Journal of Positive School Psychology http://journalppw.com
2022, Vol. 6, No. 8, 5451-5467

The Impact Of 7Cs Of Communication Interaction On Effective Teaching Among Students Of Jordanian Universities

Amani Mashhoor Al-Refai[1] , Alaeddin Ahmad[2] , Laura Wasim Akroush[3] , Reem Suwan[4] , Mohammad Sumadi[5]

[1]Applied Science University; Amman, Jordan, a_refai@asu.edu.jo
[2]E-Marketing and Social Media Department, Princess Sumaya University for Technology (PSUT), Amman 11941, Jordan; a.ahmed@psut.edu.jo
[3]E-Marketing and Social Media Department, Princess Sumaya University for Technology (PSUT), Amman 11941, Jordan; lau20200007@std.psut.edu.jo
[4]E-Marketing and Social Media Department, Princess Sumaya University for Technology (PSUT), Amman 11941, Jordan; ree20218180@std.psut.edu.jo
[5]E-Marketing and Social Media Department, Princess Sumaya University for Technology (PSUT), Amman 11941, Jordan; m.sumadi@psut.edu.jo

Abstract

This research aims to study the impact of 7Cs of communication interaction on effective teaching among students of Jordanian Universities. Additionally, it seeks to examine the moderating role of the type of school. The research's independent variables consist of 7Cs (care, confer, captivate, clarify, consolidate, challenge, and classroom management), while the dependent variable is represented by effective teaching. A quantitative method used a cross-sectional online research questionnaire to collect the primary data. A sample of (N=1244) respondents, who are students at Jordanian universities and using social media platforms, were selected. Therefore, a purposive sampling technique was used in this research. The result of this research confirms the impact of 7Cs of interaction on effective teaching among students of Jordanian Universities. This study provided useful data regarding the 7Cs of interaction and their impact on effective teaching, among students of Jordanian universities. Although this research has provided valuable insights into the area of this research. Future research is therefore required to extend these results in other geographical areas and among other students of different nationalities and countries.

Keywords: 7Cs, Effective Teaching, Type of school, Jordanian Universities.

1. Introduction

Planning for learning is probably considered the most significant challenge is confronting education today. New technologies provide a variety of methods for students to interact with rich multimedia, engage, and cooperate throughout their learning process. Despite this, educators lack the required e-learning abilities and digital literacy, which could be applied through the proper use of technologies, and that is, to enable them to make successful creative decisions. Teaching methods and designs have impressively developed in the last ten years; educators now expect to continuously be guided and supported on their teaching methods; to guarantee satisfying results post teaching. Tripod's 7Cs framework is based on three components: personal support, curricular support, and academic press (Ferguson & Danielson, 2014). The Tripod project use surveys to learn about student perceptions and views on teaching methods, classroom learning environments, student engagement, and classroom practices. The 7Cs framework divides components into three conceptual categories: personal support, which includes both 'care and confer,' curricular support, which consists of 'captivate, clarify, and consolidate' and finally, academic press, which involves 'challenge and classroom management. Each element of the 7Cs framework will be discussed thoroughly in this research.

Tripod's framework offers several benefits to both teachers and students, and that is by allowing them to analyze their strengths and weaknesses. Teachers can now use survey findings to plan focused professional development strategies and progress their efforts in ways that would ultimately improve student performance. Moreover, using Tripod's research-based methodology for data analysis and reporting allows educators to ensure that improvement actions are targeted and on track. Random improvement actions would not be as beneficial as ones that are initially aimed for, based on data gathered from Tripod surveys. Finally, the Tripod survey, which is trusted by policymakers across the country, may also be used as one of several methods to improve teacher evaluation systems. Continuous evaluation is tremendously significant nowadays, as teaching methods are uninterruptedly improving and lots of strategies are being tested over the years (Ferguson et al, 2015)

Tripod surveys record students' impressions of their personal engagement in classes in addition to providing data on teaching approaches. Each classroom is a unique atmosphere with a unique degree of participation. Tripod engagement indicators, which are based on Erik Erikson's first five stages of human identity formation (Cherry, 2018), indicate educators' top concerns regarding student involvement (Ferguson, 2010).

The first stage is trust, which can be noticed when students feel safe and welcome in class. Cooperation is the second stage, and it requires students to work with others and abide by class rules. The third stage is ambition, and this occurs when students aim to learn as much as possible. Fourthly comes diligence, which represents students working hard and facing setbacks with resilience. And the final stage is satisfaction, which occurs when students sense achievement and efficacy based on effort and progress.

According to Ferguson's et al. (2015) research, Tripod's 7Cs can help predict student engagement. The 7Cs and Tripod's metrics of student engagement, when combined, give essential information to teachers implementing professional development and school improvement efforts (Ferguson, 2015). The current research aims to study the impact of 7Cs of interaction on effective teaching among students of Jordanian universities. In addition, it seeks to examine the moderating role of the type of school.

2. Literature Review

This part of the research introduces a review of prior literature on the 7C's of interaction in effective teaching to support answering the major research question. The 7C's are as follows: care, confer, captivate, clarify, challenge, consolidate, and classroom management. The literature review gives insight into the 7C's of interaction, by defining each 'C' and explaining how each 'C' impacts and relates to teaching.

