Communication and Cohesion in Undergraduate Teams

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Abstract

Recent literature suggests that teams who engage in varying modes of communication will display varying levels of task and social cohesion (Yuhyung and Kyojik, 2011). We investigate the relationship between computer-mediated communication (CMC) and task cohesion, face-to-face communication (FTF) and social cohesion, and team duration and social cohesion. We predicted and tested the following hypotheses: 1) Computer-mediated communication leads to higher levels of task cohesion than face-to-face communication, 2) Face-to-face communication leads to higher levels of social cohesion than computer-mediated communication, and 3) Longer team duration leads to higher levels of social cohesion than short-term teams.

Literature Review

Within undergraduate studies teamwork has been a crucial factor to the learning process for students. Multiple disciplines have recognized the importance of incorporating teamwork into their curriculum as a way of preparing students for various post-graduate opportunities. In light of this, social science research can be done in order to assess undergraduate students’ experiences, perceptions, and attitudes towards teamwork and its characteristics. Scholars have explored aspects of teamwork that include cohesion, leadership, conflict and conflict resolution, and peer evaluation (Chelte F., 2005,
Amason C., Allen 1996, Wageman R., 2001). Communication is a crucial factor for creating teams that are cohesive. In this study, we will examine various facets of communication and how they contribute to the teams’ level of social and task cohesion. Communication is defined as “the exchange of information between two or more individuals” (Cortez, 2008). These facets include positive and negative forms of communication, computer-mediated and face-to-face communication, diversity, and the presence of social networks. It is important to assess students’ skills, experiences, and perceptions towards communication as it pertains to the level of social and task cohesion in the team.

**Defining Task and Social Cohesion**

Cohesion, or the level of attraction an individual feels to a group, can be divided into two subcategories: task and social cohesion. Social cohesion is defined as the level of commitment that an individual feels towards a group based on positive relationships within the group (Yuhyung and Kyojik 2011). Additionally, it involves the individual’s ability to prioritize the team’s success over his or her individual objectives and fosters trust and strong communication between team members (Chinowsky, Diekmann, and O’Brien 2010). For example, personality traits can affect perceptions of social cohesion. Undergraduate students at a Mid-Atlantic university were participants in a study that examined how perceptions of group work were affected by the personality and communicative traits they brought to the group experience (Myers et al. 2009). Extroverted students tended to be more interdependent within teams and communicated more with team members; conversely, more introverted students, who may lack communication skills, were more likely to have negative associations regarding teamwork hence diminishing their contributions to the teams’ social cohesion (Myers et al. 2009). Thus, personality traits and their effect on communication styles influence a team’s level of social cohesion.

The second subcategory of cohesion is task cohesion. Task cohesion is defined as the degree to which individuals feel a sense of commitment towards the teams’ shared tasks (Yuhyung and Kyojik 2011). Kalisch, Terzioglu, Duygulu examine task cohesion by studying misscare in a hospital setting (2012). Misscare is defined as “any aspect of [patient] care that is omitted either in part or as a whole delayed” which leads to inadequate treatment of patients and completion of necessary tasks (Kalisch et al. 2012). Misscare occurs due to lack of adequate communication resulting in a lack of task cohesion. Similarly, McCaffrey et al assess task cohesion through their study of a communication-based program for doctors and nurses (2011). This program’s main purpose was to give residents and nurses the necessary tools to properly and efficiently communicate the needs of the patient. McCaffrey et al found that the program successfully facilitated communication between doctors and nurses thus enhancing their ability to administer medical care (2011). This demonstrates the necessity of good communication in fostering task cohesion among team members whose professional or academic background is different or diverse.

