The Role of Power Relations and Identification in Collaborative Knowledge Construction at Single Gender Online Forum

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Abstract

This short paper describes a research project that aims at exploring how identification and power relations contribute to learners' knowledge construction in single gender online forum. This multiple case studies take place at five online classes in two female universities in Saudi Arabia. Data is collected from semi-structured interviews and group discussions. Qualitative content analysis of online discussions is used to investigate the extent in which collaborative knowledge construction was achieved by participants utilizing Gunawardena et, al. 1997 tool. In addition, Foucault discourse analysis is used to explore learners' power relations and identification.

The initial findings of the pilot study suggest that learners have imposed several power relations strategies in the discussion's forum such as maintaining norms of online discussions; (2) maintaining norms of a good classmate; (3) criticizing, comparing and assessing each other's posts; (4) displaying personal information; (5) checking others' intellectual activities and messages; (6) comparing between oneself and others' actions and ways of thinking; (7) categorizing oneself and others ; and (8) excluding and including others. These behaviors were organized under three themes: normalisation, surveillance, and classification. Initial findings also showed that participants revealed parts of their identities while interacting with each other. The research will continue to investigate how these practices are influenced by the social and cultural settings and how this contributes to the quality of knowledge construction in online discussion forum.

Keywords

knowledge construction, identification, power relation, Foucault discourse analysis.

Research Context

This study takes place at two female universities in Saudi Arabia. Online learning adaptation in Saudi's universities started as a reflection of the universal advocacy of online learning worldwide. As such, many universities have shifted their practices from traditional face to face educational systems to the online learning system. Saudi universities are eager to facilitate learning through online technologies. However, the learning and teaching practices in such environments are not given equal attention. According to Al lily (2011), much of academic research examining the introduction of online learning into Higher Education in Saudi Arabia is conducted at the level of administrators, technicians and teaching staff, with little consideration to students. Hence, Al lily (2011) emphasized the importance of conducting more research in what he called "the bottom-up approach." In addition, much of research in online learning in Saudi Arabia focused on the affordances of technology with little attention to pedagogy as well as the cultural and social settings (Mehana, 2009 cited in Al lily, 2011).

Considering the uniqueness of the social life in Saudi Arabia, which until recently was characterized by complete separation between females and males in schools, workplaces, and even in online classes, the exploration of this context becomes more important. In general, educational systems in Saudi Arabia are segregated at every level of education– including the level of instructors. Males are taught by males and females are taught by females with very scarce, exclusive mixed schools and universities. Gender separation is not limited to the educational sector, it even appears in institutions such as banks (Alhazmi, 2010) and governmental departments. There are many reasons for this separation. However, the most significant reasons are culture and religion. Because very little is known about this context, I argue that it is worth investigating. This claim of the

importance of the Saudi context is also supported by previous literature that called for studying learners' identities in online learning contexts (Freeman and Bamford, 2004; Oztok, 2016; and Ke et al. 2011).

According to Freeman and Bamford (2004), knowing various aspects of individual identity may contribute to understanding other facets of learning such as learners' engagement, motivation, and style. Ke et al., (2011) also argued that when interacting online, learners negotiate what they know about a subject and, at the same time, they reveal and share parts of themselves. Oztok (2016) asserted that identity is vital in the process of knowledge construction. He pointed out that although there is no recognisable scheme on how identification happens during the knowledge construction process, there is evidence that identity plays an important role at each level of the process. Learners can effectively build knowledge and properly position themselves in interactive discussions when they know who other individuals are as well as when they know how to present themselves (Oztok et al. 2013). Although the aforementioned research attempted to examine the relation between knowledge construction and identity, they did not address how power relations, as hidden forces, contribute to the construction of an interactive online community that foster knowledge building. Hence, I argue that exploring the condition and the circumstances that foster knowledge construction in online learning forum is crucial.

Aims and Objectives

The study aims to answer the following main question: what social events are involved in learners' construction of knowledge in single-gender online forums, and how does it relate to their identities?

From the main question above, the research will try to answer the following sub-questions:

- What are the power relation strategies that appeared in the students' interactions on the online discussion forum?

- How does power relations between students in single-gender online forum contribute to their knowledge construction?

- How does learners' identifications in single-gender online classes contribute to their knowledge construction?

This research will most likely contribute to existing knowledge by helping online instructional designers and developers to design online learning courses that provide more equal experiences and better online discussion environments for all students. Moreover, I hope this research will contribute to the understanding of the hidden forces that shape and influence learners' interactions in single gender online contexts.

