

A (Cyber) Communicative Home:
Emergent Structure and Leadership in an Unstructured Online Space
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Abstract

As computer mediated communication (CMC) technologies continue to become increasingly accessible and affordable, more of human life is going to happen, at least partially, in an online space. Earlier in the digital age, participating in online spaces was typically a choice or a preference of the individual; however, in the era of virtual work, virtual education, and virtual healthcare, participation in virtual spaces is now becoming mandatory for many. Organizations, both leaders and followers, need an understanding of the purposeful use of CMC and virtual environments for growth and productivity. This qualitative study establishes a theoretical framework to understand how e-leaders and their followers can benefit from unstructured communicative practices in an online context through an analysis of the content of a long-term unstructured online communication chat to see what practices might aid group development among people participating in long-term unstructured online communication. The study concludes that, in a long-term unstructured online space, structure and leadership roles emerge as a result of content patterns, frequency of engagement, and CMC effects, and that the structured elements of Zaccaro and Bader's (2003) theory of e-leadership and e-team trust can evolve in an unstructured space.

Keywords: e-leadership, e-teams, leadership of virtual teams, social cohesion, unstructured

communicative practices, group interaction patterns

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We live in the age of virtual space. In 1991, Stanley Deetz lamented the corporate colonization of the lives of those in developed countries, describing a womb-to-tomb experience of corporations in the life of a typical individual: a child is born in a corporate hospital with corporate values to parents who work corporate jobs, goes to schools where she learns the values necessary to function in a corporate job, works her entire life in that corporate job, then dies in another version of the corporate hospital where she was born. Fast forward to 2015, and Deetz could easily substitute “virtual space” in place of corporations. Before the child of today is even born, her pending arrival is announced on social media with her first photo, a sonogram. From infant to toddler to preschool, her life is recorded online. As soon as she is old enough to understand a mobile device, she can take lessons and classes online, including her entire education from kindergarten through post-grad and beyond. She may work a job with a virtual team, pursue a hobby with an online community, and tend to her health through an online support group. As she retires, she will maintain relationships through the virtual tools of her era, and at the end of her life, a bereaved family member will post a notice of her passing, perhaps on the same social media platform that contained the announcement of her birth. We do not just spend time in virtual space, our lives are happening there.

It is not unusual for work teams, communities, or even entire organizations to exist entirely in virtual space. Nearly two-thirds (66%) of global organizations use virtual teams (Minton-Eversole, 2012), and 70.8% of academic leaders in U.S. universities report "e-learning is critical to their long-term strategy" (Haynie, 2015). As of January 2015, the user “population” of Facebook (1.39 billion active users) exceeded the size of China (1.36 billion) (Investor

Relations, 2015) making Facebook the biggest “country” on the planet. Of those 1.39 billion Facebook users, nearly half, 500 million, belong to a Facebook group (Cohen, 2014), with a similar number, 500 million, using Facebook’s Messenger chat application (Martinazzi, 2014). As computer mediated communication (CMC) technologies continue to become increasingly accessible and affordable, more of life is going to happen, at least partially, in an online space. Earlier in the digital age, participating in online spaces was typically a choice or a preference of the individual; however, in the era of virtual work, virtual education, and virtual healthcare, participation in virtual spaces is becoming mandatory for many. Organizations, both leaders and followers, need an understanding of the purposeful use of CMC and virtual environments for growth and productivity.

Organizational communication ethics asserts that an organization must be more than a space for the execution of work; an organization must be a *dwelling place*, “a communicative home ... a gathering of communicative practices and stories that gives an organization a sense of uniqueness” (Arnett, Harden-Fritz, & Bell, 2009, p. 138). Organizational communicative practices can be either structured or unstructured, and research suggests that unstructured communicative practices are essential to creation of a sense of dwelling place in organizations, particularly in organizations with virtual components (Stalcup, 2014a; Stalcup, 2014b). While much research has gone into how to structure communicative practice, very little has been done on unstructured practices. CMC theories, such as hyperpersonal CMC (Walther, 1996), suggest it is in the informal communication where self-disclosure happens that leads to intimate bonds that create the sense (or absence) of a communicative home. If it is a challenge for organizations to create a sense of dwelling place among individuals who share the same physical space on a regular basis, how much more so is this a challenge in the online space? Organizations are

spending money on platforms designed to support virtual teams. The online communication app *Slack* has generated \$12 million in recurring revenue in its first year of operation (Griffith, 2015) from companies seeking to structure online communicative practice. However, the idea that most organizations fear, unstructured space, might be the very thing they need to create cohesion and effectiveness in distributed teams. Further, since by definition unstructured communication cannot be “planned or engineered” (Arnett et al., 2009, p. 84), how might one lead an unstructured space? This project speaks to both an academic and corporate audience, as it fills an academic research gap and provides insights and suggested practices for organizations using virtual teams or working with online forums. The objective of this project is to provide a resource of practices that could be used to facilitate unstructured communicative practice as part of an organizational development strategy.

This study will examine leadership in group interaction patterns emerging in unstructured communicative practices in the context of online forums. To that end, the researcher conducted a textual analysis of the content of a 19-month (November 2013 – May 2015) Facebook chat created by a cohort of graduate students in an online degree program using grounded theory. While like most virtual teams this group was temporary in nature (Zakaria, Amelinckx, & Wilemon, 2004; Zaccaro & Bader, 2003), the chat transcript is nearly two years long with more than 22,000 entries, providing the opportunity to study long-term unstructured online communication.

Literature Review

The literature review will cover the following areas: computer mediated communication (CMC), e-leadership (online leadership), online group and e-team interaction patterns, and unstructured communicative practice. The CMC section will provide background on the specific

issues related to communication at a distance, with a particular focus on the role of Walther's (1996) hyperpersonal CMC in online group cohesion. The section on e-leadership will address scholarship related to the historical study of e-leadership, the challenges of leadership at a distance, the skills required by e-leaders, and the benefits of e-teams as compared to co-located teams. The group interactions' section will explore literature related to the nature of online groups and e-teams with a focus on group interaction patterns and social cohesion. Then the unstructured communicative practice section will focus on the role of communicative practice in creating an online dwelling place, *third places* and the role of "informal sociability" (Steinkuehler & Williams, 2006, p. 903) in unstructured communication, and examples of unstructured communication in virtual spaces. The literature review will conclude with the theoretical framework of Zaccaro and Bader's (2003) e-leadership and e-team trust, a discussion of gaps in the literature, and a presentation of research questions.

Computer Mediated Communication

Mediated communication is not new—since the era of the cave paintings at Lascaux, human beings have been communicating with each other through various mediated means—letter writing, telegraph, and telephone are all forms of mediated communication (McArthur, 2010). However, the degree to which life can be lived via mediated communication is a new experience with a variety of media available for use—text, image (photo, illustration, avatar), audio, video. The field of CMC explores issues and experiences related to the mediated communication of an Internet-enabled world. Early CMC research suggested that in-person, face-to-face (FtF) communication was the standard by which all other (lesser) mediated communication should be measured (Walther, 1992; Walther, 2011). In this model, online interactions were deemed limiting due to absence of the cues made possible through FtF

interaction; however, in 1992, Joseph Walther presented the theory of social information processing (SIP). In this theory he investigated how persons in communication (dyads) in text-based environments addressed the absence of non-verbal cues in communication. He discovered that in text-based CMC, individuals adapted “the encoding and decoding of social information (i.e., socioemotional or relational messages) into the language and the timing of messages” (Walther, 2011, p. 458). The only difference in the ability to create cohesion and trust between FtF and CMC was process rate—Walther concluded that, while it might take longer for social cohesion to develop in text-only communication, communicators would achieve a similar social meaning through strategies to compensate for the absence of non-verbal cues.

Walther (1996) extended his own research with the development of the hyperpersonal CMC model. With this model, he challenged SIP, suggesting that CMC could actually go beyond FtF communication (hyperpersonal) to achieve a greater intimacy at a quicker speed than typical in FtF interactions. Walther examined four components of CMC: receiver dynamics, sender dynamics, channel attributes, and feedback effects. He discovered that in CMC settings, receivers tend to idealize and exaggerate perceptions of the sender as an attempt to fill in the blanks of the missing non-verbal cues. Senders have a tendency toward “selective self-presentation” (Walther, 2011, p. 460) constructing messages in a way that presents a “best self.” Further, in attempting to mitigate missing clues, both senders and receivers tend toward reciprocity in self-disclosure that leads to more intimate disclosures than typical in FtF encounters. Channel attributes, the characteristics of the various media, influence the nature of CMC. In particular, *asynchronicity*, *editability*, and *reallocation of cognitive resources* (Toma & Hancock, 2011, p. 45) contribute to hyperpersonal effects. The ability to communicate asynchronously (at any time rather than in real-time) allows senders and receivers time to reflect

on message construction, to edit the message, and to focus mental faculties (now freed from communicating/interpreting the non-verbal elements of message) in a way not possible in synchronous FtF communication. The elements of idealization, selective self-presentation, and channel attributes combine to create feedback effects that further reinforce and even exaggerate the already exaggerated effects.

Subsequent research posited that for some use cases, CMC could be more effective than FtF communicative interactions. Particularly in the areas of social support (High & Solomon, 2011; Ley, 2007; VanLear, Sheehan, Withers, & Walker, 2005) and task-accomplishment (Zaccaro & Bader, 2003) researchers have demonstrated that the perceived deficiencies of cues-filtered-out CMC work in favor of the accomplishment of the stated goal. VanLear, Sheehan, Withers, and Walker (2005) extended the hyperpersonal model to support groups and proposed the idea of the “hypersupportive” (p. 21) CMC model. In a comparative study of online and FtF Alcoholics Anonymous (AA) support groups, asynchronous online support groups not only demonstrated elements of hyperpersonal effects but also had exaggerated elements of support. The asynchronous online groups had less superficial discussion (chit chat), “more disclosure at both the semi-private and private-personal levels, more agreement, and more personal acceptance than in the synchronous groups” (p. 21). The researchers concluded that the online group experience was more emotionally supportive than the corresponding FtF experience. In a similar vein, Zaccaro and Bader (2003) proposed that task-oriented e-team activities can be more effective in CMC environments due to the lack of distraction in FtF settings and the ability to create social capital more quickly as a result of the hyperpersonal effect.

In addition to the hyperpersonal effects of CMC, the merging of Internet and mobile technologies has contributed an intimate dimension to CMC experience. As of 2014, nearly 60

percent of global Internet access occurred through mobile devices (Sterling, 2014). In the United States, 64% of adults own a smartphone (Smith, 2015), and 60% of Internet use is now mobile-based (Lella & Lipsman, 2014). Thus, for many Internet users, a desktop/laptop computer experience is now being replaced by a smartphone/tablet experience. The ability to access email, social media platforms, instant messaging (IM)/chat, video, and other applications once limited to a computer screen makes even asynchronous communication seem like an “always on” experience. Ling (2008) examined the role of mobile to interpersonal and small group cohesion. The research suggests that mobile communication (texting, voice calls) bridges the gap between FtF and CMC, supporting “new forms of sociation” (p. 176). Mobile CMC creates “ambient accessibility ... a sense of persistent social space constituted by the periodic exchange of text messages” (p. 121). As email, chat, text, apps, and phone blend into one, an even more heightened sense of intimacy in CMC communications becomes possible when channels are accessed via mobile devices.