2.1 Tripod's 7Cs framework for effective teaching

The Tripod framework is based upon theoretical and empirical research in education, psychology, and organizational studies. At its core, are the 7Cs of effective teaching, a collection of best practices that recent research has linked to student engagement (effort and behavior) and achievement (gains on standardized tests).

Tripod's 7Cs framework for effective teaching and related survey measures cover critical aspects of teaching methods. Student survey data matched with the 7Cs framework provide a simplified approach for teachers and school administrators to deliver practical feedback. Higher student accomplishment, engagement, and motivation, as well as success skills and attitudes, are predicted by better survey responses on the 7Cs components (Ferguson & Danielson, 2014; Ferguson et al., 2015; Kane & Cantrell, 2010; Kane et al., 2013; Stuit et al., 2013). Tripod surveys, in conjunction with the 7Cs framework, promote reflection, goal-setting, professional development, and instructional improvement.

2.2 7C's of Communication Interaction

Briefly elucidated, care is expressed when teachers or educators show concern and commitment to students, emotionally support them, and show interest in the ideas they come up with and the issues they discuss in class. Confer includes eliciting students' opinions by asking them questions and inviting them to speak up. Captivate concerns teacher behaviors that make learning engaging rather than boring. Challenge refers to both effort and rigor, pushing students to work hard and think hard. It is concerned with how teachers check for their students' understanding and assist them in organizing the material for more effective encoding in memory and more efficient reasoning. Classroom management entails creating a respectful, cooperative learning atmosphere with on-task behavior is essential.

2.2.1 Care

Care is expressed when teachers or educators show concern and commitment to students, emotionally support them, and show interest in the ideas they come up with and the issues they discuss in class. This helps build emotional safety for students who lack it for multiple reasons. Caring for students and creating helpful and optimistic teacher-student relationships is vital for teachers' qualified roles. Studies continue to highlight the impactful significance of care that is addressed by teachers to students. Being there for students, through listening and showing interest in their concerns, can dramatically improve students' both, academic and social life. Additionally, teachers offering a great level of emotional support as specified by an optimistic emotional tone in the classroom, sensitive replies to students' social, emotional, and academic needs, and deliberation of their attentiveness is one feature of high-quality classrooms. According to data gathered from (Aldrup et al., 2022; Cothran & Ennis 2000; Cothran et al., 2003; Ferreira & Bosworth, 2001; Garrett et al., 2009; Garza, 2009; Garza et al., 2010), teachers who showed care to their students in various ways and had respectful relationships with them, resulted in more favorable and positive overall classroom behavior. Moreover, students made a

clear distinction between academic and personal caring, believing that they must first feel cared for, in order to care about school-related issues. Therefore, teachers were commonly labeled as caring or uncaring by students, and these contrasts were fundamental to their discussions on effective classroom management (Cothran & Ennis, 2000; Cothran et al., 2003; Ferreira & Bosworth, 2001; Garrett et al., 2009; Garza, 2009; Garza et al., 2010). Positive teacher-student connections promote more cooperation, coordination participation, and engagement in the classroom. They also serve to develop a friendly, mainstream school environment that encourages equality, social and emotional learning, and better student performance (Nishioka, 2019).

Teachers' capacity to speak and listen to students was critical to their perception of care. In line with (Ferguson, 2015), caring relieves anxiety and gives people a sense of belonging and attachment. Caring extends beyond "niceness"; caring teachers work hard and go above and beyond to assist students. Therefore, it is highly preferable for teachers to care for students in order to guarantee better academic and social performance. An example of a Tripod survey item measuring Care is: “My teacher really tries to understand how students feel about things” (Ferguson, 2015). From the previous literature, the following hypothesis can be hypothesized:

H1.a: Care dimension has a significant impact on effective teaching among students of Jordanian universities at sig. level ≤ 0.05.

2.2.2 Confer

It includes eliciting students' opinions by asking them questions and inviting them to speak up. Therefore, students will have an incentive to stay aware and interested when they expect the teacher to call on them to speak in class (Ferguson, 2018). Furthermore, knowing that the teacher honors each point of view, provides positive reinforcement for the time and effort required to develop a viewpoint in the first place. In addition to that, if students are required to respond not only to their teacher but also to each other in the classroom, a learning community with all the social reinforcements that entail, may emerge (Sieberer-Nagler, 2016). "My teacher allows us time to discuss our thoughts", is an example of a confer item (Kuhfeld, 2022). From the previous literature, the following hypothesis can be hypothesized:

H1.b: Confer dimension has a significant impact on effective teaching among students of Jordanian universities at sig. level ≤ 0.05.

2.2.3 Captivate

It is teachers that make learning either engaging or boring. Teachers who captivate students make the information fascinating by demonstrating its relevance to topics that students are already interested in. Brain research, (Ferguson, 2018), shows that engaging learning experiences and relevant material help students recall lessons better than when the experience is dull and the material seems utterly irrelevant. (Ferguson, 2018) "My teacher makes lessons exciting," and "I often feel like this class has little to do with actual life outside of school," are two examples of survey items that measure stimulation and relevance. From the previous literature, the following hypothesis can be hypothesized:

H1.c: Captivate dimension has a significant impact on effective teaching among students of Jordanian universities at sig. level ≤ 0.05.

