

“What Motivates Me?”: A Qualitative Perspective on Student Collaboration in Small Groups

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Abstract

Collaborative learning, social interdependence and computer mediated communication (CMC) have been broadly studied in higher education research. Collaborative learning has often been associated with a social interdependence understanding. However, this study explores the relationship from an exclusively student motivation perspective in order to gain insight over the factors that encourage students' positive interdependence in small peer groups. Moreover, due to the COVID-19 pandemic which, has shifted student learning to online platforms learners have found themselves engaging in computer mediated communication more than ever. Therefore, the study aims to explore CMC's influence over student motivations towards achieving mutual-interest in their small groups. Besides that, past studies concerning these areas have been mostly quantitative in nature, thus, this study used a qualitative approach by conducting semi-structured interviews with 9 participants from the Communications programme of a private higher educational institution in Klang Valley, Malaysia. The interview findings identified few factors that transformed their self-interest motivation to mutual-interest motivation. These being: accountability, quality of work outcome, type of coursework & group size. Additionally, CMC was not directly influential in encouraging students to grow mutual-interest in their small group. Besides that, there were no significant difference between the roles of synchronous or asynchronous communication in specifically motivating students towards achieving positive social interdependence. The findings prove beneficial for educators and educational administrators when designing collaborative tasks and relevant policies or guidelines.

Keywords: collaborative learning, computer mediated communication, higher learning, small group, social interdependence, student motivation

This paper looks at the higher education context, focusing on Year 1 undergraduate students' involvement in small peer groups (4 members per group). The study has observed specifically students from a private higher educational institution in Malaysia who are enrolled in the Communications programme. Often, a large part of the coursework undertaken centres on collaborative tasks involving peer learning in small groups. The coursework in the study programme have been mainly structured for group learning due to alignment with the work nature in the Communications discipline especially careers in public relations or organisational communication, which, will largely be centred around collaborative workplace environments. Moreover, as the world has become exponentially digital so has human communication. Computer mediated communication (CMC) has also been extensively used in the workplace for some time, among its advantage acting as a tool to communicate with others from different time zones or remote areas. Particularly in recent pandemic times, the students have had to adapt and rely solely on CMC for their learning and group working, thus, changing the dynamics of their day-to-day communication especially with their peers in the programme.

As the learning environment in the 21st century has seen extensive growth of a diverse student demography, tertiary education preferences and learner (dis)abilities; thus, to be on par educational institutions require pedagogical approaches and assessment methods that are equally varied, dynamic and improved. On that account, higher educational institutions have gravitated rapidly towards active learning approaches or what is, student-centred learning and since have been moving away from the traditional teaching practice of giving lectures and inducing rote-memorisation, lately seen even in scientific disciplines such as the natural sciences and formal sciences. For instance, the engineering academia has chosen to incorporate collaborative learning into its curricula whereby, students have exceeded in successfully acquiring skills related to communication, teamwork and design (Apte & Bhav-Gudipudi, 2020; Felder & Brent, 2007). Thus, group learning has grown in importance and lately used as pedagogy in higher education. Nevertheless, as a pedagogical approach collaborative learning method does pose its own challenges, yet has shown proven efficacy among students in learning settings that practise them. Students in collaborative learning settings learned to communicate better with their peers, encouraged to think critically and laterally, to have respect for diversity, develop learning communities and cooperative attitude plus, feel motivated (Laal & Ghodsi, 2012; Tsay & Brady, 2010). Additionally, technology use in active learning has noticeably been beneficial. The ECAR survey done in 2016 reported student participation was higher in technology-integrated classrooms (Elaine Gioiosa & Kinkela, 2019). Hence, suggesting that students participate a great deal in CMC these days. As such, this has encouraged more Malaysian higher education academics to pursue collaborative learning in their classroom activities and assessments.

