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## Does Instructor Support Correlates to Task Orientation in Higher Education Students? An Explanatory Study

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### ABSTRACT

**Background:** Instructor support has been found as an important element of classroom environment which impacts students' academic achievement. Instructor support helps students to understand the task better, attach task value and motivate them to achieve the mastery goal objectives. Students on the other hand achieve mastery goals when they are more task oriented. Therefore, it is important to understand the relationship between instructor support (guidance, care & questioning) with task orientation in higher education students.

**Problem statement:** The present study recognizes the gap in the literature in explaining a link between instructor support and task orientation in higher education students. There is also a gap in understanding the types of questions that helps students to scaffold and learn better. This study aims to fulfill this gap by investigating how instructor support is related to student task orientation in higher education programs and exploring through student perspective how questions by instructor guide them in their task.

**Proposition of the study:** This is a mixed method study. What is Happening in the Class (WIHIC) scale was used to get the quantitative data from 119 participants from Master's Methodology Coursework of MED 872. Qualitative phase of the study answered the research question about how questions by instructor helped students in better guidance in task. The results showed that Instructor Support and Task orientation are correlated significantly ( $t=0.23^*$  at  $p \leq 0.05$  levels) and questioning in turn is an important aspect of task orientation as it increases understanding and critical thinking of students.

**Keywords:** Instructor support, task orientation, WIHIC scale, Types of questions.

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### 1. Introduction

The instructor-students relationship forms an integral part of classroom environment and a factor for academic achievement of students. Instructor support has been studied through various perspectives like contextual support, general classroom practices (Eccles, 2006), teacher practices, (Patall, Dent, Oyer & Wynn, 2013) and teacher-child relationships (Roorda, Koomen, Split & Ooet, 2011). However, not many studies have focused on the role of different aspects of instructor support (such as

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guidance, care, help, questioning etc.) on task orientation behavior of the students. On the other hand, literature on task orientation and student involvement in the educational activities in higher education includes multiple level of analysis and draws upon several theoretical concepts and frameworks (Webber, Krylow & Zhang, 2013; McCornick, Krizie & Gonyea, 2013; Zepke, Leach & Butler, 2014). Motivational theories have tried to explain various factors and processes that determine over the time their effect on student academic achievement (Mash, Byrne & Yeung, 1999). Despite this literature shows a gap between the relation of instructor support and task orientation in post-secondary population. This information is crucial in order to improve student engagement, involvement and motivation towards task while participating in the required courses that they find uninteresting or challenging. In the present study, the students from the Masters' coursework on research methodology were selected as participants. The course was challenging and required both instructor support and students task orientation in order to achieve academic success. This study aims to fill the gap in literature especially for adult learners both in on-line and face to face classroom environments where student cohesiveness, involvement, task orientation, instructor support and equity together contribute to the academic success of the students. This study aims to investigate the instructor support and their questioning techniques in relation to students' task orientation and their perceived guidance in task. Mixed methodology was undertaken to explore the relationship between the instructor support and students' task orientation. Findings of this study showed that there was strong correlation between the instructor support and task orientation. Further investigation found that instructor support had significant correlation with guidance aspects of task orientation which motivated the children to timely complete the task. Questioning by instructor played a major role in enabling higher understanding of the subject by the students. This paper will present a brief literature review on the instructor support, their questioning and task orientation of the students that will help in understanding the contribution of the paper to the current literature. Next section of the paper will detail the methodology for the study, report the results and discuss the findings of the paper. Last section of this paper will list the implication of the present research and conclusion of the present study.