Social and task cohesion are associated with various measures of diversity that characterize a team and may affect styles of communication. Diversity includes but is not limited to “differences among people with respect to age, class, ethnicity, gender, physical and mental ability, race, sexual orientation, spiritual practice, and public assistance status” (Esty, Griffin, and Schorr-Hirsh 1995). Winter, Waner, and Neal-Mansfield study diversity as it manifests itself in differing undergraduate majors (2008). This is done through their study of mixed-major academic teams enrolled in business communication courses.
at a Midwest, regional university. The diversity of these groups was found in their distinct academic experiences, language, and modes of thought. Therefore, the researchers posited that the presence of dissimilar majors within teams would alter the way that these groups communicated. According to the researchers, shared experiences and common language facilitated an environment in which open and free communication was more readily-developed. As Winter et al note, “a team becomes a functional body whose members complement each other to achieve their common end” (2008). The results showed that groups with similar majors felt that they were “full members of their teams” (Winter et al 2008). As full team members, individuals felt a greater commitment to other members of the team and as a consequence felt more comfortable communicating their ideas thus exhibiting a high level of social cohesion. The study was limited because it lacked an exploration of how individuals of different majors have varying levels of commitment to tasks. Furthermore, their mixed-majors may cause team members to engage in incompatible types of communication. These types of communication, whether negative or positive, should be considered for their effects on task and social cohesion.

**Forms of Communication**

Teams often engage in communication that can both hinder and enhance both forms of team cohesion. Gossip, which is usually a stigmatized form of communication, may be dismissed as being solely negative and detrimental to a team’s cohesion. However, through their study of a university rowing team, Kniffin and Wilson explored the dual functions of gossip that may actually enhance social and task cohesion (2005). In this study, gossip is defined as “informal and evaluative talk in an organization, usually among no more than a few individuals, about another member of that organization” when that member is not present (Kniffin and Wilson 2005). Gossip’s task and social cohesion function is demonstrated through its ability to establish team norms or expectations of team members’ performance. In the case of positive gossip it is a form of indirect role modeling that encourages imitation of practices that enhance team social and task cohesion (Curry, Cortland, and Graham 2011). By discussing the positive or negative attributes of another team member, gossip allows for the dissemination and reinforcement of team norms needed to bolster team task and social cohesion. Therefore, gossip should be treated as a serious communicational category that can be regarded as a measure of teams’ task and social cohesion.

**Communication and Social Networks**

Another way of framing this discussion of task and social cohesion is to evaluate individuals’ incorporation into the group based on the presence of strong social networks. Social networks within teams are characterized by a certain level of trust, knowledge exchange, and member interdependence (Chinowsky et al 2010). A crucial characteristic of social networks is the level of member interdependence. Interdependence, an element of social and task cohesion, is a strong indicator of the presence of positive relationships between team members and individuals’ commitment to the teams’ shared tasks. Through their study of staff at an engineering design firm, Chinowsky et al measured social networks through the frequency of communications and knowledge transfer, the level of inter-team reliance, trust, and shared values between team members (2010). They concluded that
there was a positive correlation between teams that reported high levels of communication and those that reported strong trust relationships among the team members. Though they studied workplace teams, their findings can be generalized to teams outside of the workplace which include classroom teams. Similarly, Bulzac-Samardzic et al found that a higher rate of communication between youth care colleagues in the Netherlands’ welfare system resulted in greater trust (2010). The trust that resulted from their communication resulted in greater social cohesion; which then contributed to the feeling that the team could then successfully complete tasks. Both these articles revealed that there was a positive correlation between the teams that reported having strong social networks and high levels of communication between team members. Conversely, teams that reported little to no presence of social networks had a propensity toward isolationist rather than collaborative practices that resulted in less communication between team members. The aforementioned characteristics are often predictors of the teams’ level of task and social cohesion because they measure the individuals’ level of commitment to the relationships and tasks of the team.

**Modes of Communication**

Similarly, different modes of communication may predict differing levels of social and task cohesion in teams. According to Yuhyung and Kyojik, 30%-50% of time in the workplace is spent in computer-mediated-communication (2011). For this reason it is important to consider the effects of technology on communication and how that communication affects a team’s level of social and task cohesion. Yuhyung and Kyojik studied social and task cohesion through teams of undergraduate students enrolled in a human resources management course (2011). The researchers investigated the relationship between computer-mediated-communication (CMC), face-to-face communication (FTF), and these communicative modes’ effect on social and task cohesion. According to their study, social cohesion was enhanced by face-to-face communication and computer-mediated-communication enhanced task cohesion. Face-to-face communication enhanced social cohesion because it allowed team members to evaluate non-verbal cues thus allowing them to better understand the interpersonal dynamic of the team. Conversely, the lack of non-verbal cues in computer-mediated-communication limits the purpose of communication solely to information transfer and does not allow for the evaluation of team members’ interpersonal dynamic. Groups that lack social cohesion may exhibit poor communication skills and a lower level of willingness to engage in practices that foster positive teamwork interactions.