Vygotsky's theorising on the social dimensions of learning led to the belief "that learners construct their own meanings within social environments" through the zone of proximal development which referred to "each person's range of potential for learning, where that learning is culturally shaped by the social environment in which learning takes place" and in which, based on this fundament collaborative learning has become an area well researched (McInerney, 2005). Therefore, collaborative learning is an educational approach that encourages interaction and transactive communication, knowledge/skill building through problem solving, product creation or task completion by groups of learners (Laal & Ghodsi, 2012; Schnaubert & Bodemer, 2018). The core of collaboration and cause of interdependence (Bonito, 2002; Cress, 2008 as cited in Schnaubert & Bodemer, 2018) has been due to "reciprocal influence" that signifies the supposed active interaction among learners who in time

influence each other in terms of “cognitions, motivation, and behavior, which may lead to both greater differences between groups and convergence within the groups.” (p.2).

Collaborative learning has developed itself into many different methods to facilitate group learning with some being more established than others, namely: Cooperative learning, Problem-based learning and Team-based learning. However, compared to the rest collaborative learning and cooperative learning often are thought to be the same as both have a constructivist epistemological background. Hence, an assertion made is that this study focuses on collaborative learning, which is defined as a personal philosophy on consensus building where group members respect and work towards enhancing each other's abilities through contributions, sharing of authority besides being responsible for group actions in a cooperative manner (Panitz, 1999). In comparison, cooperative learning is more teacher-centred in approach, directive and based on a set of fundamental principles to facilitate group learners (p.5). In addition, Johnson, Johnson and Holubec's (1991) 5 basic elements (positive interdependence, individual accountability, group processing, face-to-face promotive interaction, interpersonal & small group skills) (pp. 8–9) have been broadly adopted into the practise of cooperative learning.

Terms of Reference

To address some of the terms that are used in this study, “social interdependence” in accordance to Deutsch (1962) and Johnson and Johnson (1989), “exists when individuals share common goals and each individual's outcomes are affected by the actions of the others” (as cited in Johnson & Johnson, 2001). As for the term “motivation”, it is described as “the wants or needs that direct behavior toward a goal.” (Lumen, 2022). A considerable part of this study's inquiry is aimed at student motivations structured around “self-interest” and “mutual-interest”. On that note, “self-interest” is defined by actions performed for “the sole purpose of achieving a personal benefit or benefits.” (Cropanzano, Goldman & Folger, 2005, p.985). Hence, “mutual-interest” has been defined in this study as any action that benefit or benefits another, whereby above all the intended beneficiary is to be other than the self.

Purpose & Significance of Study

Albeit social interdependence theory and collaborative learning both have been researched rather widely in the past, however, it is still an on-going inquiry and piques much interest on what actually drives students to do well or poorly in collaborative work. Therefore, through the concept lens of social interdependence, the study's purpose is to garner a student-centred perspective focusing exclusively on their motives in shifting gears from self-interest to mutual-interest in groupwork, factoring in a CMC setting. In effect, this would be an added observation in understanding the relationship between synchronous and asynchronous CMC with student learners' motivation, who currently in higher learning are made up of Millennials and Gen Z. Thus, significantly informing educators and educational administrators or others in similar positions to consider the motivating factors for students when designing group-based tasks or related policies. This paper provides some highlighted findings that have successfully boosted students' interest towards peer collaboration for a mutual benefit rather than individual gain; while adding knowledge whether the role of synchronous and asynchronous CMC enables a collaborative spirit.

Literature Review

Social Interdependence Theory

Social interdependence theory's (SIT) premise is that the type of structure in a group determines individual members interaction, such, determining the outcomes of the group (Johnson & Johnson, 2002). SIT's historical roots can be trailed back to the early 1900s with the emerging school of gestalt psychology at the University of Berlin. Accordingly, "[t]hey posited that humans develop organized and meaningful views of their world by perceiving events as integrated wholes rather than as a summation of parts or properties." (Johnson & Johnson, 2009, p. 366). In other words, the human mind and human behaviour is looked upon as a whole. This understanding lies directly from the German "gestalt" which closely means "form" or "shape" when translated; however, the word is often interpreted as "pattern" or "configuration" in psychology (Brittanica, 2020). Hence, the understanding is human minds tend to sense events as part of a greater whole and as components of wider complexed systems. According to Kurt Lewin (1935, 1948) it was proposed that a group's essence is the interdependence among members due to common goals, resulting in that group being a dynamic whole whereby changes to the state of any member/subgroup in turn changes the state of any other member/ subgroup; thus, drives them to accomplish the common goals (as cited in Johnson & Johnson, 2009; Johnson & Johnson, 2005).