E-Leadership

In the context of communication studies, leadership is a communicative act. Hackman and Johnson (2013) defines leadership as “human (symbolic) communication that modifies the attitudes and behaviors of others in order to meet shared group goals and needs” (p. 33). Leadership in virtual spaces, e-leadership, not only requires an attention to the interactive communicative relationships between/among leaders and followers, but requires the purposeful and meaningful application of CMC so as to integrate the needs and demands of the human with the technical (Avolio, Kahai, & Dodge, 2000).

E-Leadership defined. The term e-leadership comes from the idea of “electronic leadership” (Zaccaro & Bader, 2003) and is generally accepted as leadership that happens (1)

with geographically distributed teams (either from each other or from the leader), (2) using primarily electronic (CMC) channels, (3) where the teams usually exist only for a short period of time (Avolio, Kahai, & Dodge, 2000; DasGupta, 2011; Zaccaro & Bader, 2003). Associated terms include: “*e-leadership, eLeadership, virtual leadership, distant leadership, tele-leadership, leading from a distance, leading through telecommunications, leading through ICT, leading virtual organizations, leading virtual teams, and leading virtual workforces*” (DasGupta, 2011, p. 1). E-leadership has been studied through a variety of FtF theoretical lenses: behavioral leadership (Watson, 2007; Zimmerman, Wit, & Gill, 2008); situational leadership (Watson, 2007), transformational leadership (Balthazard, Waldman, & Warren, 2009; Purvanova & Bono, 2009; Whitford & Moss, 2009); transformational versus transactional leadership (Hambley, O’Neil, & Kline, 2006; Howell, Neufeld, & Avolio, 2005), and social network approaches (Carter, DeChurch, Braun, & Contractor, 2015). Current scholarship suggests that while some traditional FtF leadership theories apply to leadership in a virtual space, e-leadership lends itself to unique challenges, benefits, and leadership skill sets (Annunzio, 2001; Avolio & Kahai, 2003; Avolio, Kahai, & Dodge, 2000; Brake, 2006; Gurr, 2004; Kerfoot, 2010; Watson, 2007; Zaccaro & Bader, 2003). E-leadership is, in fact, “a fundamental change in the way leaders and followers relate” (Avolio & Kahai, 2003, p. 322).

E-leadership skills. Among many skill sets required for leaders in general, the literature suggests that effective e-leadership demands both technical and affective skill sets, including: expertise in using various technologies and CMC channels (Gurr, 2004; Kolb, Prussia, & Francoeur, 2009; Zigurs, 2003); boundary spanning (Hogg, Van Knippenberg, & Rast, 2012; Kerfoot, 2010); ability to inspire at a distance (Kerfoot, 2010); and building team trust and identification (Samartinho, Jorge, & de Faria, 2014; Zaccaro & Bader, 2003; Zigurs, 2003). Gurr

(2004) investigates the unique challenges inherent in leadership at a distance through a study of the use of CMC in an education setting. Gurr identifies the primary challenge of e-leadership to be the “paradoxes and dilemmas and the associated behavioral complexity” (p. 113) brought about by not being physically co-located. He suggests that e-leaders must become expert in the tools of CMC such that they communicate regularly and effectively with team members so as to “establish an appropriate social climate and to be able to convey exemplary interpersonal skills through the associated technology” (p. 113). Kolb, Prussia, and Francoeur (2009) discovered that the “robustness” (p. 345) of an e-leader’s technical connectivity impacted the quality of her social connectivity (social linkages) and led to greater follower perceptions of leader effectiveness.

Hogg, Van Knippenberg, and Rast (2012) links two important leadership functions: rhetoric and boundary spanning. In an examination of the role of e-leaders in intergroup leadership, Hogg et al. proposes that there is an essential “interplay” (p. 243) of these two functions and that “the influence of boundary-spanning leadership and the influence of intergroup identity rhetoric are mutually reinforcing” (p. 243). Along with the ability to be a boundary manager, Kerfoot (2010) proposes that e-leaders must be able to inspire at a distance, to facilitate team members to develop self-management, and to engage a coaching style of leadership versus the traditional supervisory model. Carter, DeChurch, Braun, and Contractor (2015) takes this approach a step further suggesting that e-leaders need to apply a social network approach to leadership considering not just leadership *in* networks, but leadership *as* networks, “embedding social context to jointly constitute leadership emergence and effectiveness” (p. 597).

The purpose of the skill sets of technical connectivity, social connectivity, boundary spanning, and inspiring at a distance is the development of team cohesion. Samartinho, Jorge,

and de Faria (2014) encapsulates this concept with “The e-3Cs Rule” (p. 1272) of communication, coordination, and trust. Zaccaro and Bader (2003) places trust at the center of e-team effectiveness and e-leadership skills, with trust as the essential element for productivity and the effective use of member talent and social capital. Zigurs (2003) suggests that the e-leader is pivotal in the promoting and maintaining e-team trust through *telepresence*, “the experience or sense of being present in a place different from one’s physical location” (p. 344). This telepresence needs to combine *vividness*, rich media whenever possible, and *interactivity*, engagement with the media, to create a sense of trust with and among dispersed team members.

Group and Team Interactions

Groups and teams. E-leadership is closely associated with online groups and teams. There is an abundant body of literature on the study of small groups and teams. It is generally agreed that small groups are collections of 3 to 20 individuals (Hackman & Johnson, 2013; McArthur, 2010) with a shared goal (Cragen, Kasch, & Wright, 2008; Hackman & Johnson, 2013; McArthur, 2010) engaged in communication interactions over a period of time that lead to the development of communication patterns (Cragen et al., 2008; McArthur, 2010; VanLear et al., 2005). Additionally, group members are interdependent, needing the participation of other group members for the existence and functioning of the group. Group interaction patterns and shared values lead to the creation of shared identity or sense of “we-ness” (Cragen et al, 2008, p. 18) among group members. The literature makes a clear distinction between groups and teams—all teams are groups, but not all groups are teams (Hackman & Johnson, 2013). While groups have a shared purpose and goal, teams typically produce a shared work product, are accountable as a whole for specific performance goals, and usually disband when the work product outcome is accomplished (Hackman & Johnson, 2013).

The literature identifies four primary types of group communication: task, pattern, process, and self-centered (Harris & Sherbom, 2005; McArthur, 2010; Rothwell, 2006). Task communication refers to “the core aims of the group and content of its work” (McArthur, 2010, p. 293) and is goal-centered. Pattern communication involves relationships among group members. Process communication involves procedures for group function, and self-centered communication involves any subjects or discussions not related to the stated purpose and functioning of the group, i.e., “off-topic” (McArthur, 2010, p. 293) conversation and exchanges.

Small groups and teams evolve and develop over time, typically going through Tuckman’s (1965) four stages of development: forming, storming, norming, and performing (Hackman & Johnson, 2013; McArthur, 2010; Zaccaro & Bader, 2003). In the forming stage, the group members come together and typically are uncomfortable as the nature of the group is still in development. In the storming phase, conflict arises as group members express opinions as to task, process, and values definitions. This leads to the norming stage, where the group agrees upon the shared values and behaviors of the group, including social interaction, procedural rules, and task assignments (Cragen et al, 2008). In the performing stage, the group members reach consensus and function cooperatively and effectively. Tuckman and Jensen (1977) adds a fifth stage to the model, adjourning, to represent the end of the existence of the group, most common in teams and working groups.

Two key factors in effective small group and team functioning are group cohesion and trust. Putnam’s (2000) theory of social capital proposes that community cohesion (small groups and beyond) is based on “the creation of social coherence and its application in a community members” (p. 57). Social capital can be either bonding, comprised of resources that cohere group members, or bridging, facilitating connection of group members beyond the community to

outside resources. Social capital is created (or lost) through a cyclical process based on “experiences and expectations” (Luoma-aho, 2009, p. 243) where experiences, either good or bad, over time, lead to expectations, either good or bad. Thus as reputation either increases or decreases, trust or mistrust increases or decreases. These levels of trust and reputation lead to either high or low amounts of social capital. Cohesion and trust in small groups is developed “as communication interaction facilitates role taking and as the group stabilizes its norms; moreover, it continues to increase as the quality of the group’s productivity increases and the group reaches more and more consensual decisions” (Cragen et al, 2008, p. 17).

In exploring online groups and teams, the same attributes that apply to small group functioning apply to online groups, including the definition of small groups—3 to 20 individuals, with a shared goal and norms, and interdependent functionality (Cragen et al, 2008; McArthur, 2010)—with the additional element of some degree of CMC interaction, either where communication occurs entirely through CMC channels or in hybrid CMC/FtF engagements. Research into online groups and teams has explored the challenges and benefits created by the use of CMC including: the impact of channel attributes and technical structure of groups (High & Solomon, 2011; Ley, 2007); the challenges of sustaining online communities (Butler, Sproull, Kiesler, & Kraut, 2007); strong tie social cohesion (Ling, 2008); interpersonal and hyperpersonal effects in virtual groups (Walther, 2009).

Butler, Sproull, Kiesler, and Kraut (2007) explores how online communities are sustained through leader and member commitment to the community. In some online groups, commitment is required, as in the case of a corporate-formed group or team; however, in many cases, commitment to an online group is optional. Formal leaders in online groups may be appointed by an organizational owner, or may simply be the group “owner,” the person who formed the group.

Butler et al. identifies six social behaviors necessary to sustain an online group: content provision (composing, posting material); infrastructure maintenance (technical administration); social encouragement (promoting desirable behavior); social control (enforcing group rules); external promotion (new member recruitment); and audience engagement (reading, commenting on posts of others).

While the basic properties of group evolution and group interaction apply to online groups, CMC influences the nature of groups and group cohesion. High and Solomon (2011) extends the idea of CMC into group communication with a focus on channel attributes, exploring the intersection of message and platform through a study of “how features of CMC environments, in general, shape the communication of social support within a variety of specific CMC contexts” (p. 119). Those contexts include: online support groups, public discussion boards, chat rooms, instant messaging, and virtual worlds. The researchers concluded that the qualities of both channel and message impact the effects, as the attributes of varying CMC channels “determine not only the structure of a CMC venue, but also the normative communication practices that occur therein” (p. 122).

Ley (2007) presents an argument for “the architecture of commitment: the ways in which the site’s social and technical design influences the commitment that members feel toward the site and one another” (p. 1389). In a case study of an online pregnancy support group with a committed and enthusiastic membership, Ley examined the intersection of *biosocialities*, “the cultural values, discourses, practices, communities and identities that form among affected persons” (p. 1390), and *technosocialities*, “a technologically-mediated social group.” Ley discovered that the technical features of the site “not only shaped the ways in which members interact with the site and with one another, they have also influenced member’s belief about the

type of social and therapeutic space they want.” She concluded that the social design and the technical design of the site creates an architecture that supports the formation of the social capital of commitment among members.

E-teams. The roles in e-teams and the stages of team development are similar to those in online small groups. Unlike online groups, where often membership and leadership is optional, e-team membership is typically part of an organizational requirement for employees. E-team messages are often categorized as task-oriented, relationship-oriented, or technology-oriented (Youngjin & Alavi, 2004). Hart and McLeod (2003) subdivides these main categories into seven message sub-types: informational, planning or action, opinion and feeling, personal, resolution interaction, digression and play, and helping and learning. In organizations with a global presence (workforce, vendors, customers), geographically distributed teams are the norm and most organizations use some degree of CMC for team communication (DasGupta, 2011; Zaccaro & Bader, 2003). The primary issues related to e-teams involve geographic distance (time and co-locality), cultural differences (with global teams), and team effectiveness and efficiency. E-teams provide organizations the opportunity for an always-on, everywhere work environment, as work is not limited by geography or time zone, and provide greater potential to acquire human capital and resources (Zaccaro & Bader, 2003). However, distance and cultural differences present challenges related to effective communication through CMC channels and can impact productivity and team cohesion and trust, especially when teams must ramp up quickly and are short-lived.