**Focused Communication and Cohesion**

While studying the staff in top management companies in Norway, Bang et al examined the relationship between focused communication, goal clarity, and task cohesion (2010). Focused communication is “the degree to which group members stick to the issue during a group meeting; that is, whether a group refrains from digressions and/or goal irrelevant behaviors” (Bang et al. 2010). Goal clarity is “the degree to which each group member understands why the issue is important or relevant to discuss in the meeting...and what he or she wants the group to focus on” (Bang et al. 2010). This goal clarity, articulated through focused communication, is an integral component of task cohesion because it enhances the team members’ understanding of and commitment to the shared tasks. They found that
goal clarity and focused communication had a positive relationship to task cohesion and, consequently, performance (2010).

Computer-mediated communication is more conducive to task cohesion because the technology’s use is focused on the communication of the task at hand rather than, for example, interpreting the non-verbal cues of team members’ that contribute to one’s understanding of the interpersonal dynamic. This focused communication is a predictor of task cohesion. In light of the prior research it is apparent that communication, in all its forms, engages in a dynamic interplay with a team’s social and task cohesion. As has been demonstrated by researchers’ prior findings, diversity, positive and negative gossip, social networks, and technology all have an effect on teams’ communication styles and their level of social and task cohesion. Our focus group revealed that students recognize a distinction between the types of communication and levels of social and task cohesion found within short- and long-term teams. Using this information, we have gained a more nuanced understanding of the complex and differentiated ways in which communication manifests itself and has an effect on teams.

**Methods**

In order to study the relationship between communication mode and task and social cohesion, we conducted an online survey through the St. Olaf online application Form Creator. Our research was part of a broader research project that examined students’ experiences with, perceptions, and attitudes towards teams and teamwork conducted at a small liberal arts college in the Midwest. We identified the following hypotheses about teams:

1. Computer-mediated communication leads to higher levels of task cohesion than face-to-face communication.

2. Face-to-face communication leads to higher levels of social cohesion than computer-mediated communication.

3. Longer team duration leads to higher levels of social cohesion than shorter team duration.

**Variables**

Our main variables were mode of communication, team duration, social cohesion, and task cohesion. Mode of communication and team duration were the independent variables and the level of social or task cohesion were the dependent variables. Our survey contained indices that used Likert-type response categories and multiple choice questions.

**Mode of Communication**

We conceptualized communication as the exchange of information between two or more team members. Often, the purpose of communication is to clarify or acknowledge the receipt of information (Cortez, 2008). Our survey focused on team use of face-to-face communication and computer-mediated-communication (e.g. use of email, Moodle, texts, Skype, phone calls, Google documents or Google drive). We used a multiple choice question which asked *Which option below best describes the primary*
mode of communication used in your most recent classroom team? Participants were asked to choose from the following seven ordinal response categories: Only face-to-face communication, Mostly face-to-face communication, More face-to-face communication but also some computer-mediated communication (such as Google documents or email), About half face-to-face and half computer-mediated communication, More computer-mediated communication but also some face-to-face communication, Mostly computer mediated communication, and Only computer-mediated communication.

Team Duration

We conceptualized team duration as the length of time that the team worked together. We utilized a multiple choice question which asked How long did your most recent team last? Participants chose from the following seven ordinal response categories: Less than one week, 1-2 weeks, 3-5 weeks, 6-9 weeks, 10-14 weeks, 15-18 weeks (semester long), 19 weeks or more.