Lewin's contribution was extended further by his student Morton Deutsch, who in 1949 firstly noted that there are a few types of social interdependence structures: positive (cooperation), negative (competition), or non-existent (individualistic efforts) (Deutsch, 1949, 1962 as cited in Johnson & Johnson, 2002). Accordingly, a positive social interdependence is achieved when "individuals' goal achievements are positively correlated; individuals perceive that they can reach their goals if and only if the others in the group also reach their goals" while a negative social interdependence "typically results in oppositional interaction as individuals discourage and obstruct each other's efforts to achieve" whereas a non-existent social interdependence occurs "[w]hen a situation is structured individualistically, there is no correlation among participants' goal attainments; each individual perceives that he or she can reach his or her goal regardless of whether other individuals attain or do not attain their goals." (p.120)

Computer Mediated Communication (CMC)

Metz (1994) defined computer mediated communication (CMC), which presence had existed since 1969, as "any communication patterns mediated through the computer" (as cited in Laghos & Nicolaides, 2016, p.15). However, a more known definition was described by December (1997) who had outlined it as "a process of human communication via computers, involving people, situated in particular contexts, engaging in processes to shape media for a variety of purposes." (p.1). Thus, when simplified to mean that CMC involves human- to-human communication mediated by computers while also encompassing any form of digital media or video telecommunication technology from the modern day. CMC's advantage lies in its availability anywhere and anytime through multi-platforms such as emails, social media platforms, instant messaging, discussion forums, online distance learning programmes and massive open online courses (MOOC). Furthermore, CMC's other appeal is the multidimensional communication such as: one-to-one, one-to-many, many-to-one, many-to-many and even one alone (Chew & Ng, 2021, p.27).

CMC is characterised by its synchronous and asynchronous communication means. Succinctly, synchronous communication in a CMC context, applies to a face-to-face discourse with the intervention of technology or other tools in circumstances usually involving distance, whereas asynchronous communication does not happen in real-time in which the person(s) involved can interact with the message at a later time (Lim, 2017). CMC has the ability to encourage online collaborative learning where students have shown to perform well since online discussions potentially have the ability to improve learner-learner relationship due to the teacher's non-presence in the online collaborative space (Chew & Ng, 2021). Thus, giving the freedom for students to interact and share opinions as peers. However, its success possible provided if only there is mutual respect and peer engagement.

Method

For this exploratory and descriptive study, a qualitative approach was undertaken by employing a semi-structured interview method. Characteristically, a benefit of the semi-structured interview method is that even though “[t]he interviewer follows the guide, but is able to follow topical trajectories in the conversation that may stray from the guide when he or she feels this is appropriate.” (Cohen & Crabtree, 2006). However, such a method can be challenging due to its labour intensiveness and time-consumption in conducting the interviews and analysing data, while in need of interviewers who are knowledgeable, competent and adaptable (Adams, 2015). Nevertheless, semi-structured interviews enable deeper probing on the topic or matter in discussion and thus, provides in-depth perspectives to understand the circumstances surrounding it and of personal experiences.

Research Questions

Therefore, it is the study's aim to explore whether students from the communications field are driven by personal interest or incentivised by fellowship in groupwork. Whereas, the other aim is to focus on CMC's contributing role in shaping social interdependence in groupwork. Thus, the research questions (RQs) investigated are:

RQ1: What encourages Communications students to participate cooperatively in their groupwork?

- a) Are the students motivated by self-interest or mutual-interest?
- b) What are the factors behind their motivation?

RQ2: What role does CMC play in students' motivation in small group learning?

- a) Which CMC modes assist mostly in transforming the communications programme students' self-interest to mutual interest in a group learning environment?
- b) Does synchronous CMC or asynchronous CMC effect most in transforming the communications programme students' self-interest to mutual interest in a group learning environment?

Interview Participants & Interview Process

The following describes the study's targeted participants and how the interview sessions were carried out. The group of individuals chosen through purposive sampling represented Year 1 students (19-25 years) from the Communications programme in a private higher educational

institution in Malaysia. They were invited to participate as they took a core course in the same semester. The students had to produce a podcast segment (large assignment) as a group of 4 members within a 4-week duration.