In a study of online groups and virtual teams, Walther (2009) examined the intersection of task-based and interpersonal communication. His research revealed that task-focused CMC usually contains some element of interpersonal communication. Overtime, the “off-task

comments” (p. 231) that occur in conjunction with task-related communication are more likely to create a sense of social cohesion than “self-conscious” efforts to purposely create social bonds. Further, the frequency of task-related communication contributed to the degree to which members reported liking the senders. Walther concludes, “Members of CMC groups get to know each other comparatively better, and like each other more, when they communicate over at least two tasks spaced out over at least two intervals or over three days...or longer” (p. 232). The impact of frequency of communication is seen in Jarvenpaa and Leidner’s (1998) study of the effects of communicative practice on e-team cohesion and trust. The results showed that the highest performing teams were those with the highest level of trust, and that group identity was strengthened through frequent and intense periods of group communication.

Unstructured Communicative Practice

Leadership and group cohesion are functions of communicative practice. Arnett et al. (2009) proposes that any group or collection of groups (organizations) comprise a *dwelling place*, “a communicative home ... a gathering of communicative practices and stories that gives an organization a sense of uniqueness” (p. 138). These communicative practices can occur in any form (FtF, CMC) and are both structured (formal) and unstructured (informal). For e-leaders and members of online groups and teams, CMC is often the primary tool, and may be the sole tool, for communicative practices. While much emphasis is given to the coordination and management of structured communication, unstructured communication is a crucial element of the communicative home of a group or organization.

Unstructured communication. Unstructured communicative practice refers to informal communication and communication structures. In groups, informal communication involves off-topic, “self-centered communication” (McArthur, 2010), not related to the stated purpose of the

group. This can include chit-chat, discussion about family and personal interests, storytelling, joke telling, complaining, gossip, and other person-centered topics (Fay & Kline, 2011; Fay & Kline, 2012). In organizations, in addition to personal communication, informal communication can include unplanned and informal meetings and communication occurring outside of the hierarchy of the org chart (Johnson, Donohue, Atkin, & Johnson, 1994; Mangrum, Fairley, & Weider, 2001). In organizational literature, unplanned and informal meetings, even “chance encounters” (Huxor, 1999, p. 4) are considered “essential in order to coordinate work and disseminate information in an organization” (Jää-Aro & Snowden, 2001, p. 144). Informal communication has been considered in organizing physical work spaces (McGrath & Prinz, 2001) and in the design and use of virtual platforms, particularly in organizations and groups valuing collaboration (McGrath & Prinz, 2001; Redfern & Naughton, 2002).

In organizations, the benefits of unstructured communicative practice are both task- and person-oriented. Mangrum, Fairley, and Weider (2001) found in a study of a technology-oriented workplace that much of the problem-solving and task-focused interactions in the organization took place in informal and ad hoc meetings held “around computer screens, at their desk, in doorways, and in halls” (p. 333) rather than through structured meetings or formal technological channels. Further, informal communication contributes to organizational identity, co-worker relationships, and social cohesion (Fay & Kline, 2011; Fay & Kline, 2012).

The value of unstructured communicative space away from “formal” spaces (work, home) has been researched extensively through the lens of Oldenberg’s (1999) physical “third places,” the informal spaces where people gather between work and home. Physical third places are qualified by the following properties: neutral ground; hierarchical leveler; conversation is main activity; accessibility and accommodation; presence of “the regulars” (p. 31); a low profile;

playful mood; and home away from home. The concept of third places has been extended to virtual third places, including online platforms as third places (Steinkuehler & Williams, 2006) and CMC itself as a virtual third place (Soukup, 2006). Steinkuehler and Williams (2006) connect the “informal sociability” (p. 903) of communication in massively multiplayer online games (MMOs) with Putnam’s (2000) bridging social capital as central to creating a sense of place in a virtual world.

Yuk-kwan Ng and Höpfl (2013) makes an argument for the purposeful, selective use of unstructured communicative practices by organizations. They examined how employees are using social networking as an unstructured space to create “tribes” (p.103) as a way of maintaining personal identity in the midst of a forced corporate identity. The authors suggest that the structured communicative practices of high-control organizations, with a sense of “always on” connectedness in an oppressive way, lead to resistant behaviors in organizational members. They posit that the physical manifestations of resistance—“a concealed smirk. . . a derisive gesture, . . . reading a book at work for pleasure” (p. 101)—form a third “space” that can then extend outside the work place to “a fourth type of space” (p. 101) that is facilitated by social media. Their research reveals that employees will self-organize unmonitored (unstructured) communication with other employees as a means of creating a more positive dwelling place. The authors conclude with the suggestion that networked organizations should support, rather than discourage, this type of unmonitored, uncontrolled fourth place connecting.

Structured-unstructured. Trager (2005) provides an example of a purposefully created, organizational structured-unstructured experience. He conducted a two-year ethnographic study of readers in one Borders bookstore to examine how mega-bookstores make the private experience of reading “a sensual, social . . . experience” (p. 187) through a “seemingly

undisciplined, social model of reading” (p. 188). By facilitating long periods of time in the store with a high-touch experience with store products, mega-bookstores have essentially created an unstructured feel (wandering the store, browsing items, drinking coffee) but with very specific behaviors in mind: “virtually all unplanned purchases—and many planned ones too—come as result of the shopper seeing, touching, smelling or tasting something that promises pleasure” (p. 187). Marketing executives at Borders (and Barnes & Noble in a similar fashion) carefully researched the habits of their consumers, and strategically instituted practices that created an unstructured feeling. Rather than discourage customers from sitting around the store reading materials that they might not buy, they recognized that the longer a person was in the store and the more items she handled, the more likely she was to purchase. Further, store customers interviewed for the study loved spending time and money in the store and felt that the sales techniques were a fair trade-off for use of the space and access to a contemporary library. This study suggests that there are ways to create a structured-unstructured space that can support the goals of an organization as well as support the needs of its members.

In research on the use of instant messaging (IM) in organizational communication, Hendrickson (2009) hints at the potential for the purposeful use of unstructured communicative practice as a means of member cohesion. In a study of the use of IM at *Jezebel* magazine, Hendrickson noted that supervisors discouraged the use of IM for informal communication and social connectivity; however, employees reported experiencing a greater sense of organizational identity and a perceived increase in productivity through their simultaneous engagement in task-focused and social-focused communication made possible by IM. The research suggests that organizations that attempt to overly regulate informal communication are experiencing a “logical flaw” (p. 15); rather than try to restrain unstructured communicative practices, Hendrickson

proposes that “many of the informal systems resulting from CMC are integral to the health of an organization’s formal systems” (p. 16) as they contribute to the emotional well-being and group cohesion of organizational members. The research found no evidence that the *Jezebel* organization planned for informal systems; in fact, managers resisted these systems. However, the benefits to the organization of a structured-unstructured communicative practice were evident from employee testimonials and performance.

In two studies of the role of informal communication and teleworkers, Fay and Kline (2011, 2012) demonstrated that informal communication contributes to coworker relationships and to organizational identity of those working remotely. In the study of coworker relationships, Fay and Kline (2011) examined the role of three types of informal communication—family talk, socializing talk, and complaining—on coworker relationships. The research demonstrated that teleworkers engaged in informal communication had greater job satisfaction and organizational commitment. Of the types of informal communication, informal complaining was most likely to generate organizational commitment, as it created social bonding among coworkers. In the second study, Fay and Kline (2012) examined the role of three types of informal communication—collegial talk, coworker social support, and inclusion messages—in organizational commitment and organizational identification. The research found that all three types of informal communication positively contributed to organizational identity, while coworker social support and inclusion messages contributed to organizational commitment. Fay and Kline concluded that organizations should consider informal communication to be an essential component of the organizational structure and goals.

Gaps

The following gaps in research frame the context of this project: research and strategies regarding the purposeful use of unstructured communication in online group and e-team leadership, the nature of leadership roles in an unstructured communicative space, and the application of the concept of *dwelling place* to an online context.

Theoretical Framework

Zaccaro and Bader's (2003) theory of e-leadership and e-team trust addresses both functional and emotional (affective) leadership in online spaces. The theory defines e-leadership as leadership that happens with geographically distributed teams (either from each other or from the leader) using primarily electronic (CMC) channels. They identify the primary challenge of effective e-teams as process loss—the (in)ability for the team to identify the required tasks and to coordinate among themselves how to effectively execute the tasks at hand.

The theory describes three crucial roles for an effective e-team leader: *team liaison*, *team direction setter*, and *team operational coordinator* (Zaccaro & Bader, 2003). These roles address the functional tasks necessary for team productivity and effectiveness and the reduction of process loss as well as the affective tasks necessary to create group cohesion and build social capital. The team liaison scans and interprets tasks and events for the group in the context of the “larger environment” (p. 381). The team direction setter links the activities of the team liaison with the purpose of the group and focuses on sensemaking. The team operational coordinator is tasked with utilizing resources in the most effective way and “motivating and empowering team members” (p. 381).

The theory identifies three stages of e-team trust: *calculative*, *knowledge-based*, and *identification-based*. In the calculative trust stage, members see the benefit of working together but do not yet have trust in each other, as they do not yet know each other. The next stage,

knowledge-based trust, develops based on repeated engagement over a period of time that leads to the ability of members to anticipate the actions of others in the group. The third stage is the deepest form of e-trust, identification-based trust, and occurs when members recognize the shared values and intentions of the team and trust that all team members are acting for the benefit of the team as a whole. These stages align with Putnam's (2000) theory of social capital and the need for bonding and bridging capital as well as the need to navigate reputation and trust/mistrust among group members and with the organization. The stages of e-trust are driven by the ability of the e-leader to manage the functional (getting the job done), the aspirational (maintaining the big vision), and the emotional (building team cohesion). This theory suggests that once a team progresses to the identification-based stage of trust, the team can be as effective, if not more effective, than co-located teams.

This theoretical framework places this research project in the context of leadership in online environments, and allows for the exploration of how an organization and members of e-teams can build supportive, productive environments by purposeful use of unstructured space. In combination with a grounded theory method, this research will fill gaps in the literature and contribute to the existing conversation on e-leadership, including the development of recommendations on how to support the unstructured element of communicative spaces, an idea that is rarely addressed and is even frightening for organizations to consider. This research project will explore the following questions:

RQ 1: What themes, if any, emerge in the study of the content of long-term unstructured online communication?

RQ 2: What themes, if any, emerge in the study of the organizational process of long-term unstructured online communication?

Method

This project involved a content analysis of a 19-month (November 2013 – May 2015) private, online chat group created by a cohort of graduate students in an online degree program. The researcher used Glaser and Strauss' (1967) grounded theory, with a particular focus on Charmaz's (2006) co-constructive approach, partnered with Zaccaro and Bader's (2003) theory of e-leadership and e-team trust.