### **1.1 Literature review**

Wallberg (1981) developed nine factor model that explains that the learning is multiplicative and depends on student's age, motivation, ability, type and quantity of instruction. It also depends on psychosocial environments of classroom, home and peer groups. Students participation in the class increases when they perceive their instructor to be caring (Myers, 2004). Students are more willing to communicate and seek help from instructor out of class if they consider the instructor to be competent. On the other hand, unique cognitive processes have been reported to be activated within students by certain teaching behaviors (Perry, 1991). Perceived and actual instructor support has been found to be related, to support mastery approach goal orientation of students (Ciani, Sheldon, Hilpart & Easter, 2011) and also to support student learning strategies and performance (Vansteenkiste, Simons, Lens, Sheldon, & Deci, 2004). However, these studies have not isolated the aspects of the instructor support and its link towards task orientation of students in higher education.

In past few decades, many studies have been done on the instructor support its relation to students' involvement in the classrooms and effects on their learning. Joan and Loretz (2008) studied the effect of cognitive and social help given by instructors and the relationship between instructor support and students' perception of support in online teaching. They found a variation in level of questioning, amount and consistency of direct instruction and task structuring that leads to the variation in student's perception of instructor support. It was concluded that social and cognitive acknowledgement by the instructor helped students to be focused and motivates, which in turn is an important learning support. Task structuring by the instructor is also viewed as an important learning support because students need to break the larger task into smaller, clear and achievable goals towards their cognitive development (Bolkan, 2017). A study on grade ten students of Singapore was done by administering WIHIC for Geography and Math classrooms (Chionh & Fraser, 2009). It has been observed that the classroom where instructor supports, task orientation and equity was high, students had more favorable attitudes and self-esteem. These studies also showed a relationship between the instructor support, task orientation, students' attitudes and perception. However, there is lack of

studies that has looked into how student focuses on the task with varying degree of instructor support. This study thus, aims to address the gap by investigating how instructor support (guidance, care, help, questioning) is related to higher degree students' task orientation.

An important aspect of teaching is questioning in classrooms. Questioning is a powerful tool to stimulate critical thinking and is an active element of teaching and learning process (Qatipi, 2011). Level of questioning both in online and face-to-face classrooms move the students understanding and discussion to higher levels of critical response and knowledge building than just information sharing. Teacher's questioning thus, leads to the gain in the need for cognition by students and developing positive attitude towards literacy (Chad, Saichaie & Padgett, 2012).

Questions are component part of four language skills namely reading, writing, listening and speaking and serves two purposes, the broader purpose is to encourage students to reveal what they already know and what they have grasped, and specific purpose is engaging students by

- a. Introduction: to know, to discover earlier knowledge and problems that leads to subject
- b. Presentation: that manages interest and focus of class by encouraging reasoning and logic and
- c. Application: that helps student to clarify, observe and seek information on specific subject (Lynch, 1991).

The types of questions used by sixth grade mathematics teacher and their intention in using these questions were studied (Sahin & Kulm, 2008). It was found that teachers asked more factual questions during lessons and more probing questions during summary part of the lessons. Guiding questions were rarely used. Teachers on the other hand were aware that higher order questions (probing & guiding) increases students' learning the most even though they rarely use them.

On the basis of survey about questioning in Albanian Education System, a research was carried to know why teachers ask questions (Qatipi, 2011). The results suggested that teachers usually ask questions to access the knowledge of students at various levels in learning programme. But this research failed to look into the aspect that how students perceive that questioning helps into greater understanding or types of questions they think that motivates them to be more oriented towards the task in classrooms. The qualitative aspect of this study was aimed to understand the role of questions and types of questions that help them to scaffold and learn.

Kozanitis, Chouinard and Desbiens (2017) have reasoned in their study that perception of instructor support has indirect but positive effect on student perception of task value. It is therefore important to understand how instructor support links to students' task orientation. Task orientation attunes the learner towards the demands of learning task. The learning goals can be mastered by the learner through understanding the contents and aligning himself to the goals of the instructor. It requires strong intrinsic motivation from the learner to approach, explore and master the challenging aspects of task and also to enjoy these tasks relating efforts (Martin, Karabenick & Urdan, 2008). The task related challenges can be overcome by the learner through coordinating his own perspective with that of interpreted perspective of the instructor and then reorganizing his own task orientation (Feffer & Suhotliff, 1966). The interpersonal "decentrations" has been referred as student's tendency to socially co-construct the task to complement the instructor's perspectives (Cicourel, 1973). This attunes the learner to enjoy social approval by complying with the instructor. Hence, the students are engaged in effective learning when the instructor encourages them to use their ideas and evidences actively and to develop a deeper understanding of the construct thus, helping each other in aligning their perspectives towards the goals to be mastered (Bolkan, 2017). The study of literature has thus guided the hypothesis of the study that there is a relationship between the instructor support and task orientation in higher degree students. The purpose of this study is thus to explain the relationship between student's task orientation with instructor support.