To highlight, students were initially asked to fill in a survey questionnaire disclosing their abilities and skills in producing a podcast segment by the course instructor. This was mainly to facilitate grouping of students based on their present skillsets towards the completion of the project. Indirectly, it was to ensure each small group had an advantage and fairness observed from the beginning of their assigned task with one delegated member identified as the Podcast Editor. The rest of the members were given the opportunity to take on more fluid roles in the project such as being the Group Leader (GL), Assistant Group Leader (AGL), Researcher and Scriptwriter. In retrospect, the course instructor was careful to ensure that there was a balance maintained between: students having been assigned to a group and students' involvement at freewill in the group as it was to preserve the spirit of collaboration and engagement within the groupwork. Additionally, peer reviews were administered to ensure students worked towards enhancing their group dynamics as they will be evaluated on their collaborative skills by the members.

As for the interview process, a total of 34 invitations to participate were sent out to students that were either the designated GL or AGL for this project. This was mainly because every group had a student assigned as the GL and/or AGL. Hence, as a rationale, it was determined to include these students as to some degree the participants experiences would appear comparable as they had played similar roles in their respective groups. Moreover, it was observed being in Year 1, students were collaborating for the first time with peers who were relatively new to them. Therefore, it was anticipated that they would be more objective when assessing their motivation in a group with a lesser membership familiarity.

In the final outcome, a total of 9 participants from 7 different small groups had agreed to be interviewed for this study. The interviews were conducted only upon the submission of the project task so as to ensure participants did not feel obligated or bound to their small group, as they were meant to be comfortable and unrestrained when sharing their experiences when interviewed. Each in-depth single interview session lasted an average between 60-70 minutes, wherein “[a]bout one hour is considered a reasonable maximum length for [semi-structured interviews] in order to minimize fatigue for both interviewer and respondent.” (p.493). All participants had been interviewed via the online Zoom meeting software.

Preceding to that, relevant documents were sent in for institutional review and had attained approval for ethics clearance. Before the interview session, all participants were provided with a participant information sheet that was sent via email for participant consent. A set of core interview questions were attached together for participants to know the scope of the interview discussion. All participants had consented to their session being video recorded for this study's purpose.

Data collection & Analysis

The semi-structured interviews that were video recorded were transcribed for analysis and reporting purposes. In order to preserve the ethical code, each participant feedback was anonymised using a codename (e.g.: P1, P2). Besides that, a copy of the recorded interview session was sent to the participants for reviewing and for omission purposes, if any. Every one

of the participants had reverted with no corrections or omissions to be made, therefore all data collected was transcribed in verbatim.

Subsequently, the data was thematically analysed. The researcher had applied a latent level of analysis as distinguished by Braun and Clarke (2006) which focuses “to identify or examine the underlying ideas, assumptions, and conceptualisations – and ideologies – that are theorised as shaping or informing the semantic content of the data” (p.84). Thus, the emergent themes conceptualised from the 9 participants from the Communications programme concerning reasons contributing to students’ social interdependence motivation in small group peer learning (RQ1b) are: accountability (self & others), quality of task outcome, and type of coursework task & group size.

Findings and Discussion

This section discusses the findings on student social interdependence motivation in small group collaborative learning and the influence of CMC in harnessing their motivation.

Student Social Interdependence Motivation: Perspectives & Factors

One of the most significant aspect of social interdependence is the transformation of one’s motivation from self-interest to mutual-interest (Shimizu et, al., 2020) in collaborative learning. Therefore, the findings for RQ1 of the study discovered that the Communications programme students had started out the project motivated by self-interest but for many of them in due course it had transformed into mutual-interest motivation. There were mainly 4 themes that surfaced from the interview findings in terms of factors that contributed to students’ keenness in shifting their intent to do well for group benefit rather than personal benefit. These were: accountability, quality of work outcome, type of coursework & group size. In terms of self-interest motivation, participants are ostensibly prompted by individual task preference and also personal grade achievements.