Data Collection

The data for the project was taken from a private Facebook Messenger chat group created by one of the student group members. Facebook launched the Messenger application in 2012 to replace its native chat option (Newsroom, 2012) and as of the end of 2014, almost half of all Facebook users, 500 million, were using the application (Martinazzi, 2014). The application integrates with a user's existing Friend list and allows for private communication either one-on-one or in a group. Once a Messenger "Conversation" is started, any member of the chat can add participants from their own Friend list to the chat. Any member can choose to opt-out of group membership at any time by selecting "Leave Conversation" or "Delete Conversation." Messenger chats have an option for naming the chat, and any member can create a name for the group. The application supports both synchronous and asynchronous communication through text, images, and embedded files (audio, video, text) and can be accessed via desktop, tablet, or mobile device; thus, depending on the device used to access Messenger, the platform can function as IM, text, email, or in-application tool. Posts are time/date stamped by user (poster) Facebook name. Messenger chat histories are archived as part of a user's "data history" (Help Center, 2015) and are available in their entirety to any participating member of the group.

The transcript selected for textual analysis was downloaded via the “Download Data” option by one of the group participants (the author) with the permission of all group members. The transcript contains 22,817 posts by the 17 participants in the selected timeframe of September 28, 2013 (corresponding with the first thread in the chat) and May 31, 2015.

Participants

Participants in the Facebook Messenger chat were students in an asynchronous online graduate program conducted entirely through CMC channels (course website, email, Skype). The primary means of student communication was the course portal (Engage). Students engaged each other in online discussions that took the form of written essays, with discussions and response written in formal APA (American Psychological Association) style. Additionally, for the first year of the program (2013-2014) students had access to Microsoft Lync, an IM application that integrated with the online educational portal. In the period covered by the study, students completed 11 courses (the first and last courses in the study only covering half of a class period) and had three program breaks lasting from one to four weeks. To protect participant privacy, students’ names were randomized (via Excel spreadsheet) and assigned a letter (A-Q).

Participation in the group was entirely voluntary and had no connection to the communication channels provided through the graduate program. Prior to the formation of the private group, some of the members had been active on a Facebook page hosted through the university’s Facebook page. One month into the program, the members of the page became aware that the page could be accessed by university staff; as a result, a student, Student I, invited the members of the “public” Facebook page to a private chat as a “safe space” (personal communication, September 26, 2013) for information sharing and venting. A second student, Student J, emailed all of the members of the program (30 students) through the online portal with

instructions on how to join the private chat. As a result of those two sets of invitations, 11 students (B, C, D, G, I, J, K, L, O, P, Q) joined the private chat over a period of six days (September 28, 2013-October 3, 2013) and continued until January 27, 2014. The chat re-formed on January 28, 2014, with the exit of Students P and Q from the group (and the program) and the addition of Students A and E to the group. For the remaining period of the study, an additional four students were added to the group (H, N, F, M) and one student exited (O) (upon exited program). Two of the students joined the program after the start of the group; therefore, of 32 students (30 female, 2 male) invited to join the chat, a total of 17 students, all cis-gender female, participated in the chat.

All 17 participants engaged in chat activity at some point over the course of the study period (See Table 6); however, engagement was marked by a core group of participants who individually posted consistently and frequently. Of the group members (14) still active in the chat at the end of the study, over half (8) posted more than 1,000 times, with six members posting more than 2,000 times, and of that number, one member posted nearly 4,000 times. (In the category of members posting more than 2,000 posts, two of that group did not join the chat until at least four months after the formation of the group.)

Data Analysis

Given the amount of data involved in this study, the researcher used grounded theory as the approach. Grounded theory began with the work of Glaser and Strauss (1967) as an approach to qualitative research and suggests that theory is concealed in data and that the theory will emerge from a methodological approach to organizing the data. The result of a grounded theory approach is often a new theoretical framework. There are several variations on grounded theory with differing suggested methodologies (Glaser, 1992; Glaser & Strauss, 1967; Strauss &

Corbin, 1990) including the process of analysis (coding style), the role of the literature review, and the use of a pre-existing theoretical framework. The researcher chose to use Charmaz's (2006) approach to grounded theory as she presents a method appropriate to thesis work where the literature review precedes the data analysis stage, and the emergent theory discovered through the grounded theory methodology is partnered with an existing theoretical framework to place it in the context of academic research. The results of the grounded theory analysis were partnered with Zaccaro and Bader's (2003) theory of e-leadership and e-team trust.

Charmaz's grounded theory. Charmaz's (2006) approach, much like that of Glaser and Strauss (1967), involves a series of overlapping steps—data collection, coding, memoing, sorting—that led the researcher to the emergent theory. Grounded theory requires a rich, substantive text. Texts can be elicited, extant, or a combination of both. In elicited text, data collection (interviews, focus groups, ethnographic studies) focuses on open-ended questions and the goal of discerning what is happening in the research situation. Extant text can function as either a complementary or an independent data source, with attention given to who created the text, how it was created (structurally and contextually), what stated and unstated purposes it might serve, and how language is used.

The coding process gives the researcher a mechanism for making sense of the data. Coding is a shorthand that the researcher creates to identify emergent themes, categories, and properties of those categories. Charmaz's (2006) approach involves two stages of coding: initial (line-by-line) and focused coding, with axial coding as a possible additional stage. In the initial phase, the researcher goes line-by-line through the data, looking at fragments for possible themes and categories. As the coding progresses, certain categories will start to stand out as significant. Once a category has reached saturation, meaning that continued line reading adds nothing more

to the category, this category can be qualified as a core category, and the researcher can move to the focused phase, where she only looks for data related to the core category. As there may be more than one core category, coding can be an iterative process, with the phases repeating for each core category. Once core categories are identified, researchers apply a third coding phase, axial coding, to see thematic relationships around core codes. Throughout the coding process, the researcher uses memoing, a version of note taking, to track emergent categories, themes, and properties. These notes are made concurrently with the coding process so that the researcher can track her observations in the moment they occur. Once core categories and themes have emerged, the next step is sorting. Sorting gives structure to the emerging theory.

For this project, the chat transcript served as an extant text. After completion of the data collection phase, the researcher compiled the complete transcript of the text. The researcher used Charmaz's (2006) method of line-by-line coding and memoing to identify categories, moving to focused coding as core categories emerged. The researcher trained an additional coder to assist in the process. Once a significant number of core categories became obvious via saturation, the researcher structured them through sorting/diagramming and identified themes for use in the discussion. The process proceeded as follows: Stage 1: Initial coding; Stage 2: Focused coding; Stage 3: Axial Coding; Stage 4: Emergence of theory. Given the research questions for the project, the researcher was primarily looking for themes related to organizational process, group interaction patterns, and emergent strategies while remaining open to other emergent themes. This grounded theory process revealed themes in five areas: content patterns, group identity and social cohesion, CMC effects, emergent structure, and emergent leadership.

Analysis

To answer Research Question 1, the content analysis revealed the following categories: on the micro-level, participants exhibited individual communication in Task, Pattern, and Off-topic subjects, and on the macro-level, prevalent themes surrounded group identity and social cohesion, and the effects of CMC on communication. To answer Research Question 2, attention to patterns in the data revealed the following categories: on the micro-level, the pattern of *Problem-Solution-Humor-Disclosure* and *Acknowledge-Agree*. On the macro-level, prevalent patterns related to the emergent structure of the group as a whole and the emergence of e-leadership.

Research Question 1: Content Analysis

Content topics. On the micro-level, content in the chat focused on three primary types of communication: Task, Pattern (socioemotional), and Off-topic (See Appendix B). Content types overlapped, with task communication containing pattern content (a member offering cheerleading to accomplish a task) and pattern topics containing task content (encouragement in the form of task recommendations or strategy). Off-topic content often connected to pattern topics of encouragement and support or were extensions of task topics (jokes about tasks and course topics). Each primary communication type contained subtypes, and the data was organized accordingly.

Task. Task communication was the most frequently occurring type of content and corresponded to three subtypes: *requesting*, *offering*, and *bridging*. Requesting communication involved requests for information, help/task assistance, support, and distraction. Offering communication corresponded to task requests also including offers of information, help/task assistance, support, and distraction. Offering communication occurred both in response to requests for help and proactively in anticipation of group or individual member needs. Bridging

communication related to group members communicating information from and to the organization, and included sharing information posted in the course portal or in course materials, sharing personal communication conducted with the organization, and initiating communication with organizational representatives.

Table 1

Task Subtypes and Examples

Subtype	Example
Requesting	Student E, Wednesday, October 2, 2013 at 10:43pm EDT Does anyone know how many pages our paper should be. I've read through all the documents and messaged [the instructor] but haven't gotten a response
Offering	Student J Thursday, October 3, 2013 at 8:32am EDT I conked out early last night too, Re: page length. 12-15 pages, double spaced. The Literature Review is included in that count. The works cited page is not included.
Bridging	Student C, Tuesday, January 28, 2014 at 10:44am EST I emailed [name of academic advisor] back about the academic calendar and said the following: >>>Is this set in stone or open for discussion at all?...

The most common type of request and offer related to grades and instructor feedback. In the program, students completed on average two course assignments per week with an additional two major assignments per course. In the 80 weeks of courses (and nine weeks of breaks) covered, students completed approximately 188 assignments. In the chat, topics related to grades or feedback (grade(s), grading, feedback, rubric) occurred 1,077 times. Members used grade/feedback topics as both requests and offers, with members asking if anyone had received a grade/feedback, or posting that they had received a grade/feedback. Once initiated, these subjects led to group debriefing and attempts at making sense of grading and instructor feedback. Most of

these threads were driven by a sense of member frustration and confusion regarding organizational communication. Table 2 provides an example of a typical task discussion. Student D initiates a task discussion with both a request of the group (“Anyone get feedback on their drafts?”) then follows that with an offer of information (“I’ve got a bit of rewriting to do”), indicating to the group that she has received instructor feedback. Student B replies to the request with an offer of information (“No feedback for me yet!”) and then adds her own request (“Were her comments helpful?”), this one addressed directly to Student D. A third student, Student J, joins the thread with her own offer of information (“Nothing here yet either.”). Student D then offers a response to the request of Student B (“Some of her comments were helpful....”).

Table 2

Task Discussion: Grades/Feedback

Subtype	Example
Requesting	Student D, Monday, April 21, 2014 at 6:43pm EDT Anyone get any feedback on their drafts?
Offering	I’ve a bit of rewriting to do.
Offering	Student B, Monday, April 21, 2014 at 6:49pm EDT No feedback for me yet!
Requesting	Were her comments helpful?
Offering	Student J., Monday, April 21, 2014 at 7:39pm EDT Nothing here, either. Good to know she's getting them back fast.
Offering	Student D, Monday, April 21, 2014 at 9:39pm EDT Student B- some of her comments were helpful. In some places she moved things from analysis to data that I don't think should go there (but I'm not grading the paper haha) which confused me a bit She sent it via message only- nothing in the gradebook

Pattern/socioemotional. Pattern communication involved three main content types: *self-disclosure*, *reciprocal disclosure*, and *cheerleading*. Self-disclosure related to two primary

categories: emotional expressions and personal stories. The most common emotional expressions related to stress and fatigue, with members posting about task-related stress, work-life stress manifesting as fatigue and physical illness (headaches, panic attacks, crying spells, stomach problems). Emotional expressions included posts on feelings of overwhelm, anger, “burn out,” lack of motivation, lack of enthusiasm, stuck-ness, and guilt. Additionally, emotional expressions related to tasks and coursework, and included expressions of complaint, confusion, and frustration toward the organization and in personal life. To a lesser extent emotional expressions included positive feelings, such as relief, excitement, “not stressing,” and celebratory expressions (“Yay,” “WooHoo”). The second category, self-disclosure, involved storytelling. Storytelling posts involved sharing of personal experiences related to the emotions involved in task execution, in the program in general, and often extended into off-topic disclosures of personal experiences outside the program. Self-disclosure was routinely matched with reciprocal expressions and disclosures. At times, responses were simple acknowledgements of the same feeling or experience (“Me, too!,” “Agree,” “Exactly”). At other times, especially with disclosure via story, other group members disclosed personal stories in reply. As the group matured, reciprocal self-disclosure became more frequent and involved a greater number of group members per thread.

