APPLICATIONS OF ONLINE VIDEO CONFERENCING IN HIGHER EDUCATION: CASE OF SAUDI ARABIA

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ABSTRACT

Students’ engagement in online learning is one of the ongoing challenges in most Saudi universities, which mainly concern about making them more independent and to take charge of their own decisions. Previous studies showed that traditional supervision faces several problems related to students’ feelings of control that may occur when there is a limited clarification of the concept being studied. This study investigated the potential of using videoconferencing in supervision practices. Fifteen students were invited for an interview. The results showed that students’ general perceptions of videoconferencing use were positive in which the majority of students were found to favor the use of videoconferencing as a supplement to the face-to-face approach. This study would provide insights on how teleconferencing related services can empower the current supervision practices through the use of structure and formed dialogues between students and supervisors.

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1. INTRODUCTION

Many previous studies from different perspectives have documented the profound impact of videoconferencing on students’ learning. This is simply because the utilization of technology imposes an influence on students' various cognitive experiences in different learning conditions. Based in part on the support of these influences, Saudi universities are eager to assess technology utilization in driving students’ learning experience (Smith & Abouammoh, 2013). Previous studies showed that traditional supervision faces several problems related to students’ feelings of control which may occur when there is a limited clarification of the concept being studied (Kennepohl et al., 2006). Within the Saudi context, this is commonly reasoned to the weakness in ways of communication, weak relationship between supervisors and students, lack of cooperation to understand the argument, thus mutual misunderstanding (Al-Hammad, 2000). Also, when it comes
to videoconferencing utilization, two issues with current studies have been recognized. One is the relationships between instructors and students in online supervision have not been adequately explored in Saudi higher education (Almalki, 2011; Baki, 2004). Most previous studies have tended to focus on the effects of adopting technology on students by assessing differences in online and traditional lectures rather than exploring the supervision relationship between instructors and students. Second, the little evidence of videoconferencing effectiveness for supervision purposes in certain Saudi universities may negatively influence its generalization to other universities in the Kingdom (Al Ghamdi, 2017). On the other hand, there are several issues (including lack of mechanisms to promote active interaction, and commitment to the learning task) reported by the ministry of higher education in accordance with the current practices of traditional postgraduates’ supervision (Abdulkareem, 2001). Therefore, the current system of education at King Saud University is passing through a period of significant transition through the consideration of technological deployment for developing the quality of learners’ learning. Such transformation requires that the process of supervision undertake a serious consideration for using online learning tools alongside traditional learning and teaching practices (Alabdulkareem, 2014). This led some universities such as King Saud University to consider the use of the videoconferencing tool as a way for facilitating lecturers’ supervision of postgraduates. This study investigated the potential of using videoconferencing in supervision practices.

2. LITERATURE REVIEW

2.1 POSTGRADUATE SUPERVISION

Supervision is the process of managing and guiding postgraduates throughout their research by engaging in active communication to understand a concept (Jones, 2011). A great part of the previous works is mostly focusing on distinguishing the capacities that the supervisor needs to complete, with periodic reference to an enculturation, coaching or child-rearing capacity. With the literature on learning and educating has investigated an applied approach in some profundity, there has been minimal comparable investigation for supervision (Lee, 2008) in the context of higher education. According to Denicolo (2004), university students assume to interact with supervisors for the aim of getting the necessary guidelines and suggestions on aspects related to their research works. The one-part relationship that encapsulates this uncommon juggling errand is that of doctoral students and supervisee when both are scholarly members in a similar organization.

Moreover, the process associated with the instructional development and supervision helps extensively in enhancing scholarly execution of understudies (Bitzer & Albertyn, 2011). Because supervision of direction goes for upgrading educating and learning through appropriate direction and arranging, and concocting methods for enhancing instructors professionally and subsequently helping them discharge their imaginative capacities so that through them the instructional procedure is made strides (Drennan & Clarke, 2009).