To restate, a positive social interdependence happens “when the actions of individuals promote the achievement of joint goals” whereas a negative social interdependence occurs “when the actions of individuals obstruct the achievement of each other’s goals” (p.366). Therefore, indicating positive social interdependence would advance the transformation of self-interest motivation to that of mutual-interest in groupwork. Interestingly, the interview findings reiterated these concepts with most participants expressing a positive social interdependence experience in their small groups. Conversely, students who did not seem to work on a mutual benefit spirit even until the project’s end had experienced a non-existent social interdependence (members mostly worked independently) compared to a negative social interdependence in their groupwork. In this aspect, there was no progression in students’ motivation towards achieving mutual-interest in the group.

The following are evinced descriptive responses (Table 1) by participants that had encountered positive social interdependence experience when collaborating in their small groups. In summation, these participants found their motivation turn into mutual-interest when all members in their small group stepped up and played equal roles towards achieving an optimal outcome for the given task. The responses suggest that the participants were becoming intrinsically motivated to deliver their best for the project when other members equally displayed similar behaviour, thus setting up an ad hoc support system within the small group. This finding supports the literature that a positive social interdependent cooperation not only

“tend[s] to result in more frequent use of higher-level reasoning and more intrinsic motivation, but also promotes more positive interpersonal relationships and greater social support.” (Shimizu et.al., 2020).

Table 1

Responses to Positive Social Interdependence in Small Group Learning

Participant	Interview Response
P1	...it started off as personal interest. I really wanted to learn how to produce a podcast but after that, because it takes a lot of effort, [...] I really needed support from other group members [...] It was very helpful when they were always willing, [...] So yeah, yeah, like they were very cooperative for this assignment [...] Everyone was really trying their best, so I was also putting it as much effort as I could [...] because I really think that everyone deserves to do well for that one. [...] Yeah, that kind of like made you feel that you wanted everybody else to do well because everybody was pitching in to sort of help each other out, perhaps.
P3	I think it's a mixture of both. I can't say it's entirely like self-interest... because it's a group assignment. But in starting stages... yeah, it's self-interest. But when during we are discussing about the script, right? It's more like towards mutual interest. [...] Because mainly it's a group project and how others perform will...will influence others. And so, if at the same time, everyone's thinking about self-interest, I don't think that everyone is going to get benefit because everyone is too self-centered. Everyone wants the best for them. [...] But you also must want the best for others because you are a group. Yeah, basically, you are one body.
P5	I think that depends on the assignment. If it's interesting [...], I will give my all for this assignment...it's my own interest; but mutual interest, probably comes from the team members, the other team members if they are themselves interested and, like encouraging. For example, the podcast assignment, [...] They were all very, very interested. We set deadlines and everything [...] we were all in it! So, I would say mutual interest, it was more mutual interest for this assignment.
P7	In relation to this assignment, I'd say both. [...] as a student, [...] there's also a personal motivation but at the same time as a group leader it is also my role to make sure that everyone in the group participates, knows what they're doing. We are all equally wanting, you know, for each other to do well in the assignment. So, I guess it's both personal motivation but... at the same time it's also a cooperative one.
P9	I think I'm more of a personal interest person when it comes to assignment. Yeah. Especially like this assignment... because grades are very important to me. So, I tend to focus more on my interests. However, for the assignment the team mates are good and hardworking... it tends to also be mutual interest as well. It gets like self-interest and then becomes mutual interest. Yeah, [be]cause I know they put in effort to get good marks so I will try my best to help them out as well. So, we all can get good marks together.

Nevertheless, there were 2 participants that had reported experiencing non-existent social interdependence in their small groups. In a nutshell, their responses (Table 2) have shown that there was lack of cooperation by members towards a “joint goal” which, in this instance, was

the completion of the project. Such, these members felt discouraged until the project's end to feel motivated by any mutual-interest.

Table 2

Responses to Non-Existent Social Interdependence in Small Group Learning

Participant	Interview Response
P2	I think it's more of self-interest because ... I found out that after the group assigned, I noticed one group mate and I was like, oh my God, it's this person again! [...] and I didn't know about the other two. So, I was like, okay, you know what? Maybe it won't be so bad, I kept like a positive mental attitude and then when the assignments started, I was like, oh my God... Okay, you know what? They are not responding on time, [...] I'll just do it myself and just get it done. [...] So, it was more self-interest at that point. It was mutual at first and then slowly slipped to like self-interest.
P4	Actually, for me it's based on what kind of assignment it is. [...] So, I will be very motivated... own interest, I can say. [...] my group they were not very motivated. [...] So, in the end, my marks were important for me to do well.