Social Cohesion

We conceptualized social cohesion as an individual’s level of commitment to the team based on positive interpersonal relationships formed between members while in the team (Yuhyung and Kyojik 2011). We utilized a seven-item index that used the following ordinal seven-point Likert-style response categories that we recoded into interval/ratio data: Strongly Agree, Agree, Somewhat Agree, Neutral, Somewhat Disagree, Disagree, and Strongly Disagree to measure the participants’ perception of social cohesion in their most recent undergraduate team experience. Participants responded to measures including the following: During team meetings, the team discussed topics that were unrelated to the team’s task (for example, about our social lives), Team members were uninterested in personal aspects of each other’s lives, and Our team, as a whole, liked to spend time together outside work hours. The measures in the index captured how socially cohesively a team behaved based on the levels of interpersonal, non-task oriented interactions among team members as a whole.

Task Cohesion

We conceptualized task cohesion as an individual level of commitment to team tasks displayed by individuals and the team as a unit (Yuhyung and Kyojik 2011). We utilized an eight-item index with seven-point ordinal Likert-style response categories that we recoded into interval/ratio data, similar to the one used in the social cohesion index, to measure the participants’ perception of task cohesion in their most recent team experience at St. Olaf College. Participants responded to measures including the following: Individuals completed their delegated tasks in a timely manner as agreed upon by the team and Tasks were unevenly distributed across individuals in the team. These measures captured the team’s level of task cohesion based on the levels of focus and distribution of work among team members.

Validity
Validity is defined as a “space” containing ideas and concepts. We increased face validity (judgment by the scientific community that the indicator really measures the construct) by conducting an informal pretest with other student researchers studying teams and teamwork (Neuman 2012). Additionally, our professor Ryan Sheppard assessed our measures for face validity. For our social cohesion index we used both favorable and unfavorable measures to address aspects of social cohesion such as whether students spent time together outside of team meetings socializing. For our task cohesion index we used both favorable and unfavorable measures to address aspects of task cohesion such as the level of commitment that team members felt towards completing the team’s tasks. We increased concurrent validity by ensuring that the measures in our indices addressed all aspects of social and task cohesion.

In order to better conceptualize and refine our variables and hypotheses, we conducted a ninety-minute peer focus group in which seven college students participated. We asked these students about their experiences pertaining to cohesion and communication within the context of academic and workplace teams. We recruited the participants for the focus group using email and word-of-mouth through various informal social networks that each researcher possessed. The group consisted of two men, five women and included sophomores, juniors, and seniors from various majors. Conducting a focus group allowed us to receive information in regards to whether our understandings of team cohesion matched the reality of cohesion and communication as experienced by the participants of our focus group. Based on this, we were able to better construct measures of our variables that accurately reflected the reality of cohesion and communication. Furthermore, the focus group provided us with feedback that allowed us to create the variable of team duration. Participants indicated that they felt team duration was a crucial component of cohesion. The data from our focus group allowed us to accurately conceptualize our variables, thus enhancing face validity, based on data from students’ comments and feedback.

**Reliability**

In order to increase reliability (dependability or consistency) we used multiple indicators of the same variable and pre-tested our survey questions (Neuman, 2012). We used measures that accurately reflected and assessed our conceptual definitions of concepts such as social and task cohesion and mode of communication. Additionally, we used multiple indicators of the same variable (e.g. level of task cohesion) to ensure reliability. For example, we measured task cohesion through measures such as the team’s ability to focus on the task at hand during team meetings and the even distribution of tasks among members. Furthermore, we used mutually exclusive and exhaustive Likert-style response categories because it allows participants to indicate their opinions in a concise manner. Moreover, we pre-tested the survey by administering it to other researchers studying teams and teamwork. Our fellow researchers then gave us feedback and we made revisions based on that feedback.

**Sampling**

Our target population was the student body at a small liberal arts college in the Midwest that was comprised of approximately 3,000 students. To determine the appropriate sample size we used Neuman’s *rule of thumb*, which states that a population of 10,000 needs a sample ratio of 10% and a
population of 1,000 needs a sample ratio of 30% (Neuman, 167). Our attempted sample size was 707 students and we had a response rate of 35% (251) students.