2.2.4 Clarify

This element involves behaviors shown by teachers and addressed to students, which eventually promote understanding (Ferguson, 2018). Interactions that help students persevere and clear up confusion are especially important. Each student carries with them specific gaps in understanding as well as both right and wrong

interpretations of the world around them. Teachers must be able to diagnose students' skills and knowledge in order to be effective, and they must have multiple ways of explaining ideas that are likely to be difficult for students to grasp. (Egeberg & McConney, 2022). Teachers must also assess how much information students can absorb at one time and differentiate instruction based on individual maturity and interest. "My teacher has several good ways to explain each topic that we cover in this class," for example, is an example of a Tripod survey item measuring Clarify (Ferguson, 2018). From the previous literature, the following hypothesis can be hypothesized:

H1.d: Clarify dimension has a significant impact on effective teaching among students of Jordanian universities at sig. level ≤ 0.05.

2.2.5 Challenge

Another element of Tripod's 7Cs is the term "challenge", which refers to both effort and rigor, pushing students to work hard and think hard. Challenging teachers tend to monitor student effort and confront students if they believe it is insufficient or inadequate. (Ferguson, 2018). For instance, students who do not devote enough time to their work or who give up too easily in the face of difficulties are encouraged to work harder. Others who do not think deeply or who resist reasoning their way through difficult questions are similarly supported and pushed (Egeberg & McConney, 2022). A series of follow-up questions may be asked by the teacher in order to elicit deeper, more thorough reasoning. "In this class, my teacher accepts nothing less than our full effort," for example, is an example of a Tripod survey item measuring Challenge for effort. "My teacher wants us to use our thinking skills, not just memorize things," says one item measuring Challenge for rigorous thinking (Ferguson, 2018). From the previous literature, the following hypothesis can be hypothesized:

H1.e: Challenge dimension has a significant impact on effective teaching among students of Jordanian universities at sig. level ≤ 0.05.

2.2.6 Consolidate

It is concerned with how teachers check for their students' understanding as well as assisting them in organizing the material for more effective encoding in memory and more efficient reasoning (Ferguson, 2018). These practices include reviewing and summarizing material at the end of classes and connecting ideas to material covered in previous lessons. Teachers who excel at consolidation discuss the relationships between ideas and assist students in identifying patterns. There is a large body of evidence supporting the hypothesis that these types of instructional activities improve retention by developing multiple mental pathways for retrieving knowledge and combining disparate bits of knowledge in effective reasoning. (Egeberg & McConney, 2019). "My teacher takes the time to summarize what we learn each day," for example, is an example of a Consolidation survey item. (Ferguson, 2018). From the previous literature, the following hypothesis can be hypothesized:

H1.f: Consolidate dimension has a significant impact on effective teaching among students of Jordanian universities at sig. level ≤ 0.05.

2.2.7 Classroom Management

It entails that creating a respectful, cooperative learning atmosphere with on-task behavior is essential for effective classroom management (Ferguson, 2018). Classroom management is universally seen as a key dimension of teachers' work (Egeberg & McConney, 2019) Students are not responsive recipients of teacher behaviors or acts. (Schlosser 1992; Sheets 2002; Sheets and Gay 1996) Students might choose to oppose or obey by disregarding, avoiding, manipulating, or questioning instructors' requests. Students' activities are influenced by their perceptions of

classroom life and their interactions with teachers (Schlosser 1992; Sheets 2002; Sheets and Gay 1996). From the previous literature, the following hypothesis can be hypothesized:

H1.g: Classroom management dimension has a significant impact on effective teaching among students of Jordanian universities at sig. level ≤ 0.05.

2.3 Effective Teaching

There is no universally accepted definition for effective teaching. According to Skelton (2004), effective teaching is a 'contested concept'. It has been generally understood as teaching that is focused on and concerned with students and their knowledge (Devlin, & Samarawickrema, 2010). Effective teaching is defined by Medley as a teacher in teaching activities that can encourage students to learn and enhance to attain the teaching aims, whereas, Koppi, Lublin, and Chaloupka believe that effective teaching is to direct and lead students to energetically contribute to the teaching of intellectual learning; effective learning and effective teaching can motivate student's want to learn, to encourage students to vigorously grasp the knowledge, problem-solving skills, teamwork skills, and the formation of lifelong learning attitude of learning and teaching (Chen, 2017). Effective teaching has been commonly understood as teaching that is concerned with and concertation on students and their learning (Antiado et al., 2021). Beyond that essential supposition are two generally accepted items of effective university teaching: that it involves a set of certain practices and skills as recognized by research by Penny (2003) and that it meets the necessities of the context in which it arises (Devlin & Samarawickrema, 2010). In prior years, effective teaching theory is highly extensive and pervasive in the application of higher education (Chen, 2017). According to Devlin & Samarawickrema (2010), there is a growing stress on both guaranteeing effective teaching in universities and being able to prove that effectiveness (Devlin & Samarawickrema, 2010).

According to Cia & Abdul Rahim (2012), effective teaching is not a procedure that can be completed with a high volume. It is a process that cannot only deliver the skill, value, and knowledge but also can get a touch of their student's heart (Hamdan, 2015). These skills are explored in turn in this paper.