Design

The project is currently in the first stage of my PhD research.
This research falls under the qualitative research approach in which I seek to understand the experiences of online learners in an online discussion forum. I aim to explore who benefits as well as who is marginalized by the research context. This is through investigating the hidden forces that influence learners' knowledge construction in online environments. My perspective views the truth as multiple, subjective, and contextual. Thus, participants in the study will be subjected to semi-structured interviews in which the research findings will be multiple and dynamic. Furthermore, participants' discussions will be analysed for further explanation of the research phenomena. Both deductive and inductive qualitative approaches will be utilized in this process to answer the research questions. Since the research is conducted in Saudi Arabia, my home country, I consider myself close to the participants as we share the same culture. Indeed, certain subjectivity, which is a characteristic of qualitative inquiries, will be part of the data interpretation. However, several procedures will be implemented to ensure research validity; such as generating a detailed, thick description, having peer review, and reflexivity.

The Research Methodology
This study is a multiple case study that examines multiple groups. Each group is a case by itself because it has characteristics that differentiates it from other groups. Multiple case methodology will allow for wider exploring and understanding of the research problem and context. Hence, this will contribute to answering the research questions and the concepts emerged from them. It also will help to understand the differences and the similarities between the groups under study.
The Participant Selection:
The sample in this research is purposeful based on the availability of individuals and their situation.
The Data Sources and Data Collection Tools

Two instruments are utilized for data collection. The first one is the semi-structured interview to obtain understanding of individuals' current experiences, and how they comprehend and structure the reality of online discussions (Ravitch and Carl, 2016). The second tool is the group discussion. In most online learning environments, learners exist by text on a screen. In this sense, facial expressions and body language that conveys emotion are nearly absent. Therefore, the entire dynamic of online classrooms can be understood by the analysis of the discussion forum. In the selected courses of this research, students are required to participate in a weekly forum as part of their coursework requirements. Each week, the instructor assigns a topic for students to discuss. Each student is required to post and answer three times in the forum – with at least two inputs as feedback to the other participants. Those discussions in the online forums will be collected and analyzed using a qualitative content analysis tool.

Pilot Study and Preliminary Findings

The pilot study was conducted to investigate the feasibility of this research as well as pre-testing the research data collection instruments, the interviews and the discussion threads.

The course selected for the pilot was part of a diploma certified in online learning for postgraduates at Princess Nora University. All the students in this course have completed their bachelor's degrees. Therefore, participants vary in terms of age, academic background, and experience. The total number of students who enrolled in the course was eight students. However, only three agreed to be part of the pilot study.

Following more details of the process of data collection and analysis:

First: the interviews:

 I conducted three interviews with three female students (N, M, and H). Each participant was interviewed separately. The interviews lasted between 40 to 60 minutes. All interviews took place online using Zoom conference video. Participants gave consent to be part of the study in accordance to Lancaster University's ethical regulations. In the interviews, I asked the interviewees a group of questions that elicited from five main questions:

1. When do you feel you have been successful in participating and learning in the online forum?
2. When do you feel you have failed in participating or learning in the online forum?
3. What did you find difficult or what hinders your participation?
4. How do you feel toward other learners' participations?

Each interview was transcribed and translated by a colleague and I to insure validity. Interview data was the primary source to investigate both power relation and identification.

To start the analysis of power relation, I followed a deductive qualitative research approach in which Foucault's Theory of Power Relations was applied as a starting point for the analysis. The analysis process follows the following steps:

First: The Conceptual Framework; I conducted a literature review to determine what aspects of power relations and identity to be investigated. In terms of power relation, I found Foucault's theory appropriate for this research because it investigates power in several directions in the sense that it does not only study power that flows from top to bottom, but also power that flows from bottom to the top and so crosswise (Kelly, 2009). Henceforth, Foucault's analytics of power is appropriate for the context that considers the crosswise micro-acting of power relations such as students' interactions. Further, Foucault's theory helps to view higher education as a social institution that spreads power among its members in which none of the members can attain complete authority that subordinates others (Peach and Bieber, 2015). Lee (2020) argued that using Foucault's theory in Technology Enhanced Learning research can provide a better understanding of the complexity of the hidden power relations in learning and teaching . Therefore, I adopted Gore (1995) conceptual framework based on Foucault's theory of power to explain key constructs of Foucault's ideas. Gore (1995) conceptual framework consisted of eight strategies which are surveillance, normalisation, exclusion, classification, distribution, individualisation, totalisation, and regulation. In this pilot study, however, not all of Gore's themes were recognized. Only surveillance, normalisation, exclusion, classification were present. This is due to the small sample of participants. Power strategies in Gore's framework are the main theme for data analysis.