Meanwhile, the process for supervising students is believed to promote them to be familiar with the wellsprings of help with taking care of their instructional issues (Okendu, 2012). As such, it can be concluded that supervision as a process help educators comprehended the instructional process and helps them in the utilization of expert writing, diaries, free and reasonable showing materials,
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varying media help and other related instructional instruments. In light of this, Dann (2008) illustrated the strong association between technology utilization in supervision and the students’ progress through their research works. Other previous scholars like Sinclair (2004); McCallin and Nayar (2012); Harbon and England (2006); and Hemer (2012) explained the need for exploring the role of Information Technology (IT) and ICT in advancing postgraduates’ participation to complete their projects. This includes the relationship between drop-out and non-completion rates as well as dissatisfaction with the supervision experience.

Hecq (2009) and McCormack (2004) reported the potential tension between the student’s expectations of the research degree and their experience to understand and overcome various research-related challenges. Meanwhile, as a result, some conflicts between expectations and actual experiences may show up; the reason is the lack of communication between students and their supervisors in different stages of the research. Thus, the present work seeks to explore the use of videoconferencing within the Saudi context to address its potential for transforming the current supervision practices.

2.2 ACADEMIC SUPERVISION IN SAUDI ARABIA

The Saudi government focuses on enhancing the society’s view of Information and Communication Technology (ICT), and in expanding open distance programs to help the nation be in line with the latest educational advances. Late advances in innovative technologies, including iPods and iPads, PDAs, and worldwide situating gadgets are demonstrating prominent with youth. The evidence in the writing of Al-Turki (2014) who discovered college understudy enthusiasm for ICT in the educational program, affirmed as of late by AlMegren and Yassin (2013). Furthermore, Saudi understudies and the workforce have inspirational states of mind to utilize the web as a part of education; distinguishing adaptability, openness, and effective correspondence as key properties.

In general, teachers will consolidate ICT works in their educational modules (Alebaikan, 2010; Alghanmi, 2014). Be that as it may, Saudi colleges do not generally embrace web-based learning, incompletely because of certain issues concerning the availability and use of licensed innovation rights along with students’ participation in an online discussion. According to Attia (2014), the effective use of technology to enhance learning and supervision practices is currently one of the fundamental aspects for understudies encountering a mixed way to enable students to deal with their courses. While these matters make boundaries, additional propels in ICT and web capacity may serve to diminish their effect. Hence, an in-depth exploration of online tools in promoting students-to-supervisor communication is needed.

It is valuable to follow the advancement of supervision in Saudi Education to comprehend the way of the supervisory framework in Saudi schools. The part of supervision has changed significantly throughout the years. Before the development of Saudi Arabia and before the foundation of the Department of Education, schools were private and for the most part religious schools. The head instructor of the school is the one who takes charge of regulating and coordinating the educators in the school. Schools are mostly following a straightforward learning approach, so the supervision practices are to favor the capability of new educators and name them, to coordinate the instructor with general mandates the system should concern showing strategies, and to tackle any issues that may emerge between the school and the group.
Therefore, promoting the communication of students-supervisor is essential to enhance students’ academic performance (Bakker et al., 2015; Pluut et al., 2015). Such performance was found to be associated with the active participation of students throughout the learning stages, which the literature addressed it as a sort of students’ engagement in a learning task (Currey et al., 2015; Horstmanshof & Zimitat, 2007; Krause & Coates, 2008; Kuh, 2009; Neumann & Hood, 2009; Sakurai et al, 2016). After all, we considered the role of videoconferencing in promoting Saudi postgraduates’ online engagement in supervision activities.

2.3 VIDEO CONFERENCING

Early employments of video conferencing found in medical-related studies and business applications (Knipe & Lee, 2002). The utilization of videoconferencing in this review identifies with educational programs carried via videoconferencing and the utilization of videoconferencing for preparing and boosting peer-to-peer communication. Educational programs taught via videoconferencing, as indicated by Chen and Willits (2007), is to convey a learning background to the students. It is expected to improve student learning; this contrasts from another kind of videoconference: shared classes. Not at all like shared class offerings that interface areas consistently, educational modules videoconferencing is not an ordinary event (Satar, 2016). Alternatively, it can be said that it is an intermittent affair to upgrade learning. Raths (2015) recognizes educational programs upgrade as a successful utilization of videoconferencing. This may incorporate associations with zoos, galleries, creators, theme specialists, or associations with different classrooms. Hence, videoconferencing can be a compelling apparatus for instructors' proficient advancement (Loranc-Paszylk, 2016).