3. Conceptual Framework

The current research aims to draw interest towards the impact of 7Cs of communication interaction on effective teaching, with the moderating role of the type of School, in a comparative context involving two higher education sectors, which will eventually contribute to the established rich body of knowledge. The researchers developed the model for this research based on the literature review (Cherry, 2018; Cothran & Ennis 2000; Cothran et al., 2003; Ferreira & Bosworth, 2001; Garrett et al., 2009; Garza, 2009; Garza et al., 2010; Egeberg & McConney, 2022; Ferguson & Danielson, 2014; Ferguson et al., 2015; Kane & Cantrell, 2010; Kane et al., 2013; Stuit, Ferguson, & Phillips, 2013; Ferguson, 2018; Kuhfeld, 2022; Nishioka, 2019; Schlosser 1992; Sheets 2002; Sheets and Gay 1996; Sieberer-Nagler, 2016).

4. Research Model

Independent Variables

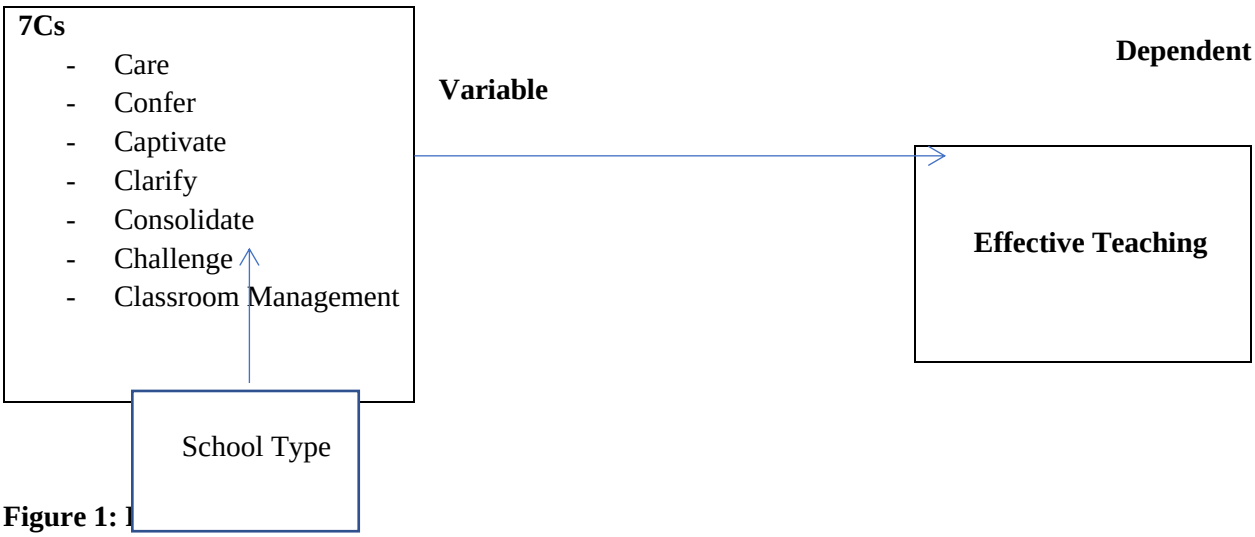

Figure 1: I

5. Research Methodology

This section contains a description of the method of data collection in addition to a description of the study population and the sample chosen, as well as the measurement and scaling. Lastly, this section demonstrates the results of the questionnaire.

5.1 Research Design

The most suitable type of research for the chosen matter is causal research, since this paper aims to study a cause-and-effect type of relationship (7Cs of communication interaction and effective teaching as direct effect. Also, 7Cs of communication interaction and effective teaching moderated by school type as indirect effect).

5.2 Data Collection Method

This research conducts a questionnaire-based survey-Likert Scale. Participants were asked to rate how strongly they agreed with each statement on a scale of strongly disagree (1) to strongly agree (5) with a middle point representing a neutral level of agreement.
The primary data was collected through an online questionnaire.

5.3 Population, Sample, and Procedure
University students in both public and private sectors are the target demographic of this study. Respondents are chosen on the basis of the purposive sampling technique. A total of 4 public universities and 3 private universities in Jordan were contacted to collect data in the 2020/2021 academic year. After obtaining the approval from these universities, an email with the online form of the questionnaire was sent to responsible parties in these universities, who in their turn sent it to all of their university students. The valid research respondents are 1244.

5.4 Measurement and Scaling
Published literature was examined to collect well-defined and tested measurements scale for the variables used in this study. Items were revised to suit the communication and interaction context. As seen in Table 2, the independent variable 7Cs dimensions, which was divided into the seven main dimensions of communication interaction, namely: care, confer, captivate, clarify, consolidate, challenge, classroom management. The second construct is dependent variable represents by the effective teaching among academic staff.

6. Respondents Demographic Profile

Out of the 1263 response received, only 1244 responses were analyzed, the remaining 19 response were excluded since they didn't match the conditions to proceed to the survey items.

Table 1: Demographics

		Frequency	Percent
Gender	Female	713	0.573
	Male	531	0.427
	Total	1244	100.0
Academic Level	1st Year	62	0.049
	2nd to 3rd	370	0.297
	4th to 5th	420	0.337
	6th	322	0.258
	Postgraduate	70	0.056
	Total	1244	100.0
Type of University	Public	514	0.414
	Private	730	0.586
	Total	1244	100.0
Type of school	Scientific	569	0.457
	Humanities	675	0.543
	Total	1244	100.0

In table 1, the demographics details of the analyzed sample are listed. The demographics data revealed that most of the responders were female, females were approximately 57 percent of the responders, and the remaining 43 percent were males. Nearly 50 percent of the respondents were between the academic year level of fourth and fifth, and sixth year. Nearly 55 percent of the respondents belong to humanities schools, and 58 percent of the respondents are in private universities.