Furthermore, an underlying supposition from P2 and P3 responses respectively has been indicative that students who enter groupwork tasks are aware of mutual-interest motivations, though superficially only. Apart from that, the interview findings revealed that the participants (P1, P4, P5 responses) may be more inclined towards self-interest motivation when involving a course task that they enjoyed working a lot at a personal level. Another reason attributed itself to maintaining student grades in the enrolled programme (P4, P9 responses). Nevertheless, for this study, the highlighted reasons were considered as peripheral factors since participants had only managed to gloss over these discussions during the interview.

Largely, from the interviews it can be understood that participants proved willingness to work with group members on a mutual (benefit) platform when members showed personal “accountability” in the given group task. Accountability, be it involving the self or others, was constantly a recurring emphasis among the interview participants. Thus, it can be identified as a factor related to the transformation of one's self-interest to mutual-interest in collaborative learning. Accountability is when every student takes individual responsibility to achieve a joint goal and bears ownership of the outcomes. During the interview, participants were candid to point out that their motivations had changed when they had observed accountability by group members who were showing commitment, reliability and competence over their delegated tasks (refer to Table 1). Besides that, group member familiarity encourages self-accountability, as P6 claimed “*let's say if I'm in a group with my friends... that I know, that means it's mutual interest. I want them to do well and I want myself to do well as well*”. As for P8, who also experienced positive social interdependence in the recent groupwork, opined that specific designated roles within the group encourages the accountability level of members stating that “*I think something that would create a mutual-interest is if...everyone has a specific role that they are good at. That only they can execute. So those kinds of settings, they really make me think about the group working... on a mutual-interest way, where I want everyone to do well.*” Such, in relation, the presence of accountability (self and others) in a group nurtures camaraderie that encourages a member's motivation to grow from self-interest into mutual-interest.

From the interview discussions, participants have also identified “quality of task outcome” as being a relevant factor in informing their motivations to a mutually interested one. Participants were keen to work on a common benefit basis when group members were committedly producing high quality work based on their assigned roles while consistently trying to enhance the overall outcome of the given task. For instance, P8 shared experiences that *“when the members do a lot more of good work, I can’t help it, that... I want to step it up, than expected, for the group”*. P9 additionally exemplifies, *“when we delegate tasks, each one of the group members will have their own parts. So, you know, like because you’re going through the document as well. So, you see how their performances are. So, when you know the work performances, like how well they elaborate the points, how well they can do and find their points. Even the mistakes they do is very low. And, they do it like quick. It’s quick but the quality is good, [...] That becomes like the mutual interest.”* On the other hand, P2 highlighted that poor work quality has been instrumental in hindering the transformation of the individual mindset to a group mindset. In the interview discussion, P2 stated, *“if it’s in a group, yes, that should be high quality results. But I think that if, if everyone else doesn’t have the same energy as you to put it in the effort, then there’s no point in being a group. To like, not give any high-quality work. And that’s when I started thinking that maybe I should just do it alone. I probably can do it better alone.”* Therefore, the stress on work quality put in by individual group members has been pivotal to the transitioning of self-interest encouraged motivation to a mutual-interest motivation for the participants in these small groups.

The third and final common factor given emphasised “type of coursework task and group size”. A number of participants interviewed pointed out that the nature of the course task would influence the way they would want to approach the task, either individually or as a group. For the recent project, generally participants felt that the podcast segment required members to approach it from a mutual-interest standpoint due to the many production levels involved in the task such as researching, scriptwriting, podcast segment conceptualisation, production, role-playing and editing. Yet, more of the participants’ responses drew attention to small group size in boosting group closeness that embodies mutual-interest motivations. P2 had stated that, *“I think it is possible and you can actually get to know them like personally too, in like a smaller group. Whereas if it’s in a bigger group ... you can feel left out sometimes because the group is too big and then everyone’s like talking and often your kind of, like, should I join in, but it’s already so many people here.”* According to P3, *“I’ve been in groups with 13 people, that one, I felt was more self-centered. Smaller groups, tend to have better dynamics, lesser personalities to deal with and more connection in the group.”* P7 agrees strongly that the sizing of the group, whether small or large, matters by expressing that *“there is a difference, because the more group mates you have, you will have to receive more different opinions, it gets tougher and maybe, sometimes, one of them might not respond since everyone else is responding.[...] To be honest, I think the podcast assignment, 4 people is just nice, perfectly fine... because usually the more people, the more conflict there’ll be”* Hence, in brief small group settings offer its members closer proximity. Such, members commonly find themselves able to deal with lesser disputes since there’s lesser communication lines crossed among them. Also, member involvement in the group task is higher, bringing about latent circumstances such as group bonding and positive social interdependence.