The videoconferencing in supervision related practices still considered an effective technique for providing the necessary services for connecting the students with their supervisors (Gordon et al., 2015; Rousmaniere & Frederickson, 2016). The difficulties incorporate the cost of the innovation and associations, the nature of the hardware, and the classroom environment and techniques that make the learning knowledge (Blau et al., 2016). There are various cases of fruitful execution of videoconferencing identified with educational modules. These encounters incorporate virtual field trips, connecting with specialists, class exchanges, and shared activities between classes.

Some previous studies showed the effectiveness of using videoconferencing technology to accommodate various learning and teaching practices in higher education, particularly for supervision. For example, O’Neil et al. (2017) explore university supervisors’ perceptions and experiences with live remote supervision. They found that remote supervision may offer a practical and cost-efficient tool to supervisors and students by facilitating the supervision of field experiences in physical education and can potentially help shift towards a new paradigm of supervision in teacher education. Ingham and Fry (2016) introduced a model of supervision called 'blended supervision' and its initial implementation and evaluation. Explain how blended supervision is achieving supervision and teaching outcomes. The authors claimed that such a model using videoconferencing means for communication could potentially promote the current supervision and teaching practices, not just practices using blended supervision. Another study by Haynes, Mosley, and Dewar (2016) evaluated the use of videoconferencing to deliver and supervise a weekly
exercise for clinical purposes.

Other previous studies like the one conducted by Knipe and Lee (2002) explained the effectiveness of videoconferencing in the teaching and learning based on the interaction and discussion elements that enable students to take place in the learning process. Their study found that remote site students had a positive perception of the quality of teaching and learning in remote videoconferencing. Wang (2004) showed that students' use of Internet-based desktop videoconferencing tools allow them to develop their oral communication and visual interaction, which caused the multiple communication channels that allowed students to engage in active discussion and expression of oneself. However, it is necessary to mention that some studies did not see videoconferencing as an effective tool for other learning and teaching purposes that included learning of complex concepts (Giesbers et al., 2014). Regarding the style of supervision in a videoconference meeting, Könings et al. (2016) found that supervisors can be stimulated to organize online group meetings with videoconferencing software, which might contribute to providing an effective feedback environment to students. They asserted that videoconferencing played a key mediator between supervisors and students by stimulating constructive dialogue.

These observations gave knowledge to the conceivable outcomes to use videoconferencing to improve the educational programs. An assortment of methodologies has been utilized reflected in cases that incorporate virtual field trips (Fitch et al., 2016), mentoring, collaboration with other members, and diverse interactions (Alelaiwi et al., 2015). Based on these, it can be said that videoconferencing provides the necessary elements for students and instructors to communicate and discuss research related matters at any time and anywhere. Therefore, investigating the effect of such utilization on students’ online engagement in Saudi higher education is essential.

3. METHOD

This study used a qualitative approach to capture students' perceptions of videoconferencing. The convenience of students (time and willingness) after being suggested by their supervisors was considering when the participants' selection.

3.1 PROCEDURE

The unstructured interview was used in this study to report students’ perceptions about the use of videoconferencing technology for supervision purposes. A total of 15 participants were randomly selected from the same sample size, based on willingness to add more insights.

We interviewed students separately to precisely capture and record unique information. We noted down what’s known “reflective interview notes” to help understand the connection between different points of view. The interview results used to provide more insights about students’ perceptions of the technology under investigation, which can help in consolidating the research objects and provide the basis for extending the results-driven from the questionnaire. The main questions asked were:

1. How do you find the use of videoconferencing in supervision?
2. What are the opportunities from using videoconferencing in supervision?

3. What are the challenges of using videoconferencing for supervision?

The researcher studied the existing literature before designing the interview questions and protocol, intensively; that led to the use of open questions to understand the concept behind the research variables under investigation. Relevant theories or related themes were collected, and to each of them, several questions were developed. Based on these questions, an interview guide was developed (see section 3.7.1). To prepare the interviews, the questions were divided into different categories. However, during the interviews, the order of questions in the interview guide may not strictly follow. Due to the open and semi-structured way of conducting the study, it seemed to make more sense to let the interviewees answer the questions in an unconstrained way, mentioning everything that came into their mind.