7. Data Analysis

7.1 Descriptive Analysis

Table 2: Means and Standard Deviations of all items

Dimension	Mean	Std. Deviation	Importance

Care			
Build strong relationships with me	3.824	1.01	High
Address learning needs	3.431	.954	Medium
Confer			
Encourage and value students' ideas and views	3.733	.854	High
Respect perspectives	3.452	.855	Medium
Promote discussion	3.942	.847	High
Invite, welcome, and respect my ideas and feedback	3.912	.954	High
Captivate			
Spark and maintain student interest in learning	3.411	.925	Medium
Design stimulating lessons	3.826	1.0.5	High
Facilitate active participation	3.510	.922	Medium
Clarify			
Help students understand content and resolve confusion	3.988	.892	High
Explain clearly	3.919	1.025	High
Check for understanding	4.021	.8913	High
Provide constructive feedback	3.921	1.132	High
Consolidate			
Help students integrate and synthesize key ideas	3.425	.991	Medium
Review and summarize	3.794	.452	High
Connect ideas	3.985	.951	High
Challenge			
Insist that students persevere and do their best work	3.869	.913	High
Press for rigorous thinking	3.688	.613	High
Press for quality work	3.941	.927	High
Press for persistence	3.922	.965	High
Classroom Management			
Foster orderly, respectful, and on-task classroom behavior	3.501	.824	Medium
Manage activities	3.854	.862	High
Manage behavior	3.914	.736	High
Effective Teaching			
Academic staff ……..			
Has knowledge, enthusiasm, and responsibility for learning.	3.866	1.740	High
Has classroom activities that encourage learning.	3.201	1.202	Medium
Has assessment activities that encourage learning through experience.	3.957	.9557	High

Table 2 shows the means and standard deviation of each item in the questionnaire. All items' mean ranged from 3.411 to 4.021 representing that most respondents agreed with the statements. The statement under clarity "Check for understanding" shows to have the highest value among all items, with a mean of 4.021. Clarity and Challenge demonstrate to have the highest means and therefore, they show to be highly significant. The means for the statements under clarity range from 3.919 to 4.021, representing very high means and being highly significant.

Clarity has the highest means against all variables. In addition, the means for the statement under challenge range from 3.688 to 3.941, which also represent being highly significant. The lowest value of mean is for the statement "Spark and maintain student interest in learning" which falls under the variable Captivate.

7.2 Simple Linear Regression Analysis

To investigate H1: 7Cs of interaction have a significant impact on effective teaching among Jordanian universities students at a sig. level of 0.05. It was tested as seen in table 3, the (R) value for simple correlation is 62.9%, indicating that the association between two variables is commonly thought to be a very strong positive relationship. The (R^2) value indicates how much of the difference in effective teaching among Jordanian universities students can be explained by 7Cs communication of interaction variables. In this case, 40.3% of the variance can be interpreted, with the remaining 59.7% explained by factors not used in the regression model. Hypothesis 1 is therefore accepted.

Table 3: Regression model between 7Cs and effective teaching

Dependent Variable	Model Summary			ANOVA			Coefficient		
	R	R^2	Adj. R^2	F	df	Sig.	β	t	Sig.
Effective Teaching	0.629	0.403	0.422	337.272	1	0.001	0.629	19.026	0.001

7.3 Multiple Regression Analysis

H1 is divided into seven sub hypotheses, multiple regression analysis in SPSS software V23 was used to test the following sub hypothesis:

H1.a: Care dimension has a significant impact on effective teaching among Jordanian universities students at at sig. level ≤ 0.05.

H1.b: Confer dimension has a significant impact on effective teaching among Jordanian universities students at at sig. level ≤ 0.05.

H1.c: Captivate dimension has a significant impact on effective teaching among Jordanian universities students at at sig. level ≤ 0.05.

H1.d: Clarify dimension has a significant impact on effective teaching among Jordanian universities students at at sig. level ≤ 0.05.

H1.e: Consolidate dimension has a significant impact on effective teaching among Jordanian universities students at at sig. level ≤ 0.05.

H1.f: Challenge dimension has a significant impact on effective teaching among Jordanian universities students at at sig. level ≤ 0.05.

H1.g: Classroom management dimension has a significant impact on effective teaching among Jordanian universities students at at sig. level ≤ 0.05.

Table 4: Regression between 7Cs dimensions and effective teaching

Dependent Variable	(R)	(R^2)	F	DF	Sig*	B		T	Sig*
Effective Teaching	0.892	0.795	76.612	4	0.001	Care	.267	7.159	0.000
						Confer	.119	4.418	0.005
				1240		Captivate	.187	4.621	0.013
						Clarify	.149	4.740	0.000
				1243		Consolidate	.143	4.506	0.009
						Challenge	.164	4.539	0.000
						Classroom management	.234	6.106	0.001

*The impact is significant at level ($\alpha \leq 0.05$)

Table (4) shows the impact of 7Cs dimensions (care, confer, captivate, clarify, consolidate, challenge, classroom management) on the effective teaching. The regression model achieved a very good degree of fit, as reflected by (R) and (R^2) value (0.892), (0.795) respectively, which asserted that (89.2%) of the explained variation in effective teaching can be accounted for 7CS factors. On the other hand, Table (4) for the executive data set indicated that for a one unit increase in 7Cs of students (care, confer, captivate, clarify, consolidate, challenge, classroom management) can significantly predict a (26.7%), (11.9%), (18.7%), (14.9%), (14.3%), (16.4%), and (23.4%) increase in effective teaching respectively. However, for (care, confer, captivate, clarify, consolidate, challenge, classroom management) significance level was ($\alpha > 0.05$), therefore, it is assumed that they have a significant impact on effective teaching.