For the survey, students were selected using simple random sampling and were drawn from the target sample population of all students not including the students that were excluded. We used a random sample so that our results would be generalizable to the undergraduate college population and so that each member of the population had an equal chance of being selected (Patten 2001). We excluded individuals who participated in our focus group, part-time students, those off-campuses due to study abroad, under the age of eighteen, non-traditional students, or those who were enrolled in the Sociology/Anthropology course Foundations in Social Science Research. We excluded these individuals so that there wouldn’t be overlap between those who had already participated in the focus group and those we surveyed, to prevent the ethical dilemma of studying vulnerable populations, and because non-traditional and off-campus study abroad students may not be enrolled in a typical course load. The Director of Institutional Research at the college completed the sampling process for us. Our sample size was 707 with 251 respondents, which resulted in a 35% response rate. Our sample was 67% (167) female and 29% (72) male with 4% not responding. Our sample had 30% first-years (76), 27% sophomores (68), 24% juniors (61), and 15% seniors (37), .003% other (1).

**Ethics**

We encountered the following possible ethical issues: protecting vulnerable populations, privacy, and informed consent. However, the consequences of ethical dilemmas were limited because the nature of our research topic was not very sensitive. We resolved the issue of working with vulnerable subjects by excluding students under the age of eighteen from our sample. Although the nature of our study topic was not sensitive, we ensured that students would retain anonymity by not requesting names while taking the survey. Additionally, consent to participate in the survey was both informed and voluntary, which would allow participants to withdraw at any time, ensure that they were aware of the risks and benefits of their participation, and who would have access to our research findings. We distributed a cover letter along with the survey that included the aforementioned informed consent information. The nature of our study required the approval of the St. Olaf Institutional Review Board (IRB). We required IRB approval because we asked for personally-identifiable information (e.g. major), we interacted with subjects (through survey), and we engaged in systematic collection of data to be contributed to generalizable knowledge (St. Olaf IRB 2004).

To test our hypotheses of whether mode of communication (computer-mediated or face-to-face) affected the level of cohesion (task and social cohesion) in teams, we conducted statistical analysis using a Kruskal-Wallis test and a Chi-Square test. We hypothesized that computer-mediated communication leads to higher levels of task cohesion in teams than face-to-face communication. We also hypothesized that face-to-face communication leads to higher levels of social cohesion in teams than computer-mediated communication. Lastly, we predicted that longer team duration would lead to higher levels of social cohesion in teams than shorter team duration.

**Results**
When asked what the team’s primary mode of communication was, the majority of respondents reported using a combination of computer-mediated and face-to-face communication. But after collapsing the response categories into face-to-face communication (only face-to-face communication, mostly face-to-face communication, more face-to-face communication, but also some computer-mediated communication) about half face-to-face and computer-mediated communication (about half face-to-face and computer-mediated communication), and computer-mediated communication (more computer-mediated communication, but also some face-to-face communication, mostly computer-mediated communication, only computer-mediated communication), (Figure 1) we found that respondents used more face-to-face communication (62.3%), followed by equally computer-mediated and face-to-face communication (27.4%) then more computer-mediated communication (10.2%).

**Figure 1: Student teams’ mode of communication**

Hypothesis 1: Computer mediated communication leads to higher levels of task cohesion than face-to-face communication.

In our task cohesion index we included items which measured the teams’ overall task cohesion (Table 1). For example, we asked respondents to report as to whether tasks were completed in the teams’ agreed upon time frame. Students were more likely to agree (88%) that their team completed tasks in the team’s agreed upon time frame, very few disagreed with this statement (8.1%), and less than 4% were neutral towards the statement.
For our uncollapsed task cohesion index, the mean score was 33.35 on the 8-item index. The index scores ranged from 3-24. We collapsed the response categories into “Agree” (Strongly Agree, Agree, and Somewhat Agree), “Neutral” (Neutral), and “Disagree” (Strongly Disagree, Disagree, and Somewhat Disagree). The mean score on the collapsed index of task cohesion then showed that the mean score was 20.64 on an 8-item index (Table 1).

Our first hypothesis predicted that computer-mediated communication leads to higher levels of task cohesion than face-to-face communication. To test our first hypothesis, we used a Kruskal-Wallis test that compared the varying levels of task cohesion with computer-mediated communication. A
significant relationship was found \( H(2)=14.49, p < 0.01 \) indicating that the two groups differed from each other. This suggests the importance of using computer-mediated communication in relation to raising levels of task cohesion in teams.