4. RESULTS

Interviewing 15 students (9 male and 6 female, 22-34 years old) in this study revealed some new insights. Regarding students’ general perceptions of videoconferencing use, students, in general, favored the use of videoconferencing as a supplement to the face-to-face approach. For example, one participant stated that

“I feel more relaxed when I communicate with my supervisor via the provided videoconferencing system at the university; it’s like saying we are all in this together.”

Another student was mostly concerned about the supervisors’ role in investing the time for their students after formal discussion. For example, he stated that

“My supervisor and I may set some goals in my research and try to achieve them, but sometimes the supervisor still needs to remain about the progress we had, and that’s why sometimes it is better to meet the supervisor from time to time to discuss key points before we use the video conferencing tool.”

Other students addressed the potential of this tool in facilitating their research schedule and provide a way to continue their research, especially when they are staying away from the university campus. One student, in particular, shared that

“…..using videoconferencing is a solution to my communication problem as my supervisor speaks English, so I usually find it difficult to understand some words. When we use videoconferencing, I usually record the session and replay again to make sure that I am in the right direction.”

As for the opportunities from using the video conferencing tool, the majority of students expressed different interesting benefits from such use, for example, one participant stated that

“one important benefit from using this medium is actually in making it easy for me to share my thoughts with my supervisors and search at the same time for solutions online.”
Other concerns were mostly related to the recording of the session and writing down notes for students to use every time they meet with their supervisor face-to-face. For example, two students expressed that

“……yes true, I use it when I have to stay with my family which is like 60 km away from the main campus. My supervisor doesn’t mind meeting me frequently via videoconferencing. And I find sharing my desktop with my supervisor via the videoconferencing tool is something essential, especially when I am working on statistical matters that require my supervisor’s guide.”

“It depends, I like using the screen recording option we have here because I can replay it when I work on the revisions. My supervisor also likes to use the sharing doc option where we can highlight some important parts to extend…”

From there, it can be said that the main opportunities from using video conferencing among students at King Saud University can be narrowed into its potential to make it easy for students to meet their supervisors at any time and from anywhere; sharing files and screen; recording the session; reduce communication barriers when the supervisor is a foreigner, and help students monitor with their supervisor about the work progress. As for the challenges of the videoconferencing tool, majority of the students addressed the Internet speed issue, for example, one student stated that

“for some reasons when I use the screen sharing option with my supervisor, the connection starts to be slow and even may lead to some difficulties in maintaining the session.”

Another interesting aspect that was highlighted by one student is the need for a reminder or notification to help the student and supervisor to meet, for example,

“compared to Skype for business, the current videoconferencing tool does not offer a reminder option that is connected to your university email account. I sometimes forget about the meeting or when it should take place exactly.

Based on these comments, it can be assumed that students found the videoconferencing tool to be mostly a useful solution to maintain their communication and interaction with their supervisors.

5. CONCLUSION

This study would provide insights on how teleconferencing related services can empower the current supervision practices through the use of structure and formed dialogues between students and supervisors. It would also contribute to the existing theories on digital learning like transactional distance theory by explaining the association between instructors and students when communicating through a medium that allows active interaction and managing of previous discussions for understanding various learning problems. It is assumed that results from this study would empower the traditional supervision practices by opening the doors for Saudi higher education to improve students’ online engagement with their supervisors.
This study would help the Ministry of Higher Education in Saudi Arabia in general and King Saud University in particular to understand the boundaries of teleconferencing services such as videoconferencing to provide the communication-related elements necessary for postgraduate engagement in an online context. It will also serve as a source for explaining how videoconferencing can promote the current supervision practices in the Kingdom, which have always been seen to follow the traditional face-to-face method. The video conferencing method is considered greatly helpful in the wake of the New Coronavirus Covid-19 pandemic to reduce the risk of infection in the classroom.

6. AVAILABILITY OF DATA AND MATERIAL

Data can be made available by contacting the corresponding author.

7. REFERENCES


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