Moreover, Table (4) shows that the analysis of variance of the fitted regression equation is significant with F value of (76.612). This is an indication that the model is a good one. Since the p-value is ($\alpha \leq 0.05$), it shows a statistically significant relationship between the variables at (0.95) confidence level. As a result, all the sub hypotheses are **accepted**:

7.4 Hierarchical Regression Analysis

After inserting the controlled variable, which is the type of school into the model, hierarchical regression shows if variables of significance justify a statistically meaningful amount of variance in the dependent variable (effective teaching). In order to test (H2), which is the moderator effect, the type of school was inserted as the control variable (moderator) into the hierarchical regression analysis in SPSS and the results showed that type of school has a significant positive effect as a moderator in the relationship between 7Cs and effective teaching with the percentage of (R^2 = 89.2%) and R change of (11.3%) between model 1(without the control variable) and model 2 (with the control variable).

Table 5: Hierarchal regression results after inserting moderator effect

Dependent Variable	Independent Variables	Model 1			Model 2		
		β	T	Sig*	β	T	Sig*
Effective Teaching	7Cs (care, confer, captivate, clarify, consolidate, challenge, classroom management).	0.822	17.019	0.000			
	7CS X Type of School Factor				0.892	17.908	0.000
	R	0.822			0.910		
	R^2	0.675			0.828		
	ΔR^2	0.753			0.194		
	ΔF	436.715			568.354		
	ΔF Sig.	0.000			0.000		

Table (5) shows the moderate impact of type of school on the relationship between 7Cs and effective teaching in Jordan. The first model reflected based on the results the value of the correlation coefficient (R= 0.822), this demonstrates that there is a positive correlation between effective teaching and independent variables (7Cs). The results also show the statistically significant impact of these variables on effective teaching, with F value of (436.715) since the p-value is less than (0.05). As the value of the coefficient of determination in the first model is (R^2 = 0.753), this indicates that the 7Cs factors (care, confer, captivate, clarify, consolidate, challenge, classroom management) of Jordanian university students explain (75.3%) of the variance in effective teaching.

In the second model, the entry of the moderate variable (type of school) to regression model, increased value of the correlation coefficient to become (R = 0.910) as well as the value of the coefficient of determination (R^2) increased to (0.828), and this percentage is statistically significant, where the value of (ΔF = 568.354) and the significance level (Sig. ΔF = 0.000) which is less than (0.05).This confirms that there is a statistically significant impact of type of school factor (moderate variable) on the relationship between 7Cs (care, confer, captivate, clarify, consolidate, challenge, classroom management) and effective teaching, where the percentage of interpretation of variation in independent factors has improved by (19.4%). As a result, the following hypothesis is **accepted**:

H2: Type of school moderated the impact of 7Cs on effective teaching among Jordanian universities students at at sig. level ≤ 0.05.

8. Results and Discussion

After analyzing the gathered data, this research aimed at drawing interest towards the impact of 7Cs of interaction on effective teaching among students of Jordanian universities, with the moderating role of the type of school; and that was by establishing a conceptual framework.

The influence the 7Cs of interaction had on effective teaching was verified in this research, providing clear support for the current research context. Along with exploring the factors

impacting effective teaching, the newly developed model primarily generates new relationships within these variables.

H1: 7Cs of interaction have a significant impact on effective teaching among Jordanian universities students at sig. level ≤ 0.05.

Our basic assumptions are that effective teaching influences the 7Cs of interaction namely (care, confer, captivate, challenge, captivate, clarify, and classroom management) among students of Jordanian universities. A multiple regression modeling approaches was proposed as an effective method for studying the relationships. As displayed in Table 5, the adjusted R^2 is 0.422 suggesting that the 7Cs factors explain close to 42 percent of the variance for the dimension of effective teaching.

Results of testing this hypothesis illustrate the relationship between 7Cs of interaction and effective teaching demonstrated that there is a positive impact between 7Cs of interaction and effective teaching.

H1.a: Care dimension has a significant impact on effective teaching among students of Jordanian universities at sig. level ≤ 0.05.

Our findings in table (4) provide support for care having a statistically significant positive impact on effective teaching, equivalent to (26.7%). This finding is similar to the work of researchers that identified care as a major factor influencing effective teaching and further proved that by discussing the results reflected on overall classroom performance and student behavior (Cothran & Ennis, 2000; Cothran et al., 2003; Ferreira & Bosworth, 2001; Garrett et al., 2009; Garza, 2009; Garza et al., 2010).

H1.b: Confer dimension has a significant impact on effective teaching among students of Jordanian universities at sig. level ≤ 0.05.