Second: the Codes; based on the conceptual framework, I developed a set of codes, and each code indicates a particular behaviour that can fall under the predetermined power relation strategy (themes) specified at the conceptual framework. A review of Gore (1994), Gwittar and Carter (2014), and Marwick (2012) works aids this process of pre-coding. The outcome of this stage is summarized in Table (1).

Third: Data Analysis; the set of themes and codes were applied to the analysis of the data collected from interviewes. This involves the revision and the confirmation of the codes. This process also includes inductive inquiry in which some new themes and codes might emerge from data.

Fourth: Findings; in this stage I found that participants practiced three power strategies over one another. Those are normalisation, surveillance, and classification (excluding and inclusion). In normalisation, for example, the data showed that the students used a set of techniques to impose their authority on each other, they (1) maintained norms for online discussions; (2) maintained norms of a good classmate; (3) and criticized, compared and assessed each other's posts.

Here are some examples from the interview of how participants maintain norms of a good classmate which they follow in many of their interactions. Asking tricky and complex questions is considered a violation of certain norms, thoughtfulness and helpfulness, since it may cause discomfort and embarrassment. Therefore, participants showed many times in the interview their obligation to not put their peers on the spot. For instance, N said that she avoided interacting with one specific student in the class since she tended to privately message N when N commented on her posts, asking what to say in reply and how. N decided not to make any further comments on this student's posts so as not to humiliate her and thus violate the behavioural norm.

Here is an excerpt from N's interview:

*Researcher: **Have you ever corrected your classmates or helped them on their posts?***
Participant: I think they don't like the questions I ask. Some girl used to send me a private message asking for my own answer each time I asked her something in the discussion forum. I felt that my question was difficult…
Sometimes I had remorse; I would regret asking her questions and tell myself not to do so anymore.
*Researcher: **Why did you have remorse?***
Participant: I had remorse especially after asking this specific girl. I think she couldn't understand my questions. I didn't want to embarrass her again so I stopped asking her.

H faced the same situation but did not explicitly state whether she avoided this specific student in future discussions. However, she implied later in the interview that she avoided students who did not like to be asked questions.

In M and H talks, they were trying to display understanding and consideration towards their classmates. They do not want to embarrass or annoy them with criticism. On the other hand, their classmates held the assumption that fellow peers would undoubtedly extend their help in answering the discussion forum questions.

Additionally, these excerpts portray examples of classification behaviors such as exclusion and inclusion. When the participants mentioned that they avoided interacting with a particular student, it showed behaviors of exclusion. Participants also practiced other classification behaviours such as categorization based on academic level or experience. For instance, N classified herself as an experienced student and her classmates as non-experienced. Here are excerpts from N's interview:

*Researcher: **Did you ever feel that you were more capable than your classmates when it comes to discussions?***
Participant: Sometimes yes. I would spend my free time reading my classmates questions wishing they used a different format.
*Researcher: **So, you would assess them?***
Participant: Yes, because I have worked in the field. I believe I am more informed than they are but not more intelligent.

In terms of Surveillance, the data showed that students display personal information; check others' intellectual activities and messages; and compare between oneself and others' actions and way of thinking. For example, N mentioned that she was inspired by H's answers and thus tries to expand on and benefit from H's new ideas. Here N implied that she indirectly compared her own writing style with H's writing style and that this resulted in N's improving her own way of writing and thinking. Here are excerpts from N's interview:

*Researcher: **Where there any discussion that you benefited from and learnt something new?***
Participant: I do not remember exactly but I liked H's discussions a lot; they motivated me to ask her.
*Researcher: **Did you feel that she would add new things to the discussion?***
Participant: Yes.
*Researcher: **Do you remember learning something new from H's discussions?***
Participant: Not exactly, but I would be enthusiastic when the teachers asked for a new discussion. The first student to discuss would be H. In all the courses, the way she thinks and states her points is excellent. It reflects someone who really understands what they're writing. She inspires me and offers opportunities for new questions and new aspects. Sometimes, among the ideas she states in the discussion, you find an idea that raises a new question in your head.

The analysis of the interview also showed that participants revealed parts of their identities while interacting with each other. To start the analysis of participants identification, I utilized an inductive approach in which themes emerged from the data. Hence, professional identity, motherhood identity, and institutional identities were recognized in the analysis.