Closely connected to both self-disclosure and reciprocal communication is content related to cheerleading. Cheerleading content included expressions of support, encouragement, and comfort and was directed both to individuals expressing specific concerns and to the group in general (see Table 3). From the first thread of the chat onward, expressions such as “You/We can do it,” “You/We’ve got this,” and “Hang in there” were common in threads involving expressions

of fear, worry, concern, or frustration. Many times self-disclosure and reciprocity were used by group members as a form of cheerleading, to boost either individual or group morale.

Table 3

Pattern Subtypes and Examples

Subtype	Example
Self-disclosure	Student H, Tuesday, March 10, 2015 at 8:55pm EDT Btw am I the only one who feels that the workload for this class is a little overwhelming?!
Reciprocal	Student E, Tuesday, March 10, 2015 at 8:57pm EDT No, you are not alone... I am overwhelmed in general right now though... and yet, I'm goofing off on Facebook and playing Trivia Crack.
Cheerleading	Student I, Friday, July 18, 2014 at 10:08am EDT hang in there Student E!! I'm totally right there with you We will get through this....together!!

Off-topic/self-centered communication. Off-topic communication involved a variety of subjects including humor, family and personal stories, pop culture and current events, and miscellaneous subjects (see Table 4). Humor in the form of jokes, visual memes, emoticons, word play, sarcasm, and self-deprecation was the primary off-topic content. This content routinely appeared in most conversation threads with the inclusion of the term *haha* (or variations: see Appendix B, Table B3) or a short humorous statement. As the group matured, humor threads developed into longer forms, some threads lasting four or five hours at a time with most group members participating. Over time, the group developed inside jokes and sayings that became *in vivo* codes referenced by group members such as comments about drinking wine, drinking coffee, binge-watching streaming media content, and the use of expressions involving profanity. Humor often overlapped or served as cheerleading communication.

Family and personal stories related to work and individual experience were the next most common type of off-topic content. In the early stages of group development, references to family and work were often embedded in comments related to task challenges and/or socioemotional management (see Table 4). Over time, much as with the humor theme, the sharing of family and personal stories grew into dedicated threads with multiple participants. These off-topic family and personal stories can also be qualified as content related to self-disclosure and reciprocity, as disclosures of personal stories were matched with reciprocal disclosures by other group members.

Table 4

Off-topic Subtypes and Examples

Subtype	Example
Humor	Student L, Wednesday, March 4, 2015 at 12:07pm EST BWAHAHAHAHA!!! That's it! I'm calling virtual happy hour RIGHT NOW!!
Family/ Personal Stories	Student I, Wednesday, April 2, 2014 at 8:33pm EDT and i just received a call that my mother in law is in the hospital...they think she had a stroke
Other (pop culture, current events)	Student G, Saturday, July 12, 2014 at 11:15am EDT i think I am really weird, I usually watch [the film] Magic Mike to do my homework. Watching Magic Mike and Frozen back to back. hmmm

Group identification and social cohesion. From the first chat, group members regularly expressed appreciation for the group. In the first chat, members began using the expression “We can do it” for cheerleading and support and referencing the concept of “sorority” for the relationship of group members. Along with regular acknowledgement of the value of the group, members openly acknowledged a sense of interdependence with other members (“I couldn’t do

this without this group”), and declared their commitment to the group. Six months into the program, after a miscommunication from the organization to the students in the program about the academic calendar, the group exhibited a shift from “We” in the program to “We” in the chat group. Up to this point, the only active recruitment for the chat group occurred at the chat’s formation. With the calendar issue (see Table 7), those in the chat group began reaching out to other members of the cohort not in the chat to join, so that the group could organize a response to the calendar issue. Rather than simply being a space for information sharing, the chat group became a place for organized action. One month later, in an off-topic thread, one member proposed assigning in-group names to all participating members. These names were created based on the roles played by individual members in the calendar incident, as well as on self-disclosures by group members both in the chat and in coursework posted to the course portal.

Student L, Monday, February 3, 2014 at 6:58pm EST
So I think Student G is Wine-Drinking Ass, Student O is Cross-Country Moving Ass,
Student E is Baseball Watching Ass and Student J is Researching Ass. Lololol...Student
I is Marathon Running Ass!...Student D is Disney Ass!

Within the next month, a member suggested a name for the group, “Bad Asses” (or “Badasses”), based on a term used frequently in group cheerleading: “We can do it. We’re bad asses.” Later, a group member proposed the creation of a virtual sorority called “DGAF (Don’t Give A Fuck),” based on another frequently used *in vivo* code for emotional expressions and support. As new members joined the group, they were given their own “Bad Ass” name.

Group members regularly expressed support and commitment for the group; however, after the naming of the group, the cohesive nature of the group appeared in a discussion of taking a break from the program. One member posted that she planned to take a one-course break from the program during the summer session. Others expressed similar plans but feared that they would no longer be in the same classes with the rest of the members in the chat:

Student A, Tuesday, April 15, 2014 at 1:07am EDT

Hi ladies...I think we're all on the same page. I'm so burnt out, and just thinking about continuing at this pace is giving me a migraine...off to go find some Exedrine. LOL

Student G, Tuesday, April 15, 2014 at 7:37am EDT

I wonder wha they would say if we all decided to take the summer off? If we aren't going to get any breaks during the semester, the logical thing is to take the summer off.

Student C, Tuesday, April 15, 2014 at 7:54am EDT

I was wondering the same, Student G. I want to take one of the summer blocks off, but I want to stay with all of you badasses for the whole program.

Student A, Tuesday, April 15, 2014 at 8:15am EDT

Right there with u ladies...that's exactly why I don't want to take time off...want to stick with u guys!!!

Student E, Tuesday, April 15, 2014 at 9:28am EDT

Tell me if most of you do it and I'm in.

Student D, Tuesday, April 15, 2014 at 10:40am EDT

It would definitely send a message if we all took the summer class off at the same time.

Student C, Tuesday, April 15, 2014 at 11:06am EDT

I am very likely to take the second 8 weeks of summer off. I'm still debating that, but I am in for the first 8 weeks unless I have a nervous breakdown within in the next few days.

Student D, Tuesday, April 15, 2014 at 11:09am EDT

I would love to take some time off but that would push me back too far. I need to finish before oct next year for my wedding. No one will want to speak to me if im doing my wedding and finishing my masters thesis at the same time haha

Student C, Tuesday, April 15, 2014 at 11:19am EDT

Totally understandable, D.

[...]

Student I, Tuesday, April 15, 2014 at 4:09pm EDT

originally i was going to take the summer off, but I want to stay with you ladies so I decided to stay with it. I couldn't bear the thought of doing this program without you!! I had no idea I would bond so closely with classmates when I started!!

Student I, Tuesday, April 15, 2014 at 4:09pm EDT

if ya'll break, let me know, i'll do the same, but if the majority stick with it, I will as well

The thread shifts to other content without an explicitly stated decision as to taking a summer break; however, no student in the chat group took a break. This idea is referenced later at the beginning of the second summer term:

Student B, Wednesday, July 2, 2014 at 2:11pm EDT
I feel like the only ones who haven't taken a break or dropped are the ones in this chat. Our Facebook group really makes all the difference!

The group experienced increased degrees of group cohesion after periods of intense communication. In times of stress (as stated in posts by group members), frequency of posts and duration of threads increased (see Table 7). Extended periods of emotional support, reciprocal self-disclosure, and humor threads culminated in group declarations of the value of the group and its members. Each of the “naming” incidents occurred after an intense period of communication about course difficulties. Subsequent stressful periods were marked by a return to the naming convention, with a reminder of group and individual names, and extended threads on future “sorority” activities (making T-shirts, meeting in person).

CMC effects. Chat content is marked by strategies for compensating for the CMC environment and for the absence of non-verbal cues. Members used expressions such as *LOL*, *haha*, and emoticons to add to the meaning of the posts. Members also added posts with explanations and clarifications of meanings, to insure that posts were not misinterpreted.

Student G, Wednesday, September 10, 2014 at 10:20am EDT
@Student D I feel so bad because I feel like I was arguing with you in the discussion and I was not, I was just trying to come up with a good response. I know this is grad school and we are supposed to express opposite views, I just don't want to hurt anyone's feelings. I love you guys and couldn't do this class without you so I don't want upset anyone :)
[...]
Student D, Wednesday, September 10, 2014 at 10:24am EDT
It's all good! :-)

Additionally, group members routinely announced when they were exiting the chat, periods when they would be absent from the chat, and shared information about the physical location and environment they were working from to explain any sudden lack of engagement during a thread.

Student E, Friday, May 29, 2015 at 7:36am EDT

I'll be driving to the office but will check the chat from my phone when I get there. Let me offer moral support now: good luck, my dear- you've got this and will do GREAT!!!!

The chat gives evidence of both synchronous and asynchronous engagement. The vast majority of posts involved some degree of synchronous communication (at least one response posted within five minutes of the original post). However, these were often followed by asynchronous interactions described as “catching up” on the thread or being “late to the convo.” Further, it was common for a chat thread to begin in the evening, then pick up in the morning with no apparent break in the thread theme:

Student D, Tuesday, February 3, 2015 at 6:08pm EST

Student H, that's my goal- to scan remaining sources. I'm assuming that a book is considered a peer reviewed source since she listed some for us?

Student G, Wednesday, February 4, 2015 at 6:40am EST

Guys, I had the exact same problem. I was struggling for sources. I just resorted to internet searches and probably went over my non academic quota but that's OK. Anybody else have trouble keeping it to seven pages? Mine was 10 or 11.

Channel attributes. Content reflected channel attributes of Facebook Messenger as both a synchronous and asynchronous communication tool and as a platform accessible from multiple locations via multiple devices. Group members reported accessing the chat from home, work, public transportation, and public locations using desktop/laptop computers and mobile devices. In particular, group members used the accessibility of Facebook Messenger to request assistance with access to portal information when away from their home computer (at the time of the chat, the course portal was not accessible via mobile device).

Student D, Friday, September 5, 2014 at 12:09pm EDT

can anyone send me the link to the online library please? I am at work and do not have it saved on this comp

Student J., Tuesday, October 7, 2014 at 11:46am EDT

Can anyone post links to the online portion of our readings? I just locked myself out of both my house and car, and I've got about an hour to kill waiting for my sister to bring me the spare key. All I have is my phone. :-)

Research Question 2: Patterns

To answer Research Question 2, attention to patterns in the data revealed the following categories: on the micro-level, the pattern of Problem-Solution-Humor-Disclosure and Acknowledge-Agree. On the macro-level, prevalent patterns related to the emergent structure of the group as a whole and the emergence of e-leadership.