## 1.2 Theoretical framework

This study uses learning assistance and scaffolding theories (Tharp & Gallimore, 1991; Collins, Brown & Newman, 1990) as the guiding framework. According to these theories, the teacher assists the learner by instructing, modeling, feedback, questioning, reinforcement, and structuring the task towards zone of proximal development and continues to do so till he becomes an expert. Scaffolding provides a function for the individual development by supporting the student intellectually. It enables

the student to perform the challenging tasks without guidance and assistance from the teacher. Student's understanding of the task improves when teacher enters into conversational dialogues related to the task and thus helps them cognitively to construct knowledge (Hogan & Pressely, 1997). Formal help sought from the instructor has been reported an important regulation strategy (Karabenick, 1998). It was linked to higher learner satisfaction and to high academic achievement in higher education (Karabenick, 2003, 2004; Karabenick & Newman 2006; Zusho, Karabenick, Bonney & Sims, 2007). Based on this theoretical perspective, it can be assumed that the instructor support and guidance will have effect on the task orientation. The second purpose of this study is to know how questioning by instructor is related to students' understanding of the task in class.

### 1.3 Problem statement

The present study recognizes this gap and lack of empirical clarity in literature on relation between instructor support and student task orientation and deeper understanding that how questioning is related to students' understanding of subject matter in classroom. The observed gaps on above aspects in literature raised following research questions for deeper understanding:

1. How is instructor support related to student's task orientation in higher education programs in general?
2. Does teacher's asking question help students in better guidance in their task?

## 2. Research methodology

The mixed method study was used to explore the relation between the instructor support and task orientation of students. The quantitative part of this study is a correlational design because the researcher is more interested to find how does one variable correlates to the other variable and to further understand which aspect of instructor support is perceived more important for task orientation. A qualitative study was undertaken to understand how students perceive questioning as instructor support and helps them in being task oriented.

### 2.1 Subjects

Subjects were 119 Master's Course Students enrolled in the coursework on Methodologies at National Institute of Education (NIE), Singapore. The class comprised of participants with professional background of teaching, with varying years of experiences. The WIHIC pretest and posttest was administered to the class. Total of 123 students completed the pretest but out of them 96% of the participants completed the posttest measure of WIHIC.

### 2.2 Procedures

Pretest and posttest were administered to assess the expected and actual level of correlation between instructor support and task orientation in higher degree programme. The WIHIC scale was applied to the class for assessing relationship between the instructor support and task orientation. The WIHIC scale, developed by Frasher, Fisher & McRobbie (1996), is the predictor of outcomes as suggested by various earlier studies. The WIHIC contains six sub-scales: Student Cohesiveness, Instructor Support, Involvement, Task Orientation, Cooperation and Equity. The scale has been modified to suit the requirement of the study and four items per scale are used in a five-point Likert response scale (Almost never, Seldom, Sometimes, Often and almost always).

Table 1

*Description of WIHIC sub-scales and a sample item for each*

Sub-Scale Name	Description	Sample Item
Student Cohesiveness	Extent to which student knows each other and helps and supports each other.	I would have friends in this class.
Instructor Support	Extent to which teacher communicates, befriends, helps trusts and are interested in students.	The teacher would care about me.
Involvement	Extend to which students are interested and participate in	I would give opinions during class discussions.