The findings in table (4) provide significant support for the influence of 7Cs of interaction on effective teaching. Confer is indicated to increase effective teaching by (11.9%), which makes our findings consistent with other research findings (Sieberer-Nagler, 2016; Kuhfeld, 2022). As a result, we are able to confirm that confer, one of the 7Cs of interaction, does actually influence effective teaching among students of Jordanian universities.

H1.c: Captivate dimension has a significant impact on effective teaching among students of Jordanian universities at sig. level ≤ 0.05.

Captivate is also considered to be one of the 7Cs of interaction that influences effective teaching. According to the data gathered, it has been evident that captivating students has positively influenced effective teaching by (18.7%). This as a result, makes our findings consistent with other research findings which were previously done. (Ferguson, 2018)

H1.d: Clarify dimension has a significant impact on effective teaching among students of Jordanian universities at sig. level ≤ 0.05.

Clarify is are also considered to be one of the influential factors on effective teaching among students of Jordanian universities. According to our data in (table 4), clarify has positively influenced effective teaching by (14.9%). Prior research has empirically found positive relationship between clarify, one of the 7Cs of interaction, and its influence on effective teaching (Ferguson, 2018).

H1.e: Challenge dimension has a significant impact on effective teaching among students of Jordanian universities at sig. level ≤ 0.05.

An examination of table (4) reflects the influence the 7Cs of interaction have on effective teaching. The results therefore, substantiate that challenge

has a positive impact on effective teaching, causing it to increase by (16.4%). These findings are also consistent with other research findings. For example, (Egeberg & McConney, 2022; Ferguson, 2018) found that challenge does influence effective teaching positively.

H1.f: Consolidate dimension has a significant impact on effective teaching among students of Jordanian universities at sig. level ≤ 0.05.

Consolidate is also considered to be one of the influential factors in effective teaching among students of Jordanian universities. With reference to the data gathered in (table 4), consolidate, one of the 7Cs of interaction, has significantly affected effective teaching among students of Jordanian universities, by (14.3%). Other researchers have empirically found a positive relationship between consolidate and effective teaching, making our results consistent with theirs (Egeberg & McConney, 2019).

H1.g: Classroom management dimension has a significant impact on effective teaching among students of Jordanian universities at sig. level ≤ 0.05.

Examining data in table (4), it appears that classroom management has a positive significant influence on effective teaching among students of Jordanian universities. The table shows that classroom management, one of the 7Cs of interaction, has significantly influenced effective teaching by (23.4%), which makes our findings consistent with other research findings (for example, Schlosser 1992; Sheets 2002; Sheets and Gay 1996).

In summary, it can be seen that all 7Cs of interaction, care, confer, captivate, clarify, challenge, consolidate, and classroom management, do influence effective teaching among students of Jordanian universities which approves H2.

H2: There is a significant positive relationship between 7Cs factors and effective teaching among Jordanian university students moderated by type of school at sig. level ≤ 0.05.

9. Implication

The research studied the impact of the 7Cs of interaction on effective teaching among students of Jordanian universities. In terms of the education services industry, the research was one of the few found that took into account the 7Cs of interaction, and deeply studied their impact on effective teaching. This study and its conceptual model can assess other teachers and educators in the education domain. As technology evolves, newer and more effective teaching methods are being discovered, tested, and applied. Educators are always seeking ways to make teaching as effective as possible, and that is to further develop students' abilities and improve their overall performance. We believe this research could inspire teachers to start introducing the 7Cs of interaction to their students and to eventually include them in the teaching process because it divides them into three conceptual categories: personal support, which includes both (care and confer), and curricular support, which consists of (captivate, clarify, and consolidate), and finally, academic press, which involves (challenge and classroom management). Therefore, it is easier to tackle student issues and quickly and concisely address them. Regarding future researchers, this research provides a detailed basis on seven factors that influence effective teaching, researchers can refer back to it and build upon it.

10. Conclusion

This study provided useful data regarding the 7Cs of interaction and their impact on effective teaching, among students of Jordanian universities. As discussed above, with reference

to the data gathered, effective teaching has been present the more the 7Cs of interaction were applied in classrooms, meaning that students' behavior and knowledge are both vastly affected by the treatment and delivery methods, which their lecturers apply throughout the teaching process. This research sought to build a framework for examining the impact of 7Cs of interaction on effective teaching among students of Jordanian universities. The conceptual model examines the influence of 7Cs of interaction on effective teaching. The data were examined using the SPSS v23 software program to determine the relationship between the model's variables. Eventually, it has been evident that students' performance and interactivity are actually affected by the application of the 7Cs of interaction in classrooms. Therefore, for teachers to aim for effective teaching, it is crucially preferable and encouraged to apply the 7Cs of interaction and to persistently care about providing a suitable atmosphere for students to learn in. To conclude, the research has confirmed that the 7Cs of interaction had a significant impact on effective teaching among students of Jordanian universities.

Although this research has provided valuable insights into the area of this research, yet, it has been subject to some limitations. To begin with, as mentioned above, we have distributed an only survey to collect our data. One limitation of this method is that there could be survey fraud; to some respondents it seemed long, which makes their responses less accountable and reliable. Moreover, the survey being entirely an online one causes limited sampling and respondent availability, as some respondents are less likely to have internet access and respond to online surveys. Furthermore, the research has focused on studying the impact on university students, specifically ones enrolling Jordanian universities, thus limiting the generalizability of the result to students of other levels and classes, or ones living in different countries.