Problem-Solution-Disclosure-Humor. The first micro-level pattern appeared in the first thread and expanded from there. In the first phase, the pattern presented as *Problem-Solution-Humor*: a group member would post a request to the group, other group members would offer solutions, and a group member would punctuate the thread with some form of humor (*LOL/haha*, emoticon, funny saying). In the example in Table 5, excerpted from the first chat thread, Student P raises an issue to the group about the challenges of academic writing. The group discusses various approaches, with Student P continuing to assert her inability to write in a “scholarly way.” The “Problem” topic culminates with the Solution followed by Humor. By the end of the thread, the member with the problem is contributing humor to the thread herself.

Table 5

Pattern: Problem-Solution-Humor

Subtype	Example
Problem	Student P, Saturday, September 28, 2013 at 11:50am EDT ready to scream! I kinda know what I want to do but I can't seem to write it in "scholarly" way [...]

Solution	Student D, Saturday, September 28, 2013 at 12:07pm EDT I agree. I often think I sound much less academic in my writing, until I go back and re-read it.
Humor	Student J., Saturday, September 28, 2013 at 12:08pm EDT @Student D Good point--when you're comparing your writing to lines like: The rhetorical-theatrical sensibility addresses a present-day exigency: the atrophy of embodied engagement in a technologically mediated life world. You think you sound stupid. :-)(
Humor	Student L, Saturday, September 28, 2013 at 12:09pm EDT Lololol
Solution	Student J., Saturday, September 28, 2013 at 12:09pm EDT But on re-reading, you sound much smarter than you thought
Humor	Student P, Saturday, September 28, 2013 at 12:09pm EDT @Student J I have no idea what that means! lol

As the group progressed (see Table 7: Phase 2) and more of the content included reciprocal self-disclosure, the Problem-Solution-Humor pattern shifted to Problem-Solution-Disclosure-Humor. Self-disclosures were often in off-topic threads, with members sharing details about their personal lives (work, family, interests). As the group reached an advanced stage (see Table 7: Phase 3), this pattern extended over series of posts (days, weeks) to include long periods of Problem-Solution-Disclosure-Humor. The Problem-Solution-Disclosure-Humor pattern was applied to all three types of content, with group members contributing brainstorming and support for task, emotional, and off-topic problems of individual group members. This pattern is seen in content related to the stress and sensemaking problems across two courses (see Table 7: Phase 3). After many discussion threads on the problems and possible strategies for approach, members started disclosing the physical and emotional effects of the stress of the program—hair falling out, crying jags, back and neck pain, panic attacks, contemplating leaving the program, and

family members urging them to quit the program. After sixteen weeks of mostly Problem-Solution-Disclosure content (with Humor scattered throughout), the group moved into an eight-week period marked by extended humor-themed off-topic threads covering pop culture, memes, jokes, and stories. This culminates in a day with 198 posts, that begins with the group fantasizing about how they will spend their winter break (“Imma drink like a mother %#]^[^]”), then moves to revelations about “gross” behavior in the workplace, with each member contributing a funny, shocking story: the woman who smells like meat, the woman who never flushes the toilet (“the phantom pooper”), the man who passes gas at his desk when he thinks the office is empty (“the night farter”).

Acknowledge-Agree. A second micro-level pattern involved a rhythm of engagement of post acknowledgement and agreement, Acknowledge-Agree. In this pattern, a member would post on one of the core content topics (Task, Pattern, Off-topic), and at least one other member would acknowledge the post (often using the posting member’s name) and then offer agreement to the idea or sentiment. At times this pattern led to longer discussion threads, shifting to the Problem-Solution-Disclosure-Humor pattern; however, these acknowledgements and agreements often served as stand-alone threads with no attempt to “solve” problems. Acknowledgments of posts included expressions of acknowledgement, such as, “Me, too,” “Agree,” “Exactly,” “I hear/feel you,” and “Right there with you,” as well as visuals, such as emoticons, memes, and *LOL/haha*.

The Acknowledge-Agree pattern often served as a shorthand for self-disclosure and reciprocity. When used in Task content, Acknowledge-Agree appeared when the members online at the moment, or the group as a whole, did not have a solution to the problem or issue posed to the group. Thus, even when a request was made to the group for which there was no immediate

answer, members acknowledged that the posting member's request/expression had been heard, and that others were having a similar experience. When used with Pattern and Off-topic content, the pattern served as a means of recognizing that a member was participating. This pattern is illustrated in Table 6 in a thread about motivation. Student C discloses a lack of motivation. Two students (Students D and I) immediately acknowledge the post, mentioning Student C by name, and agree with the expressed sentiment ("same here," "not just you"), thus offering a reciprocal disclosure of a similar experience. Student I emphasizes the reciprocal disclosure with a second post ("I was thinking the same thing'). A fourth group member, Student E, joins the thread, acknowledging Student C by name and agreeing with the sentiment ("It isn't just you"). Students I and D extend the disclosure, and Student E concludes the thread with a repeat of the Acknowledge-Agree pattern, this time with Student I. This thread, containing disclosures from four group members, begins and ends in less than one minute.

Table 6

Pattern: Acknowledge-Agree

Type	Example
Disclosure	Student C, Monday, April 14, 2014 at 8:06pm EDT Y'all... I am just not feeling this current class. Is it just me? I'm really glad it's almost over.
Acknowledge-Agree	Student D, Monday, April 14, 2014 at 8:06pm EDT Student C- same here
Acknowledge-Agree	Student I, Monday, April 14, 2014 at 8:06pm EDT not just you Student C
Disclosure	Student I, Monday, April 14, 2014 at 8:06pm EDT i was just thinking the same thing
Acknowledge-Agree	Student E, Monday, April 14, 2014 at 8:06pm EDT It isn't just you Student C

Disclosure	Student I, Monday, April 14, 2014 at 8:06pm EDT I just CAN'T get motivated
Disclosure	Student D, Monday, April 14, 2014 at 8:06pm EDT I find that I'm just tired with school in general right now. Would love to have a week with no homework
Acknowledge- Agree	Student E, Monday, April 14, 2014 at 8:06pm EDT Me too Student I

Emergent structure/architecture. On the macro-level, the researchers identified four phases of group development in the period of study: Phase 1, the initial formation of the group; Phase 2, a re-forming of the group and a development of norms and a performance routine; Phase 3, a period of intense stress for the group that leads to a re-norming and increased group cohesion; Phase 4, an enhanced period of group performing focused on collaboration both inside and outside the program.

Table 7

Timeline: Group Phases and Critical Incidents

Critical Incident	Date
Phase 1: Forming (September 28, 2013-January 27, 2014)	
Initial chat	September 28, 2013
Phase 2: (Re)forming/Norming/Performing (January 28, 2014-May 4, 2014)	
Group re-forms; calendar incident	January 28, 2014
Naming of members	February 3, 2014
Naming of group	March 6, 2014
Discussion of taking summer break	April, 15 2014
Phase 3: Intense Communication/(Re)norming (May 5, 2014-December 14, 2014)	
Group stress (Courses 6-8)	May 5, 2014-December 14, 2014
Sorority Name (DGAF)	August 14, 2014
Attitude adjustment	September 8, 2014
Reaffirming member names	October 16, 2014
Recommitment to group	October 22, 2014
Long-form OT (the five-hour joke)	November 20, 2014

 Phase 4: (Re)performing (January 15, 2015-May 30, 2015)

Return from break/collaboration

January 15, 2015

Exam

May 30, 2015

Forming: The group began with no formal rules or procedures. The first thread of the chat occurred on September 28, 2013, with seven participants generating 179 posts in six hours. There were no formal introductions, as students had already introduced themselves in the course portal. The group immediately engaged in a task-based discussion around specifics of the first major assignment of the course, and the Problem-Solution-Humor content pattern is evident (see Table 5). At no time in the existence of the group were rules proposed or roles assigned; however, in the first few days of the chat, several group members discuss the purpose and meaning of the group:

Student L, Wednesday, October 2, 2013 at 7:28pm EDT

Indeed!!! I just have to thank Student J again for creating this group bc I know others are experiencing the same things I'm going through and this has been a huge support system after less than a week!

Student D, Wednesday, October 2, 2013 at 7:29pm EDT

Student L- I agree. I'm glad I'm able to come on here and share our situations with each other. It helps me feel not so alone.

[...]

Student J, Wednesday, October 2, 2013 at 7:31pm EDT

This is how we are going to get through this with our sanity and self-esteem intact: asking tons of questions and connecting with one another. This is not a process that can be done alone.

[...]

Student Q, Wednesday, October 2, 2013 at 7:33pm EDT

I completely agree, Student J. This is going to be a tough but fun 2 years and if we stick together, we'll make it and be sisters in ink, er paper, or facebook at least!

Student O, Wednesday, October 2, 2013 at 7:33pm EDT

@Student J agreed! Connecting here is critical since we don't meet in class. I know I won't be able to do without you guys!

New member recruitment and onboarding. In Phase 1 of the group, there was no additional member recruiting beyond the original email and Facebook invitation. However, at the beginning of Phase 2, one member, Student C, began actively inviting classmates in the cohort (not yet in the group) to join. As the group matured, onboarding went from no acknowledgement to a more robust onboarding experience as illustrated in this onboarding thread:

Student F, Monday, August 25, 2014 at 9:27am EDT
Yay! Student C, thanks for adding me, I had no idea this existed :)

[...]

Student E, Monday, August 25, 2014 at 9:29am EDT
Student F!!! Hey!!!! [IMAGE]

Student H, Monday, August 25, 2014 at 9:32am EDT
Hi Student F! Welcome to the We Need to Rant A Lot About This Program Club!

[...]

Student F, Monday, August 25, 2014 at 9:38am EDT
Haha, I will try to keep my ranting under control! Probably not though. I still have no grades for last classsigh

Student G, Monday, August 25, 2014 at 9:38am EDT
Welcome Student F! This group will save your sanity AND make you laugh while doing it!

Student C, Monday, August 25, 2014 at 9:38am EDT
Student F, RANT AWAY. That's part of the reason we're here. :)

Student F, Monday, August 25, 2014 at 9:39am EDT
Hahaha excellent. [IMAGE]

Student E, Monday, August 25, 2014 at 9:40am EDT
Student F, please DON'T control your rants!!!

Student E, Monday, August 25, 2014 at 9:40am EDT
I don't

[...]

Student H, Monday, August 25, 2014 at 9:44am EDT
Agreed @Student E, don't control them Student F because none of us do!

Storming and norming: There was no overt storming in the group among individual members. The values and approaches of the group were established through social encouragement, with very little overt social control. A member described the process:

Student J, Wednesday, October 22, 2014 at 8:01am EDT
And to echo Student G: don't worry about being overly negative here. I find this group remarkably self-regulating when it comes to tone. Everyone needs to vent periodically, but it seems like if things start to drift too critically, someone jumps in and raised the energy. It's very interesting and very unusual,

Group members reinforced group norms throughout the life of the group through active engagement of posts related to task management, socioemotional support, and off-topic content, and members acknowledged the unwritten rules in post on the nature and value of the group:

Student G, Saturday, April 26, 2014 at 8:47am EDT
...Suggestions, commiserations and dirty jokes would be appreciated and Its too early to get into the wine!