Task Orientation	class discussions. Extent to which students are focused on the task and are important to complete the activities planned.	Getting my work done would be important to me.
Cooperation	Extent to which students cooperate with one another to complete the learning task.	I would cooperate with other students in the class.
Equity	Extent to which students are treated equally in the classroom by the teacher.	My questions would get as much attention as other students.

Items employ 5-point Likert scale for the responses Almost always, Often, Seldom, sometimes, Almost never.

The WIHIC has been validated in various countries like Australia, Canada and UK (Dorman, 2003), Singapore (Chionh& Fraser, 2009), USA (den Brok, Fisher, Rickards, & Bull, 2006; Wolf & Fraser, 2008) and Korea (Kim, Fisher & Fraser, 2000). In the present study, internal reliability of the scales was found to be high and instructor support posttest alpha Cronbach reliability was also reported to be 0.89 which in turn is the predictor of high reliability. Cronbach’s alpha has also been found 0.65 for task orientation posttest which again is considered as acceptable reliability for the scale.

The second phase of the study was to collect the qualitative data to understand how Instructor questioning was related to students’ better understanding of the subject matter. Interview questionnaire were mailed to five participants of MED872 coursework (60% females and 40% males) and their views were collected about how instructor support is related to their task orientation. Coding was done based on meaning effects of each answer. The following questions were used in the interview questionnaire.

1. Is questioning in the class an important feature of Instructor Support? Please elaborate your answer,
2. Do you think teacher’s questioning helps you to understand more in class? If yes, how?
3. What kinds of questions guide you towards more understanding of lesson?

### 3. Findings

#### 3.1 Quantitative findings

Prior to this research many studies have shown the effects of Instructor Support on Involvement. Presently, WIHIC scale was applied to the students of MED 872 coursework at the end of the course and correlation analysis was done to understand the relation between instructor support and task orientation of higher degree education programme students.

Table 2  
Showing correlation between ISpost and TOrientpost

Correlations		Ispost	TOrientpost
Ispost	Pearson Correlation	1	0.22*
	Sig. (2-tailed)		0.01
TOrientpost	Pearson Correlation Sig (2 tailed)		1

- \*Correlation is significant at 0.05% level (2- tailed)
- Ispost is the post measure of instructor support on WIHIC scale
- TOrientpost is the post measure of task orientation on WIHIC scale

The WIHIC scale has shown a significant ( $t=0.22^*$ ,  $p \leq 0.05$ ) correlation between instructor support and task orientation (Table 2). This study answered the research question that instructor support and task orientation are correlated.

Table 3  
Correlation between Instructor Support post measures and Items in Task Orientation post measure

		Correlations				
		ISpot	WIHIC_ post13	WIHIC_ post14	WIHIC_ post15	WIHIC_ post16
Ispost	Pearson Correlation	1	0.29**	-0.33	0.32**	0.083
WIHIC_ post13	Pearson Correlation		1	0.27**	0.24**	0.31**
WIHIC_ post14	Pearson Correlation			1	0.31**	0.39**
WIHIC_ post15	Pearson Correlation				1	0.48**
WIHIC_ post16	Pearson Correlation					1

\*\*Correlation is significant at  $p \leq 0.01$  level (2-tailed)

Micro level correlational analysis was done for Instructor Support and various items on Task Orientation to understand the correlation of instructor support with task orientation (Table 3). Instructor support and item 15 i.e. knowing what to do in class (guidance) are significantly correlated ( $t=0.32^{**}$ ,  $p \leq 0.01$  level).

Table 4

Correlation between Items on Instructor Support Post Measure and Items on Task Orientation Post Measure

Instructor SupportP ost Test Measures per item	Correlations							
	Task Orientation Post Test Measures Per Item							
	WIHIC_ post5	WIHIC_ post6	WIHIC_ post7	WIHIC_ post8	WIHIC_ post13	WIHIC_ post14	WIHIC_ post15	WIHIC_ post16
WIHIC_ post5	1				0.35**	0.06	0.33**	0.075
WIHIC_ post 6		1			0.31**	-0.04	0.19*	0.08
WIHIC_ post 7			1		0.19*	0.044	0.29**	0.09
WIHIC_ post8				1	0.15	-0.17	0.31**	0.05
WIHIC_ post13					1			
WIHIC_ post14						1		

WIHIC\_  
post15

1

WIHIC\_  
post16

1

\*\* . Correlation is significant at 0.01 level (2-tailed).