**Hypothesis 2:** Face-to-face communication leads to higher levels of social cohesion than computer-mediated communication.

Our social cohesion index included items that measured the teams’ level of social cohesion. For example, we asked respondents to report as to whether the team spent social time together outside of work meetings. The majority of respondents were more likely to disagree with (44.9%) or feel neutral about (24.4%) the team spending time together outside of work meetings and few agreed with this statement (30.7%) (Figure 3).

![Figure 3: Social Cohesion Index Item](image)

For our uncollapsed social cohesion index the mean score was 43.03 on a 7-item index (Table 2). The index scores ranged from 10-21. We collapsed the response categories into “Agree” (Strongly Agree, Agree, and Somewhat Agree), “Neutral” (Neutral), and “Disagree” (Strongly Disagree, Disagree, and Somewhat Disagree). The index of social cohesion then showed that the mean score was 16.79 on a 7-item index.
For our second hypothesis, we ran a Chi-square test of independence that examined the frequency of face-to-face communication and social cohesion (both collapsed). The Chi-square test compared use of face-to-face communication and level of social cohesion. After collapsing the response categories for mode of communication and the social cohesion index we found no statistically significant relationship ($\chi^2 (22)=20.614$, $p>.05$) between face-to-face communication and social cohesion.

**Hypothesis 3: Longer team duration leads to higher levels of social cohesion than shorter team duration.**

Team duration was another variable we examined. When asked the duration of their most recent team, the majority of respondents reported team duration of 1-2 weeks (34.7%). After collapsing the response categories to short-term teams (less than 3 weeks) and long-term teams (3 weeks to 19 weeks or more), our results showed an approximately half and half division between short-term teams (48.6%) and long-term teams (51.4%)

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<thead>
<tr>
<th>Table 2: Social Cohesion</th>
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<tr>
<td>Social Cohesion</td>
</tr>
<tr>
<td>Team members spent personal time outside of work</td>
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<tr>
<td>During meetings, team discussed topics unrelated to tasks</td>
</tr>
<tr>
<td>I was familiar with personal aspects of members’ lives</td>
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<tr>
<td>I felt uncomfortable discussing personal aspects of my life with team</td>
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<tr>
<td>Members uninterested in personal aspects of each other’s lives</td>
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<tr>
<td>At team meetings, whole team lost focus on tasks</td>
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<tr>
<td>Team, as whole, liked to spend time together outside of work</td>
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<tr>
<td>Total Mean Score on Social Cohesion Index</td>
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**Figure 4: Duration of student teams**

We ran a Chi-square test of independence that compared team duration and social cohesion (both collapsed). A Chi-square test compared team duration and level of social cohesion. After collapsing the team duration and social cohesion index response categories, we found no statistically significant relationship ($\chi^2 (44)=57.490, p>0.05$) between team duration and social cohesion.

**Discussion**

Hypothesis one predicted that more use of computer-mediated communication would lead to higher levels of task cohesion than face-to-face communication. We found a statistically significant relationship, which indicates that teams who used more computer-mediated communication exhibited higher levels of task cohesion than teams who used face-to-face communication. We observed a lower score on the uncollapsed task cohesion index and, after collapsing our response categories, we observed a higher score further reinforcing that there were high levels of task cohesion in the teams that respondents reported on. Due to the significant relationship between task cohesion and computer-mediated communication, we found support for our hypothesis. This finding corresponds to prior research which found that the use of computer-mediated communication led to higher levels of task cohesion (Yuhyung and Kyojik 2011). This finding supports our research question that addresses the relationship between computer-mediated communication and level of task cohesion. As a consequence, these findings may influence how future employers of undergraduate students choose to invest their resources, particularly, for teams whose outcomes are task-oriented in nature.

Hypothesis two tested the relationship between teams’ use of face-to-face communication and their level of social cohesion. We found no statistically significant relationship between these two variables. This indicates that teams who used face-to-face communication were no more likely to exhibit higher levels of social cohesion than teams who used more computer-mediated communication. The mean score on our collapsed social cohesion index was low indicating low levels of social cohesion in the teams that respondents reported on. This indicates that students felt that their teams did not display much social cohesion. Although most respondents reported using more face-to-face communication than computer-mediated communication, this did not correlate to higher levels of social cohesion in teams. This contradicts previous research which found a relationship between use of face-to-face communication and higher levels of social cohesion (Yuhyung and Kyojik 2011). Therefore, our hypothesis was not supported. Nonetheless, these findings may influence how future employers of undergraduate individuals choose to invest resources in order to promote social cohesion. Employers cannot solely rely on face-to-face communication to promote higher levels of social cohesion.