Student D, Saturday, May 3, 2014 at 2:15pm EDT
Having such supportive classmates to cheer you on is a huge help. :-)

Humor, as seen in the Problem-Solution-Humor pattern, was frequently used to shift an individual or group away from overly negative threads.

Group content covered an area of potentially controversial subjects such as, politics, sex, off-color jokes, and profanity was used throughout (see Appendix B, Table B3); however, there were no personal attacks or expressions of offense at these topics. The only concern regarding offense of the group was expressed by members themselves, either due to a disagreement on a course discussion (occurring on the course portal) or when group members reported self-censorship on emotional expressions so as not “to bring down morale.”

Performing. Performing happened in a variety of ways. In Phase 1 of the chat, performing involved the sharing of information and emotional support. The pace of the program led to regular periods of synchronous communication punctuated with gaps (1-6 days) without communication. However, in Phase 2, engagement shifted to more of the “always on” model. From Phase 2 to the end of the study period, there were only three occurrences of gaps lasting longer than 24 hours. Members began coordinating schedules to be online at the same time on assignment due dates. Performing moved from information sharing to task coordination, with group members using the chat as a space to engage course discussion, coordinate partnered/team assignments, and brainstorm assignment ideas.

(Re)norming and (re)performing: Each phase saw a period of re-norming and re-performing as group cohesion deepened. The content patterns and norms established in Phase 1 of Problem-Solution-Humor became the rhythm of participation and content in Phase 2 with Problem-Solution-Disclosure-Humor. However, in Phase 3, the group experienced a type of storming brought on by external factors. For three successive courses (six months), the introduction of new instructors and the fatigue of the pace of the program brought about a disruption to the ease of group performance. The organizational sensemaking achieved in Phases 1 and 2 seemed to crumble in Phase 3, and the group members increased frequency of posting of all types, particularly of socioemotional issues (overwhelm, confusion, rage, despair). The highest consecutive number of posts per course occurred in Phase 3 (three courses with more than 2,000 posts as compared to the course average of 1908). This culminated in a thread where group members expressed their resolve to maintain a positive “mindset” (see Table 7: Attitude Adjustment) in the face of duress.

As the group reached the end of Phase 3, they engaged in the question of whether or not it was necessary to self-censor negative emotional expression at times of extreme stress so as not to damage the emotional well-being of the group. While many in the group encouraged openness, Student H addressed the issue with what became the “enhanced” norm of the group:

Student G, Wednesday, October 22, 2014 at 2:32am EDT

Student I, Student K and Student E, here is something to think about. I think it's really sweet you don't want to bring others down but a lot of us felt exactly the same way and in my case it helps me so much when people share their stories. So in some ways it is uplifting to know you are not alone. And who has not laughed hysterically when one of us goes on a funny rant? I know that each of you has said things that make me laugh so hard because it is so true, and made me feel better about things. I have never felt anyone trying to bring me down, in fact I think we bring each other up. Every one of us has meltdowns at different times and that's the best part of our sorority here is that when one of us is down, we all want to help. Do not be afraid to say how you feel, because all of us have felt that way at one time or another. If this were easy everyone would have a masters degree.... I love you guys and feel free to rant. Personally I think most of our rants are quite hysterical and I get a lot from them. I really feel like we are a sorority and I couldn't do this without you. We are going to do it!

This re-norming, the reassertion of the group as a safe space to say whatever might be on a member's mind without fear of judgment, was followed one month later by a five-hour thread of jokes and scatological stories, a long-form humor thread that punctuated months of emotional self-disclosure.

As the group entered Phase 4, the group experienced enhanced performance patterns. The use of the chat became a routine in both course work and daily life, and the chat became fully integrated in the course activities, as the group coordinated its own supplemental study materials (a course study guide) and supported each other in real time in completion of assignments.

This integration is illustrated in the group activities during the final exam in the program.

Students were required to access and complete a three-hour online exam. All members of the group took the exam over a span of three consecutive days. While students completed the exam with no assistance from each other, members coordinated schedules to be online while others

were taking the exam, to provide moral support. During a three-day period of exam taking, group members generated 908 posts (compared to an average course post of 1908). At one point in the exam, a group member experienced a technical issue posting her final exam. She enters the chat with her problem. Without even asking for a solution, in a four-minute span, three group members coach her through the resolution of the issue with both task and emotional support:

Student E, Saturday, May 30, 2015 at 4:13pm EDT
OMG!!!!!! It's telling me I can't upload my document!!!!!! breakdown time!!!!

Student E, Saturday, May 30, 2015 at 4:13pm EDT
NOOOOOOO

Student E, Saturday, May 30, 2015 at 4:13pm EDT
I have 21 minutes left. This can't happen!!!!

Student C, Saturday, May 30, 2015 at 4:13pm EDT
what?! why?!`

Student F, Saturday, May 30, 2015 at 4:13pm EDT
Take a screen shot of the error message. Worst case, you will have that to email to [the instructor].

Student E, Saturday, May 30, 2015 at 4:14pm EDT
It says activity not available!!!!

Student C, Saturday, May 30, 2015 at 4:14pm EDT
WTF

Student F, Saturday, May 30, 2015 at 4:14pm EDT
Weird...

Student E, Saturday, May 30, 2015 at 4:14pm EDT
and I can't take a screen shot from this laptop

Student E, Saturday, May 30, 2015 at 4:14pm EDT
OMG, I am hyperventilating

Student C, Saturday, May 30, 2015 at 4:14pm EDT
did the session time out or something? i've been wondering if that could happen..

Student F, Saturday, May 30, 2015 at 4:15pm EDT

Try opening the exam screen in a new tab/window (keep the original one up), will it let you do that?

Student D, Saturday, May 30, 2015 at 4:15pm EDT
then take a photo with your phone

Student F, Saturday, May 30, 2015 at 4:15pm EDT
Maybe your browser timed out

Student E, Saturday, May 30, 2015 at 4:15pm EDT
OMG, OMG, OMG.

Student D, Saturday, May 30, 2015 at 4:15pm EDT
calm down- we will figure this out!

Student F, Saturday, May 30, 2015 at 4:16pm EDT
Try opening a second version in another page/window.

Student D, Saturday, May 30, 2015 at 4:16pm EDT
first, take a snapshot with your phone of the error screen. Second, try and open the exam page in a new window like Student F suggests

Student C, Saturday, May 30, 2015 at 4:16pm EDT
Don't panic, Student E!

Student F, Saturday, May 30, 2015 at 4:16pm EDT
Will it let you in/ let you submit to that one?

Student F, Saturday, May 30, 2015 at 4:16pm EDT
Don't panic!

Student E, Saturday, May 30, 2015 at 4:16pm EDT
Okay... whoever said open it in another tab is a genius

Student E, Saturday, May 30, 2015 at 4:16pm EDT
That worked

Student C, Saturday, May 30, 2015 at 4:16pm EDT
whew

Student F, Saturday, May 30, 2015 at 4:16pm EDT
Yay!

Student E, Saturday, May 30, 2015 at 4:17pm EDT
but note to all... the browser session times out!!!!

Student D, Saturday, May 30, 2015 at 4:17pm EDT
yay!

Emergent e-leadership. As with the structure of the group, leadership roles developed in the group without overt discussion. Leadership roles fell into three main categories: *Task*, *Affective*, and *Initiating*. Task leadership involved offering and responding to posts related to task issues in the group, including issues pertaining to course material, proposing sensemaking strategies, bridging the group to the organization, and technical/infrastructure management of the group. Affective leaders engaged the group in emotional support, cheerleading, and humor for morale building. Initiating leaders started conversation threads, either by asking questions to the group, sharing off-topic content, or reaching out to individual group members to spur engagement. While all members took turns in all roles, each member exhibited a primary and secondary leadership role. Members in Phase 1 of group development had identifiable roles; however, in the shift in members in Phase 2, with three members exiting and four members joining, new members picked up on the roles of those who had exited with no discussion in the group about role participation.

Table 6

Posting Frequency by Student and Role

Student	Total Posts	Date Joined	Primary Role	Secondary Role
J	3946	September 28, 2013	Task	Affective
C	2608	October 2, 2013	Task	Affective
L	2494	September 28, 2013	Affective	Initiating
E	2430	January 28, 2014	Initiating	Affective
H	2344	May 14, 2014	Affective	Initiating
D	2237	September 28, 2013	Affective	Task
I	1990	September 29, 2013	Initiating	Task
G	1241	September 28, 2013	Initiating	Affective
B	891	October 3, 2013	Task	Initiating
A	791	January 28, 2014	Initiating	Task

P*	716	September 28, 2013	Initiating	Affective
O^	329	September 28, 2013	Task	Affective
F	298	August 25, 2014	Task	Initiating
K	233	September 29, 2013	Task	Initiating
Q**	195	September 28, 2013	Initiating	Affective
M	45	May 15, 2015	Initiating	Affective
N	29	July 16, 2014	Initiating	Task

*Exited group January 25, 2014

^Exited group March 13, 2014

**Exited group December 23, 2013

Discussion

A group that formed as a resistant act to an organizational communicative space, a group with no stated structure, no designated leaders, and no rules throughout its entire existence, provides insights into the emergent nature of structure, leadership, and group identity in a long-term unstructured online space. The themes of the study give evidence of the role that content patterns, frequency of member engagement, and online channel attributes play in the emergence of an architecture of dwelling place, with norms evolving without explicit direction, that leads to the development of an identifiable structure, leadership roles, and group cohesion. This discussion will focus on three areas of use to organizations and to members of long-term unstructured online groups: (1) the role of content and CMC effects in creating an emergent group structure; (2) evidence of Zaccaro and Bader's (2003) e-leadership and e-team trust occurring in a long-term unstructured online space; and (3) practices that might aid group development among people participating in long-term unstructured online communication.

Emergent Structure

While content in the study was organized into three subject types (Task, Pattern, and Off-topic), in a sense, all of the content was off-topic. As predicted by the literature on unstructured communicative practices, the organizational members in this study, working in a highly structured communicative environment provided by the organization, self-organized an

unmonitored space to create a more positive dwelling place (Yuk-kwan Ng & Höpfl, 2013). Thus, none of the content produced in the chat was “officially” related to the course. However, just as the literature suggested, this off-topic space allowed for greater group cohesion than through the formal channels provided by the organization for member connection (Walther, 2009). In this safe space for complaints, concerns, confusion, and distraction, group members accomplished much course (task) related work as the result of sensemaking activities and social cohesion, and of their own accord, integrated the informal communication of the chat with the formal communication of the course portal.

Though the group began as an entirely unstructured experience, micro-level content and engagement practices led to macro-level patterns that created an architecture for this unstructured group. The patterns of Problem-Solution-Disclosure-Humor and Acknowledge-Agree that developed in the earliest threads of the chat group served as a model for the type of exchange and engagement in the group. The pattern of Problem-Solution-Humor (and later Problem-Solution-Disclosure-Humor) created a model for sensemaking and social control that expanded from single threads to extended posts over periods of time (days, weeks, months). Humor and cheerleading served as the social control mechanisms for the group, with members policing themselves with jokes and positive expressions to keep the mood of the group elevated. With the Acknowledge-Agree pattern, members encouraged frequent participation in the group by allowing all participating members to be recognized and “heard.” By regularly addressing one another by name, members reinforced the value of each individual member to the group.