To further narrow the focus of the study items on the Instructor Support scale and Task Orientation scale, Instructor Support especially caring and helping attitude of the instructor were strongly correlated to work completion ( $t= 0.35^{**}$   $p \leq 0.01$  level) and guidance that students got during their task completion ( $t=0.33^{**}$ ,  $p \leq 0.01$  level) (Table 4). Another significant correlation ( $t= 0.31^{**}$ ,  $p \leq 0.01$  levels) was suggested in teacher's questioning and understanding and guidance in lesson of the students. This micro level analysis strengthens the establishment of the relations between Instructor Support and Task Orientation.

### 3.2 Qualitative findings

Another research question that how questioning by instructor helps students in guidance was also answered by the qualitative approach and by collecting students' perspective about the understanding of the task and questioning by the instructor.

The qualitative interviews of the students revealed that 100% of the participants reported that questioning by the instructor increased their understanding of the task and helped them to clarify their doubts. This has been clearly seen as stated by one of the participants as follows:

*"The questions that teacher's ask tend to provoke you into thinking about a topic even further. This will create a better and a more holistic understanding on the topic".* (Participant 4)

Questioning and its' importance in task orientation was acknowledged by 80% of the participants whereas, remaining 20% reported questioning not important for understanding what one is supposed to do in class. They found instructor's delivers the content of the subject i.e. the teaching techniques of the instructor as more important aspect of task orientation. All the interviewed participants agreed that questioning helps them in more holistic understanding by provoking them to think and to clarify their doubts. Then the response for the type of questions that students found guiding and supportive were also analyzed and the percentage frequency of the responses were also recorded as shown in Figure1.

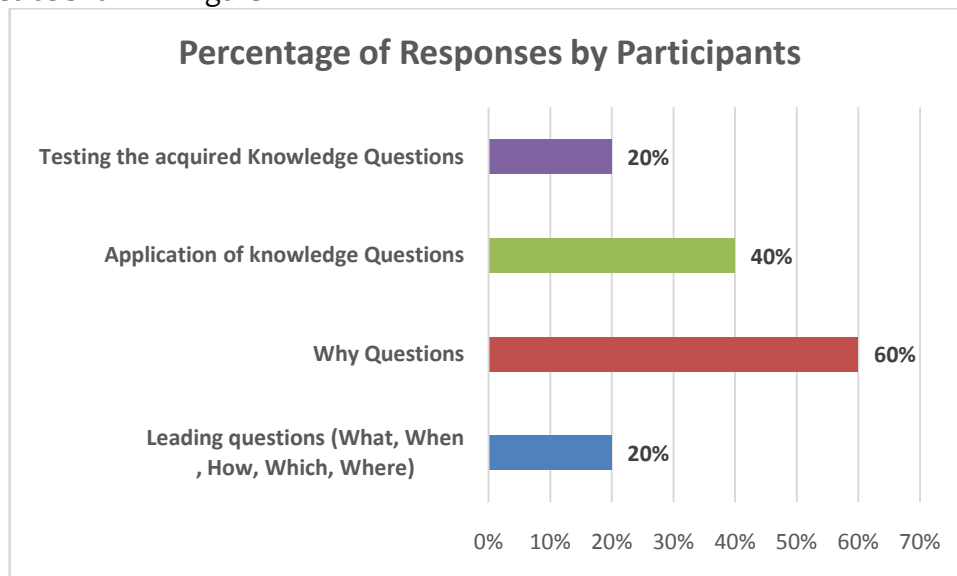


Figure 1. Types of questions asked by instructor and percentage of participant responses

After looking at the data collected from the interview, twelve codes were formed, which were then grouped together to respective categories. These codes were compared by the codes formed by the fellow researcher to find discrepancy in forming of the categories. The themes that emerged were mapped to understand the underlying phenomenon of the relation between questions by instructor as guidance to students.