For example, N is an intellectual person who wrote articles at a very young age and worked as a news editor for several years. This professional identity of N was clear in the interview and her participation in the forum. For example, N stated that she often evaluates, reads, and corrects her colleagues' posts in discussions unconsciously and that she enjoyed doing this. This professional identity of N made her selective in responding to her colleagues as it appears from her interaction in the forum that she chooses the students with whom she wants to interact with. In the interview, she stated that she interacts with people who write well-organized posts and avoids those who do not write clear and organized posts.

Second: Group Discussions

The purpose of analyzing discussion threads is to identify where and to what extent knowledge construction took place in learners' interactions. To do so, I read participants' threads several times and tried to identify threads with knowledge construction using the model of Gunawardena et al. (1997). Messages in the thread that included statements of opinion, clarification, or example were coded as phase (1). Messages that show areas of disagreement or negotiation were coded as phase (2 + 3). Messages that show an application of new knowledge or changes in knowledge or ways of thinking were coded as phase (5). Initial findings showed that most students participation in the forum were in phase (1) with some posts in phase (2 +3).

The research will continue the analysis by drawing a connection between participants' power relations and identification to the process of knowledge construction.

Themes (categories)	Sub-themes	Reference
Surveillance	Display one's personal information	Albrechtslund (2008) Marwick (2012)
	Compare one's own and others' actions and ways of thinking;	Gore (1995)
	Check others' intellectual activities and public posts	Marwick (2012)
	Search for others' backgrounds and personal information	Marwick (2012)
	Comment on others' news and updates	Albrechtslund (2008)
Normalization	Maintain the norms of a good relationship;	Gore (1995)
	Maintain the norms of a certain task;	Gore (1995)
	Criticise, scold, and mock anyone who violates the norm;	Guitter & Carter (2014)
	Engage in corrective training	Guitter & Carter (2014)
	Provide a model that maintains norms to be identically followed;	Guitter & Carter (2014)
	Make a tribute to all who follow the norms;	Guitter & Carter (2014)
	Compare and assess oneself and others in accordance with the norm	Guitter & Carter (2014)
Classifications	Categories others based on their academic achievements	Gore (1995)
	Categories others based on their experiences	Theme emerges from the data itself
	Exclude certain members from one's social circle	Snyder (1984)
	Include certain members to one's social circle	Snyder (1984)

References

Al Lily, A. E. (2011). On line and under veil: Technology-facilitated communication and Saudi female experience within academia. *Technology in Society*, *33*(1-2), 119-127.

Albrechtslund, A. (2008). Online social networking as participatory surveillance. First Monday.

Alhazmi, F. A. (2010) Job Satisfaction Among Female Head Teachers in Saudi Arabian Secondary Schools: a Qualitative Perspective. PhD thesis. UK: University of Southampton.

Andrejevic, M., 2004. The work of watching one another: Lateral surveillance, risk, and governance. Surveillance & Society, 2(4).

Creswell, J.W. and Poth, C.N., (2018). Qualitative inquiry and research design: Choosing among five approaches. Sage publications.

Freeman, M., & Bamford, A. (2004). Student choice of anonymity for learner identity in online learning discussion forums. International Journal on E-learning, 3(3), 45-53.

Gore, J. M. (1995). On the continuity of power relations in pedagogy. International Studies in Sociology of Education, 5(2), 165-188.

Guittar, S. G., & Carter, S. K. (2014). Disciplining the Ethical Couponer: A Foucauldian Analysis of Online Interactions. *Foucault Studies*, 131-153.

Gunawardena, C., Lowe, C., & Anderson, T. (1997). Analysis of a global online debate and the development of an interaction analysis model for examining social construction of knowledge in computer conferencing. Journal of Educational Computing Research, 17(4), 397-431.

Ke, F., Chávez, A., Causarano, P. and Causarano, A. (2011). Identity presence and knowledge building: Joint emergence in online learning environments?. International Journal of Computer-Supported Collaborative Learning, 6(3), pp.349-370.

Marwick, A. (2012). The public domain: Surveillance in everyday life. Surveillance & Society, 9(4), pp. 378–393.

Öztok, M. (2016). Cultural ways of constructing knowledge: the role of identities in online group discussions. International Journal of Computer-Supported Collaborative Learning, 11(2), pp.157-186.

Ravitch, S.M. and Carl, N.M., 2019. Qualitative research: Bridging the conceptual, theoretical, and methodological. SAGE Publications, Incorporated.

Snyder, C., 1984. Analyzing Classifications: Foucault for Advanced Writing. College Composition and Communication, 35(2), p.209.