

-There were no statistically significant differences (α ≤ 0.05) in students' opinions regarding the degree of emojis' usage by faculty members at al-Bayt University in Jordan concerning gender. There were also no statistically significant differences (α ≤ 0.05) concerning gender regarding the degree of emojis' usage by faculty members of the Arab Academic College Academy in Haifa.

-There were no statistically significant differences (α ≤ 0.05) in students' perception of the degree of emojis' usage by al-Bayt University instructors concerning BA specialization. However, there were statistically significant differences (α ≤ 0.05) in students' perceptions of the degree of emojis' usage by Arab Academic College's instructors regarding Bachelor's specialization in humanities (F = 5.646, α = .019).

The third research question: Why do students in both universities (Al-Bayt University in Jordan, Arab Academic College in Haifa) need their teachers to use emojis in distance education? To answer this open-ended question, repetitions and percentages of reasons for given emojis' usage were extracted for the two universities (Al-Bayt University in Jordan, the Arab Academic College in Haifa), as shown in Table 7:

Table 7
Frequencies and Percentages of Reasons for Emojis' Usage

⁣#	Item	AABU		AAC	
		Frequencies	Percentages	Frequencies	Percentages
1	Emojis express what is on one's mind as an alternative to facial expressions.	66	%28	47	%47
2	They reduce time and effort.	54	%22	17	%17
3	They help to communicate and show interest.	46	%18	13	%13
4	They make learning effective.	22	%9	8	%8
5	They motivate students to interact.	17	%7	8	%8
6	Emojis are considered a method for demonstrating a student's understanding of the material.	12	%5	2	%2

7	They spare a lot of embarrassment and feelings of shame.	9	%4	2	%2
9	They add fun to a conversation.	8	%3	1	%1
	Total	243	%100	100	%100

Table 7 indicates the following:

For Al-al Bayt University in Jordan: the most frequent answer was "*Emojis express what is on one's mind as an alternative to facial expressions*"(28%), followed by "*They reduce time and effor*t" (22%) and "*They help to communicate and show interest*" (18). The least frequent answer (8) was "*they add fun to a conversation*" (3.0%).

For the Arab Academic College in Haifa: the most frequent answer "*Emojis express what is on one's mind as an alternative to facial expressions* " (47%) followed by "*They reduce time and effort* " (17%) and "*They help to communicate and show interest* " (13%). The least frequent answer was "*They add fun to a conversation* "(1%).

The fourth research question: Which emojis are used frequently by instructors in distance education?
To answer this question, the repetitions and percentages of the most commonly used emojis for both universities (Al-Bayt University in Jordan, the Arab Academic College in Haifa) were extracted, as indicated in Table 8.

Table 8

Frequencies and Percentages of the Emojis Used Most by Instructors in Distance Education

!#	Emoji	AABU		AAC	
		Frequencies	Percentages	Frequencies	Percentages
1	👍	147	60.5	65	65.0
2	❤️	54	22.2	10	10.0
3	🌹	8	3.3	5	5.0
4	😉	4	1.6	2	2.0
5	🤔	13	5.3	2	2.0
6	😀	14	5.8	7	7.0
7	🤌	2	.8	3	3.0
8	🙁	1	.4	6	6.0
	Total	243	100.0	100	100.0

Table 8 indicates the following:

 -For the al-Bayt University sample: The most frequent emoji was (👍) with (60.5%), followed by (❤️) with (22.2%), and (🤌 🙁) yielding the lowest frequencies of 8% and 4.0%, respectively. For the Arab Academic College' sample: the most frequent emoji was (👍) with (65.0%), followed by (❤️) with (10%), and(🤔 😉) yielding the lowest frequencies of 2.0%, respectively.