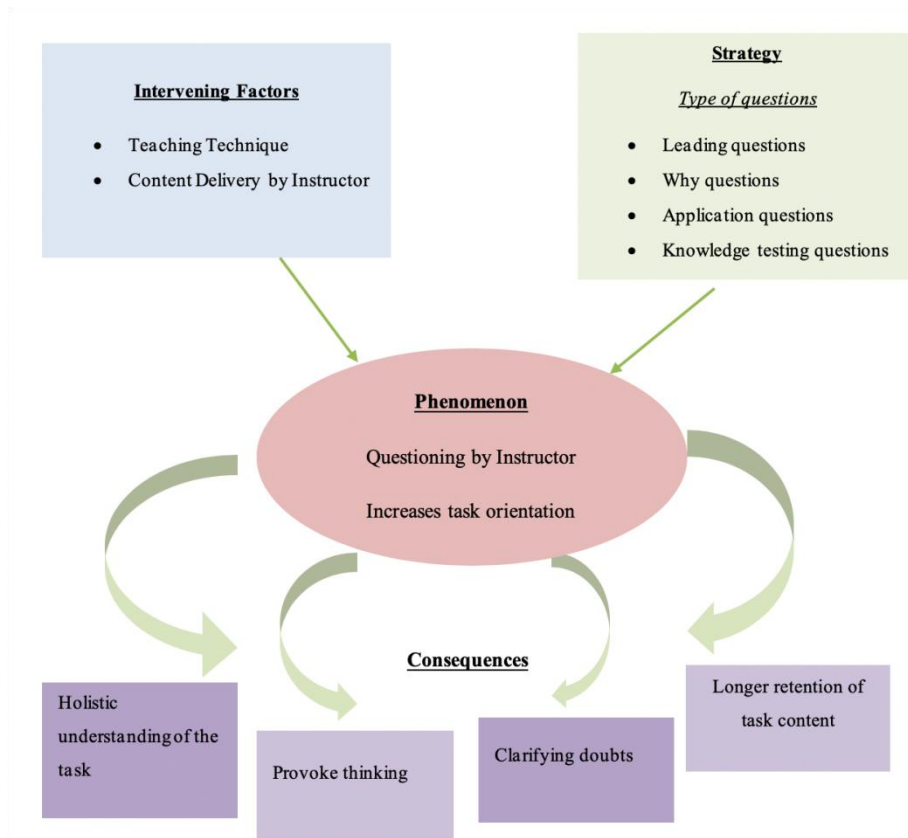


Figure 2. Pictorial Representation of the Emerging Themes and Their Mapping

One of the participants reported on the importance of questioning in instructor support as “Instructor ask questions to help us recap the lesson and to learn by understanding. This is a good way to revise what was taught in the previous lecture. This shows instructor’s effort to help us learn better.” (Participant 2)

Whereas one participant did not consider being an important aspect of instructor support and said

“I will appreciate if the instructor is clear in his delivery of the content”. (Participant 5)

The results show that questioning is an important aspect of instructor support that helps students to be task oriented. Why questions were found to be more helpful in improving students understanding in the present coursework flowed by the application of the knowledge questions.

#### 4. Discussion

The learning assistance and scaffolding theories explain that how various teaching techniques and task structuring by instructor help the students in their learning. The present study also looked into the aspect that how instructor support in general is related to specific items in task orientation scale. The correlation between instructor support and task orientation was found to be significant.

The Instructor Support has also been found significantly correlated to the guidance that students perceived in knowing and understanding what the task require them to do. Instructor’s caring and helping attitude was also found to be correlated to students being more task oriented. Previous studies also partially support the results that students become more tasks oriented and willing to complete task if they are able to get instructor support and perceive their instructor to be caring (Myers, 2004; Wallberg, 1981).