Future research is therefore required to extend these results in other geographical areas and among other students of different nationalities and countries. For example, the concept could be extended to other Arab countries in order to confirm the model and its findings. For instance, the same independent variable could be used, 7Cs of interaction, however, the dependent variable could be changed to another impacted factor by the 7Cs, such as student interpersonal skills. We believe as more studies are done concerning this topic, teachers and educators will be more open and prone to applying the 7Cs of interaction in their classrooms, which will eventually result in higher motivation to giving students all their best as a result of the improved overall

References

1. Aldrup, K., Carstensen, B., & Klusmann, U. (2022). Is Empathy the Key to Effective Teaching? A Systematic Review of Its Association with Teacher-Student Interactions and Student Outcomes. Educational Psychology Review. Springer. https://doi.org/10.1007/s10648-021-09649-y

2. Antiado, D. F., Tawadrous, M. I. M., & Sergio, R. P. (2021). Untangling constructs on characteristics of effective teaching from a higher education institution: Basis for effective teaching program. International Journal of Learning, Teaching and Educational Research, 20(1), 275–291. https://doi.org/10.26803/IJLTER.20.1.15

3. Chen, Y. (2017). The application of effective teaching theory in higher education. Eurasia Journal of Mathematics, Science and Technology Education, 13(12), 8185–8191. https://doi.org/10.12973/ejmste/80781

4. Cherry, Kendra. "5 components of Emotional Intelligence." VeryWell Mind, 3 Apr.2019, www.verywellmind.com/components-of-emotinal-intelligence-2795438

5. Cothran, D. J., Kulinna, P. H., & Garrahy, D. A. (2003). ''This is kind of giving a secret away…'': students' perspectives on effective class management. Teaching and Teacher Education, 19, 435–444.

6. Cothran, D., & Ennis, C. (2000). Building bridges to student engagement: Communicating respect and care for students in urban high schools. Journal of Research and Development in Education, 33, 106–117.

7. Devlin, M., & Samarawickrema, G. (2010). The criteria of effective teaching in a changing higher education context. Higher Education Research and Development, 29(2), 111–124. https://doi.org/10.1080/07294360903 24439

8. Ferguson, R. (2018), Can Student Survey Measure Teaching Quality?, Phi Delta Kappan, DOI: 10.2307-41763671.

9. Ferguson, R. F. (2010). Student perceptions of teaching effectiveness (Discussion brief from the National Center for Teacher Effectiveness and the Achievement Gap Initiative). Boston, MA: Harvard University.

10. Ferguson, R. F. (2012). Can student surveys measure teaching quality? Phi Delta Kappan, 94 (3), 24–28.

11. Ferguson, R. F., & Danielson, C. (2014). How Framework for Teaching and Tripod 7Cs evidence distinguish key components of effective teaching. In T. J. Kane, K. A. Kerr, & R. C. Pianta (Eds.), Designing Teacher Evaluation Systems: New Guidance from the Measures of Effective Teaching Project. San Francisco, CA: Jossey-Bass.

12. Ferguson, R. F., Phillips, S. F., Rowley, J. F. S., & Friedlander, J. W. (2015). The influence of teaching beyond standardized test scores: Engagement, mindsets, and agency. Cambridge, MA: The Achievement Gap Initiative at Harvard University.

13. Ferreira, M. M., & Bosworth, K. (2001). Defining caring teachers: Adolescents' perspectives. Journal of Classroom Interaction, 36(1), 24–30.

14. Garrett, T., Barr, J., & Rothman, T. (2009). Perspectives on caring in the classroom: Do they vary according to ethnicity or grade level? Adolescence, 44, 505–521.

15. Garza, R. (2009). Latino and white high school students' perceptions of caring behaviors: Are we culturally responsive to our students? Urban Education, 44, 297–321.

16. Garza, R., Ryser, G., & Lee, K. (2010). Illuminating adolescent voices: Identifying high school students' perceptions of teacher caring. Empirical Research, 7(4), 1–16.

17. Hamdan, A. R., & Lai, C. L. (2015). The relationship between teachers' factors and effective teaching. Asian Social Science, 11(12), 274–280.

https://doi.org/10.5539/ass.v11n12p274

18. Kane, T. J., & Cantrell, S. (2010). Learning about teaching: Initial findings from the Measures of Effective Teaching Project. Seattle, WA: Bill & Melinda Gates Foundation.
19. Kane, T. J., McCaffrey, D. F., Miller, T., & Staiger, D. O. (2013). Have we identified effective teachers? Validating measures of effective teaching using random assignment. Seattle, WA: Bill & Melinda Gates Foundation.
20. Schlosser, L. K. (1992). Teacher distance and student disengagement: School lives on the margin. Journal of Teacher Education, 43(2), 128–140.
21. Sheets, R. H., & Gay, G. (1996). Student perceptions of disciplinary conflict in ethnically diverse classrooms. NASSP Bulletin, 80(580), 84–95.
22. Sheets, R. S. (2002). ‘‘You’re just a kid that’s there’’—Chicano perception of disciplinary events. Journal of Latinos and Education, 1(2), 105–122.
23. Stuit, D., Ferguson, R. F., & Phillips, S. F. (2013). The reliability and validity of the early elementary Tripod 7Cs composite measure. Cambridge, MA: Trip