The fifth research question: *Who uses emojis more in distance education, female instructors, or males*? After calculating the frequencies and percentages of the data, the results showed that 215 of the AABU sample (91%) and 88 of the AAC sample (88%) perceived female instructors as being more active in using emojis in distance education, as shown in Figure 3.
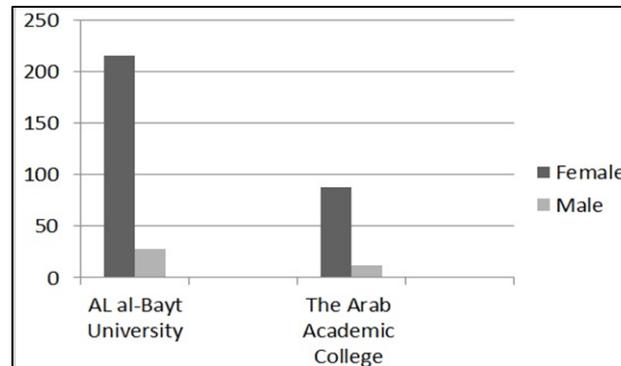
Figure. 3. *Instructors' Emojis' Usage According to Gender*

5. Discussion

The results contrasted surprisingly with the study's assumption that emojis would be effectively used by instructors of both universities in distance education. The first question revealed a moderate usage of emojis in distance education; this is because the instructors of both universities avoided connecting emotions to another party in virtual lectures as this would make them appear too informal. They also viewed sentences without emojis as items that need to be taken seriously. When an emoji is used, it signals that part of the interaction is supposed to be humorous or entertaining. This result is not consistent with the call to increase the use of emojis and express feelings in education cited by several researchers (Sperber & Wilson, 1986; Adams, 2013; Li & Jang, 2018; Na, Lavoué, Aritajati, Bartrd, & Rosson, 2019).

The results for the second research question indicated no statistically significant differences in students' perceptions of instructors' usage of emojis at both universities according to gender. This suggests that female and male students at both universities were aware of instructors' usage of emojis in distance education. This result is in line with that of Herring and Dainas (2018) but it does not align well with the findings of other studies (e.g., Sokolov et al. 2011; Shahbaz et al. 2017; Herring & Daina, 2018; Butterworth et al. 2019; Haji and Bakir, 2019; Hameed, 2019; Wirza et al. 2020; Abdelghafoor, 2020) which highlighted females' effective role in communication. Regarding bachelor specialization, there were statistically significant differences in the AAC sample regarding bachelor's specialization in humanities. This might be because AAC humanities students are more expert in human relationships and better communicators than AABU students as they possess a high level of digital communication skills in distance education. This result is in accordance with findings reported by several other researchers (Hameed, 2019; Strauss, 2017) who confirmed that the nature of an academic specialization affects communication skills and understanding.

The responses of both samples to the third question indicate the same preferences for using emojis in distance education. Both strongly agreed that emojis express what is on one's mind as an alternative to facial expressions. This result is consistent with several other studies (e.g., Sperber & Wilson, 1986;

Na et al. 2019; Abdulhafez, 2019; Dadar, 2019). The results also indicated that students perceive emojis as tools to reduce time and effort in virtual communication. The responses "they spare a lot of embarrassment and feelings of shame" and "they add fun to a conversation" were the least likely reasons for using emojis in distance education. This is due to students' perceptions of distance education as a formal process where there is no place for feelings or emotions.

One result for the fourth question was consistent with the findings of Li and Yang (2018) as it indicated that instructors of both universities use one specific emoji, the thumbs-up (👍), more frequently in distance education to signify positivism, agreement, support, motivation, liking, and assurance. Its use is similar to the use of the word 'perfect' or 'yes' as an answer. It is acceptable for an instructor to use that emoji as its meaning is the same in online interaction, therefore it cannot be interpreted differently. The heart emoji ❤️ usually represents romance and true love; however, it has a different meaning in distance education as it is commonly used by instructors of both universities to reinforce a distinguished answer. Instructors should be aware that the use of the heart emoji❤️ may be interpreted differently in distance education according to gender. The least used emojis by AABU instructors were the sad face 😟 and the okay 👌 emojis. The former is not common in distance education as it expresses sadness and disappointment, which can generate frustration for learners and a feeling of embarrassment. The okay emoji 👌 is not frequently used in Middle-eastern culture as it is offensive where the preference is to employ the thumbs-up emoji. Regarding AAC instructors, they rarely used the thinking face emoji 🤔 as it could have a negative meaning (e.g., I cannot believe someone is giving such a stupid answer). The winking face emoji 😉 is also rarely used as it may have a negative meaning in distance education (e.g., the instructor is flirting, kidding, or not being serious). This result is significant as it highlights the best emojis to use in distance education by instructors.