CMC: Preference of Mode & Role in Encouraging Student Motivation

The other aspect of this study explored was the role of computer mediated communication (CMC) in encouraging students’ motivation. The interview responses had answered RQ2 of the study by imparting students’ perspective of their preferred tools of communication for

groupwork which, were mainly (in sequence of preference): the multiplatform messaging app – WhatsApp, online word processor – Google Docs and video teleconferencing software – Zoom. Hence, their preferred CMC mode was mainly textual based while supplemented by audio, image and/or video information. Furthermore, the students did not find disparity between synchronous CMC or asynchronous CMC in transforming their self-interest to mutual interest in the small groups, though generally they predominantly agreed CMC was able to foster positive social interdependence due to reciprocal influence by members. However, it was discovered from the interviews that the asynchronous communication was preferred and that it did not dissuade students from feeling lesser of a member in their small group.

The Internet has become the most common source of information today and happens to be a platform where social media presence is thriving, thus, much of the communication among users are engaged online. In recent times, due to the Covid-19 pandemic the Communications programme students have been participating in their coursework tasks fully online. Thus, students have found various CMC tools to stay connected and to complete given tasks, particularly when involving groupwork. P9 iterated that CMC, *“definitely does help, because, even though it is online, we are still working to complete the assignment together”* but, since CMC is technology-based P6 asserts that *“it has its challenges, there are some with poor internet...or simply low bandwidth to connect for our discussions. Then, it becomes a problem for the group”*. Subsequently from this study, all participants strongly claimed that they preferred communicating using the multiplatform app WhatsApp with their group members. The primary reason being its accessibility since it is a free application. Another reason highlighted by participants was due to its convenience since students were able to text message, record voice or video messages, upload files and check unread message and/or reply them at their disposal. This is further evinced by the participants responses; for instance, P5 who stated, *“[w]e used three platforms. First... we created WhatsApp group for casual texting and updating everything on that script, [...] Why? Because everyone has it, so that’s the first thing we thought of,”* whereas P7 shared, *“WhatsApp. It’s friendly. Fairly informal. Anytime. As long as you have access to internet data, whatever place you are you can check messages.”* Subsequently, Google Docs was also highly regarded as a productive cooperative work space as group members could compile work that were delegated to them, leave comments and even improve on each other’s work. In P8’s response, it was mentioned that *“working on Google Docs was great. Sometimes, when I was checking on the script ...requested by members, I could make the changes there and then. [...] They understood the changes made, when they read the changes...[be]cause they trusted my judgment ...that I was wanting to improve the script for us all.”*

Hence, the text-based feature in WhatsApp and Google Docs was substantially useful to participants and treated akin to progress(ion) records on their project work. To add, mediated communication is rarely impersonal (Walther, 1995 as cited in Wrench & Punyanunt-Carter, 2007). Therefore, WhatsApp and Google Docs’ writing-texting as well as direct editing features can be seen as useful in tracing the development of each individual’s contribution, timeliness and efficiency in the groupwork. P6 shares that *“Yeah, it plays a part in our group mates feeling. Like, yes, I think they are a good team player because they’re responsive and they’re able to convey the information to the group well, and on time and effectively.”* Consequently, this has helped form certain opinions and feelings for specific members that are more affirmative and optimistic, in consequence expanding on group members interactivity levels in a positive manner leading to positive interdependence. Thus, CMC used for groupwork has capabilities to rouse happiness and trustworthiness, correlating with one’s “emotivation”. In short, the portmanteau “emotivation” has been conceived to explain our

distinct emotions which motivate behaviour (Beall & Tracy, 2017). Accordingly, the feeling of happiness may have coevolved with “a fundamental motivational system geared toward promoting affiliation with peers” (Kenrick et al., 2010 cited in Beall & Tracy, 2017, p.4). In this regard, CMC shows capability to promote peer affiliation which, by nature is inherently motivated by mutual-interest and a sense to avoid solitariness.