Hypothesis three tested the relationship between team duration and level of social cohesion. We found no statistically significant interactions between the level of social cohesion and team duration. This indicates that long-term teams were no more likely to exhibit higher levels of social cohesion than short-term teams. This contradicts previous research, which suggested that longer team duration would lead to higher levels of social cohesion than shorter team duration. In the uncollapsed version of our team duration multiple choice question, the majority of respondents reported team duration of 1-2 weeks.
This hindered our ability to assess the relationship between long-term teams and increased levels of social cohesion because the majority of respondents indicated that they had been in short-term teams. We then collapsed the response categories into two categories: Short-term (less than 3 weeks) and Long-term (3 weeks or more), which resulted in an approximately half and half division between short-term and long-term teams. Nonetheless, we found no statistical significance to support our hypothesis. However, these results indicate that employers cannot only rely on duration to build social cohesion in teams.

Conclusion

Our research sought to address the relationship between mode of communication, team duration, and social and task cohesion. We proposed the following hypotheses: 1) Computer-mediated communication leads to higher levels of task cohesion than face-to-face communication 2) Face-to-face communication leads to higher levels of social cohesion than computer-mediated communication and 3) Longer team duration leads to higher levels of social cohesion than shorter team duration. We found statistical significance for our first hypothesis, but no statistical support for the second or third hypotheses. Our findings for hypotheses two and three contradicted the prior research while the findings for hypothesis one supported that prior research (Yuhyung and Kyojik 2011).

There are various limitations for the generalizability and validity of our findings. First, our data are based on a limited sample size of roughly 700 college students. This could be resolved by obtaining a larger sample, which could be done through alternate recruiting tactics such as in-person recruitment. Secondly, we had a low response rate of 35% (251). This could be resolved by shortening the survey or providing different incentives to take the survey. Time restrictions played a large role in limiting our research both in terms of the thoroughness of the research and the amount of time that participants had to respond to the survey. These issues may be resolved by extending the research period into another semester or summer session and would allow the survey to be open to participants for a longer period of time. Third, our conceptualization of social cohesion, and the index items we used to measure it, may not accurately reflect the reality of social cohesion amongst undergraduate teams at this undergraduate college. This issue could be resolved by more extensive pre-testing and additional focus groups around these variables. Fourth, we lacked data from participants who had been on long-term teams (3 weeks or more). This may have affected our social cohesion data because, in general, teams need longer team duration in order to develop social cohesion. Lastly, because our research was part of a broader initiative we had limited space on the survey and this hindered our ability to include sufficient measures of our variables. This issue could be resolved by allowing each research team to create their own survey that addresses their research questions. However, this may further decrease the response rate and induce survey fatigue amongst respondents.

Future research into the relationship between mode of communication, team cohesion, and team duration may examine an older population (e.g. graduate students or upper-classmen) and how intergenerational environments affect the aforementioned variables. Upperclassmen (juniors and seniors) or individuals who have completed their undergraduate education may have greater experience with long-term teams particularly those found in the workplace. With increased data on long-term
teams, future research may be able to better examine the relationship between team duration and social cohesion. Intergenerational workplaces are a reality that nearly every recent graduate will encounter and varying generations have varying relationships to mode of communication. Consequently, future researchers may examine intergenerational teams to see if there is a differing preference or use of mode of communication and whether this affects these teams’ social and task cohesion.

In conclusion, although the majority of our hypotheses went unsupported, we were able to gain crucial insights into the relationship between mode of communication, team duration, and social and task cohesion. As more and more workplace and classroom interactions move to a computer-mediated platform it is important to examine the effects of this on team social and task cohesion. We hope that further research will build on the insights we’ve gained and continue to expand knowledge of this crucial issue.

Works Cited