The results for the fifth question showed that female instructors were more aware and active in using emojis in distance education. This result is in line with numerous studies (Sokolov et al. 2011; Shahbaz et al. 2017; Alqunayeer & Rahmt-Allah, 2019; Calin, 2019; Abdelghafoor, 2020) found that females are better communicators than males. In general, females are effective at using and reading others' body language and are more expressive than males. When it comes to virtual lectures and distance education, emojis are excellent substitutes for physical gestures as they help in adding tone and clarity to a context and improve the capacity to make words more understandable. This result contrasts with that of Herring and Dainas (2018) who identified no significant gender differences in emojis' usage.

6.   Conclusions and Future Implications

From the above, we conclude that students' perceptions of their instructors' usage of emojis in distance education in both universities were similar because they are a direct output of the same Middle Eastern environment and culture. The results revealed that university Instructors are reluctant to use emojis in virtual classrooms and lectures as they prefer to appear more formal when communicating with their students. Therefore, they use neutral emojis that do not carry more than one meaning, and are culturally and socially recognized, and cannot be interpreted unacceptably. Emojis are extremely helpful in our increasingly text-based interactions, therefore, further research is needed to confirm these novel findings and specify which emojis to use and which to avoid in distance education.

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Appendix

Electronic survey (translated).
https://app.surveyplanet.com/share/5ee91a2a09c0b30df70bdf36

Dear respondent:

We are researching to assess instructors' usage of emojis in distance education for high diploma students. Please assist by completing this survey; we appreciate your taking the time to complete it. Do NOT write your names on this questionnaire. If there are items you do not feel comfortable

answering, please skip them. Your responses are voluntary, confidential, and cannot be identified by other individuals. Thank you for your cooperation. Your assistance is highly appreciated.

1   Demographic questions:

  I.   Q1   University: A) AABU   B) AAC
  II.   Q2   Gender: A) Male   B) Female
  III. Q3   Bachelor specialization: A) Humanities   B) Science

2   On a scale where 3 represents (high), 2 represents (medium), and 1 represents (never), how would you rate each of the following statements?

#	Item	Emoji	Rate		
			High	Medium	Never
1.	The teacher uses this emoji at the end of a conversation.	🌹			
2.	The teacher uses this emoji when a student answers inconspicuously.	🤔			
3.	The teacher uses this emoji when he or she likes the student's unique answer.	❤️			
4.	The teacher uses this emoji to indicate student's alterness.	🤓			
5.	The instructor uses this emoji to indicate that he\she does not wish to comment.	😐			
6.	The teacher uses this emoji to denote approval and support for an idea presented to them.	🙏			
7.	The teacher uses this emoji to indicate that he/she likes the student's answer.	👍			
8.	The teacher uses this emoji to indicate that what they have read made them happy.	😀			
9.	The teacher uses this emoji to exchange feelings of love with students.	😍			
10.	The teacher uses this emoji to indicate that he/she is joking with the student.	😉			
11.	The teacher uses this emoji to denote his/her frustration and sadness that a student does not understand what he or she has explained.	☹️			

        3   Who uses emojis more in distance education - female instructors or males?
        A)   Males   B)   Females.
        4   Which emoji is used most frequently by instructors in distance education?

…………………………………………………………………………………………..

5   As a student, I prefer instructors to use emojis in distance education because: …………………………………………………………………………………………..