Various reasons can be considered in understanding why instructor support was found to be an important factor relating to the task orientation of the students in the present study. The reason for this can be the methodology coursework in psychological studies, which is considered to be the toughest and less engaging to students. Another reason can be that expectation of the students might be higher for instructor support in this coursework. The results answer the first research question and are in line



with the past studies that argued that task orientation, instructor support and equity are higher in a classroom where students have more favorable attitudes (Chionh & Fraser, 2009). However, it is beyond doubt that the relation in itself is significant and more studies are required to understand this relation better and to fill in the gap in literature.

Another theme that came up in the qualitative study was that how different kinds of questions were helpful for different students. Literature has time and again supported the importance of questions in learning. On exploration of the qualitative data, it was found that the questions from instructor that students considered important fell into the categories of 1) Leading questions like What, When, Which, How etc, 2) Why Questions, 3) Questions relating to the application of knowledge and 4) Questions that testifies the knowledge acquired by students (Figure 1). In the present study why questions and application-based questions were found to be most helpful by students to improve their task orientation. Sahin and Kulum (2008) have also identified probing and guiding questions in literature that teacher uses intentionally to increase the understanding of class. Since the study was for 6th graders, therefore, it was not really applicable to higher education students and also in the study they found that probing questions for higher order thinking were rarely used by the teacher. Qatipi (2011) also reported that questions are usually asked for broader and specific purposes but at the same time it leads to increase in knowledge and to develop critical thinking. Participants in this study also identified the consequences of question asking.

The mapping of responses, codes and categories of the interview responses revealed that the process of using the strategy for types of questions asked by instructor showed relation between increase in task orientation, when the desired consequences of increased critical thinking, holistic understanding, clarification of the doubts and longer retention of the subject matter was perceived by the students (Figure 2). Teaching techniques and contents delivered were the intervening factors in this phenomenon. These findings answered the research question about how questions increase task orientation.

#### **4.1 Future implications**

##### **4.1.1 Implication for research**

This study establishes a fact that there is a significant correlation between Instructor Support and Task Orientation, but more studies are required to be carried out on this aspect. More qualitative data also needs to be collected to probe the aspects of instructor support that students found most helpful in task orientation and in turn motivate them to be successful more academically.

##### **4.1.2 Implication for the practitioners**

For the practitioners, this research gives a direction in probing into the type and kind of questions that can make their teaching more effective other than their content delivery. Questions have been found to increase the confidence of the students in task along with guiding them towards the proximal zone of development to become experts. Therefore, the questions should be an integral part of task structuring and teachers' intention for using the questions.

##### **4.1.3 Implication for policy**

This study informs the policy maker about the importance of instructor support for the higher degree programme that requires students to be task oriented and motivated even for the study modules that are challenging to them. Instructor support is an important factor in students scaffolding and learning in both online and face-to-face classroom environments.

## **5. Conclusion**

The present study was focused on finding the relation between the instructor support and task orientation of the higher degree programme students. The study used WIHIC scale to get the quantitative data from 119 participants and the results were then statistically analyzed. The correlational analysis shows correlation between the instructor support and task orientation. However, when the instructor support was correlated with different aspects of task orientation, it was found that students understanding of the task in hand and their motivation in timely completing their task had a significant correlation with instructor support. On item level, correlational analysis found that instructors' caring and helping attitude increased the task orientation of the students and their

guidance and understanding in the subject improved. Questioning was also found to be one of the factors in instructor support that lead to higher understanding of the subject. The qualitative data analysis of this aspect of instructor's support and recording the perspective of the students about the importance of questioning in their task orientation revealed that questioning led not only to clarifying of the doubts but also provoked students thinking and helped in longer retention of the subject matter. Thus, questioning other than the teaching skills and the content to be delivered is a significant aspect of instructor support leading to task orientation and greater academic achievement of the students.

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