As for the roles played by synchronous or asynchronous CMC, participants were quick to report there were no differences between the two sets of communication pattern in influencing their motivations. However, the discussion findings prove intriguing when participants initially highlighted their general preference for face-to-face communication, yet found synchronous communication rather uncomfortable from their experiences. As mentioned by P1, *“we were all feeling shy with the video call,”* and further to that, P3 who illustrates in-depth, *“with face-to-face meetings, it’s different [...] there’s body language and just something about... the interaction level, better connection is fostered [...] but on our Zoom call, it wasn’t the same. Some did not turn on the video, [...] one participant was directly staring at the member speaking [...] also, on screen people, just show you what parts they want you to see of them...it’s easier to filter”*. Therefore, to these participants synchronous communication could not replace face-to-face communication, even though both had similar characteristics in terms of being communication done in real-time. This finding can be supported by Chen and Wang’s study (2009) who found that an obvious difference between synchronous online and face-to-face communication discussions is the direct interaction that incurs in the latter whereby learners chatter noisily and laugh together whereas members in online discussions appear silent as they are more engaged in typing on the keyboard.

By comparison, the interview responses had leaned towards participants being partial over asynchronous communication in this project. Though the finding was unclear whether their motivations had changed when engaging in CMC, but almost all participants claimed that they still felt group affiliation in CMC caused by member reciprocal influence. This was clearly seen in P6’s response, *“because usually, WhatsApp feature, you can like send multiple things... like links, documents, and pictures and you can even record your audio if you... don’t want to have an awkward call with your group mates, you can just voice record it and send it to the group. So, everyone can listen to it at the same time. [...] so, we get a sense of belonging. [...] We feel connected as part of that group,”*. As a bid to answer why CMC did not affect participants social interdependence motivation, this could be linked to one’s communication competency and length of that active communication when using computer mediated technology (Wrench & Punyanunt-Carter, 2007). For the recent podcast group project, most of the participants cited that the 4-week timeline was insufficient to get to know their members socially or personally as communication was mainly reserved for work-related matters. Besides that, some members online communication had proven poor causing unnecessary miscommunication as highlighted by P2, *“I was surprised at the way he replied in the group, it was... somewhat like rude, [...] then in the video meeting a week later, actually he was okay”*. As a conclusion, the likely online communication incompetency among some members may have demotivated others from nurturing a positive social interdependence in their small groups.

Conclusion

As an overview, the study’s qualitative inclined findings through both RQs inquiries have revealed that students showed motivation towards a mutual-interest in circumstances where the small group working experiences have been such that: members show accountability, members produce good quality of task outcome, the nature or type of coursework given and the allotted group size. Thus, in general 7 interviewed participants from the Communications programme

were able to have experienced positive social interdependence in their podcast segment project. As for the remaining 2 participants, they were unable to achieve social interdependence in their group due to lack of member accountability, thus, stayed motivated by self-interest until the completion of their group project. As for CMC's role in transforming motivation in small peer groups, students generally appeared in consensus that CMC assisted with the reciprocal influence, such, enhanced the overall groupwork experience and group affiliation. It still remains unclear on the direct influence of CMC on mutual-interest motivation since participants stressed member accountability as being most important to their group membership. Moreover, to the participants neither synchronous nor asynchronous communication particularly heightened their recent collaborative experience. Yet, the indicated notion has been that the participants preferred asynchronous communication for its non-restrictive nature in checking/replying messages to the rest of the group members.

The study's limitation is set in the fact that all participants wore a leadership hat in the small peer groups as either a Group Leader or Assistant Group Leader. Therefore, the study was not able to explore the power-distribution paradigm to have gained a fuller insight into the interpersonal interaction between leader-member relationships and its relationship to social interdependence motivations. It is recommended that perhaps future research work could explore these dynamics.

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