Both of these patterns involved the element of disclosure, and thus contributed to the hyperpersonal (idealization, self-disclosure/reciprocity, feedback) and hypersupportive (private disclosure, agreement, acceptance) effects of CMC. As self-disclosure was met with reciprocal

disclosure, sender and receiver perceptions received positive reinforcement. This led to the development of group cohesion, which contributed to the development of group identity and commitment to the group. Group cohesion was further aided by CMC strategies to accommodate for missing nonverbal cues. In the absence of the ability to smile in agreement or nod a head in solidarity, group members used a variety of text-based approaches to indicate agreement and support. Along with the use of emoticons and *haha(s)*, members developed the habit of directly and explicitly expressing appreciation for individual members, as well as for the group as a whole. The repeated affirmations of the value of the group reinforced and strengthened group cohesion.

Along with the messaging content produced by group members, the channel attributes of Facebook Messenger also appear to have played a role in the emergent structure of the group. Messenger was a tool easily accessible by all group members, available on a variety of devices. The native structure of the Messenger application minimized the need for infrastructure maintenance and process discussions in the group, and encouraged social engagement related to content provisioning and social encouragement. As a mobile application, members with Smartphones could even engage the platform without Internet access. The course portal, on the other hand, required a multistep login and could only be accessed through an Internet-enabled device, and for the period of study, was not accessible via mobile Internet. Further, while the course portal was entirely asynchronous, Facebook Messenger could be used for both synchronous and asynchronous communication. The ease of posting to the chat group and getting an instant response, rather than logging into a portal or sending an email, facilitated the regular use of the chat group. Finally, the style of communication in the portal was formal; Messenger allowed for a more natural, informal communication style among members.

Beyond the Messenger application, the use of Facebook added to the relationship among group members. For those regularly using Facebook for personal use, reading and commenting in the chat was a practice that could easily be added to a preexisting social media habit. Group members could follow each other's public Facebook profiles, and many off-topic threads began with a reference to something a member had seen on another member's Facebook page. This added a layer of intimacy that could not be achieved through the course portal.

Content reveals that the group was able to unite around shared experience as well as shared values and goals. Members valued having a group experience, even at a physical distance, and demonstrated commitment to the greater group by regular group engagement. They all had a shared frustration at the perceived lack of interaction and unclear communication from the organization, and shared the values of performing well academically while maintaining a positive attitude. They did not feel "at home" in the environment of the course portal, and they expressed feelings of being unappreciated and ignored because of being distance students. Having those feelings validated by other members in a designated "safe space" allowed the group to become a dwelling place for members. Thus, content and channel combined to create "normative communication practices" (High and Solomon, 2011, p. 122) that formed a structural architecture for an unstructured group.

E-Leadership and e-Team Trust

The organic growth of an architecture built on frequent engagement and social cohesion shows evidence of Zaccaro and Bader's (2003) e-leadership and e-team trust. This model's e-leader roles and the stages of e-team trust (culminating in a shared group identity and group commitment) emerged through the life-cycle of this group to result in the creation of a cohesive, collaborative group.

E-leadership. Content from the chat identified three major topics of communication: Task, Pattern, and Off-topic that resulted in three types of leadership roles: Task, Affective, and Initiating. These roles correspond with Zaccaro and Bader's (2003) e-leader roles of team liaison, team direction setter, and team operational coordinator, with some overlap in responsibilities. Each of the emergent roles identified in the analysis, Task, Affective, and Initiating, contains elements of each of the e-leader roles and addresses the core e-leader task of team efficiency and efficacy.

In Zaccaro and Bader's (2003) model, team liaisons scan and interpret events and tasks for the group in the context of the "larger environment" (p. 381). Each of the emergent leadership roles in the chat group involved a degree of interpretation and context creation. Task leaders acted as liaisons to both the organization and among group members through bridging communications. Further, they assisted individuals and the group as a whole to understand the specifics of task execution and to connect these to the greater "whole" of the organization. Affective leaders focused on creating context for the group by visions of the end goal—completing the assignment at hand, the course, and the program itself—through cheerleading and encouragement. Initiating leaders raised questions and concerns that facilitated interpretation and context-setting discussions.

In the e-leader model (Zaccaro & Bader, 2003), the team direction setter links the activities of the team liaison with the purpose of the group and focuses on sensemaking. Task leaders functioned as team direction setters through task-related sensemaking activities such as brainstorming and strategy discussions. Affective leaders did the same for the emotional and personal issues of the group. Initiating leaders drove sensemaking engagement (task and affective) by raising questions and sharing issues with the group.

The e-team role of operational coordinator involves using resources in the most effective way to motivate and empower the team. Task leaders approached this role by using the group to coordinate course tasks, member engagement in the portal, and the group as a whole in times of stress. They motivated and empowered group members by assisting them to find, understand, and implement task-based instruction. Affective leaders kept individual members and the group as a whole motivated through cheerleading, encouragement, and off-topic conversations. When emotional stress threatened the efficacy of the group, Affective leaders reframed situations and refocused the group through affective discourse. Initiating leaders exposed potential areas of process loss (through task and affective requests) and provided opportunities for the group to work together to utilize their resources.

In the e-leadership model, the e-leader is called upon to fulfill all three roles of team liaison, team direction setter, and operational coordinator. In a similar manner, group members exhibited facets of each of the emergent leadership roles of Task, Affective, and Initiating. While each member had a primary identifying role (see Table 6), most members engaged in all roles. The most frequent posters, those with more than two thousand posts over the course of the program, were evenly spread across Task, Affective, and Initiating roles. These high frequency posters maintained and expanded the content pattern established in the beginning phases of the group.

E-team trust. Zaccaro and Bader (2003) suggests that the most difficult challenge for teams working at a distance in CMC environments is the development of group cohesion and trust. In this model, e-team trust progresses through three stages: calculative trust, knowledge-based trust, and identification-based trust. The four phases of group development identified in the analysis correspond with these stages of e-team trust.

Phase 1 of the chat group development begins in the calculative-trust stage. At the beginning of the chat, group members were not entirely unknown to each other as they had some degree of interaction through the course portal, but they had engaged in very few personal exchanges. In the initial chat thread, group members immediately expressed appreciation for the value of the group. The group reached a degree of knowledge-based trust in this phase, trust based on repeated engagement over a period of time that led to the ability of members to anticipate the actions of others in the group; however, with the re-formation of the group in Phase 2, the group expanded and knowledge-based trust increased. In this phase, group members were assigned names based on the knowledge the group had gained of each other through the chat group (“Marathon Running Ass,” “Cross Country Moving Ass,” “Wine Drinking Ass,” “Disney Ass”). The off-topic conversations, occurring on a more regular basis, led to more intimate knowledge of group members. Group members began initiating requests directed at specific group members known for being Task or Affective leaders.

The group showed evidence of the third stage of e-team trust, identification-based trust, at the mid-point of Phase 2, when the group adopted a name (“Bad Asses”); however, group identification came to the fore in the stress-filled period of Phase 3. The increased routinized engagement with the chat and the frequency of communication led to a greater degree of reciprocal self-disclosure (particularly on an intimate level). By the end of Phase 3, the group reaffirmed its identity and values indicative of an enhanced level of group cohesion.

The effect of the progression through these stages to a deep level of trust is seen in the shift to the fully-integrated use of the chat in both course and daily activity occurring in Phase 4. The processes driven by content patterns of Problem-Solution-Disclosure-Humor were now routinely applied to both course and personal issues. The group initiated its own tasks and

created its own work product, a study guide. The efficacy of the group in task and affective leadership is illustrated in the analysis example of the exam thread. A group member initiates a thread that is both task and affective—she needs help solving a technical issue with the course portal and managing stress. Three group members simultaneously address both the task and affective issues, brainstorming solutions while offering advice about remaining calm. In four minutes, both issues are resolved. There is a feeling of Zigur’s (2003) telepresence in this exchange, the sense that the members are present in a “place” together though not physically present in the same space.

Implications

The emergent themes of the study provide guidelines for organizations and group members participating in long-term unstructured online communication. For organizations, this study suggests that group cohesion in a private space among team members contributes to retention and productivity. The entirely private nature of the group allowed group members to freely express concerns, complaints, and personal experiences. This led to group cohesion and identification-based trust that created a fierce commitment of members to the group. Although this group voiced many complaints about the organization and many expressed thoughts of leaving the program, commitment to the group, achieved through unstructured communicative practice, kept members from leaving the organization. As the group became more cohesive, they became more collaborative and were able to resolve issues internally without elevating them to an organizational level. In this case, a group that operated entirely separately and without the knowledge of the organization, benefited the organization in retention and group performance.

Organizations can provide employees/organizational members with designated “safe spaces” for unstructured, unmonitored communication. Communication platforms such as *Slack*

provide unmonitored channels for team engagement. Alternately, organizations can encourage members to use traditional social media channels to connect privately. Additionally, in more “public” communication channels (those monitored by the company), organizations should allow room for some off-topic sharing, and can encourage members, particularly those working entirely virtually, to share family and personal information. Rather than condemn off-topic communication among team members as a threat to productivity, organizations can see these topics (even the complaining) as opportunities for building e-team cohesion and trust, qualities that will ultimately lead to more productive teams. Along with these unstructured spaces, organizations need to provide clear channels for bridging from these groups to the organization, so as to support members in these groups in sensemaking and, potentially, in issues of social control. As demonstrated by the group in this study, the availability of unstructured space can contribute not only to team/member productivity, but to member retention, as loyalty develops to the group.

For members of groups participating in long-term unstructured online communication, an understanding of the roles of e-leadership and the stages of e-team trust can add a degree of structure to an unstructured experience. As evidenced in this study, structure and leadership will emerge over time in an online group. Content and frequency of engagement will drive that structure. In the case of this Facebook chat group, in an attempt at sensemaking, members took on roles of liaison, direction setter, and operational coordinator with no outside direction; however, had the content in the early stages of the chat not lent itself to patterns that supported e-leadership and group cohesion, the longevity of the group and the cohesion present there may never have developed. For those undertaking participation in a long-term unstructured group, volunteers may be recruited to drive content generation and content engagement in the early

stages of the group. These volunteers can use social encouragement to promote patterns of engagement and content with the group. These initial e-leaders can be encouraged to post consistently and frequently, to engage content posted by other members, to acknowledge new posters by name, and to share personal and off-topic content (as appropriate) to drive group cohesion.

When choosing platforms for unstructured communication, groups do well to consider platforms that offer both synchronous and asynchronous communication options, as well as platforms easily accessible across a variety of devices. As evidenced in this study, ease of accessibility to the Messenger application made the group the first stop for group members encountering organizational issues. Further, the specific brand of tool may impact group adoption and frequency of engagement. The students in the program had an IM platform available to them through the organization (Microsoft Lync), but the group never made an effort to use it for informal communication. While group members did not discuss the use of this platform (it is mentioned once in the first chat thread), it is possible that members were not inclined to use the Lync platform because it could be monitored by the organization and/or because they were not familiar/comfortable with this platform. Thus, sponsors of unstructured online groups will want to consider member preferences for online applications. As with any online platform, organizers should make members aware that most online communication, even in a so-called “private” space is never entirely private.

E-leaders in unstructured online spaces must be aware that structure and cohesion cannot be forced; a group may never reach the identification-trust stage. By definition, the unstructured space cannot be “engineered” (Arnett et al, 2009, p. 84), so it is to be expected that each unstructured communicative space will develop at its own pace and in its own way, if it develops

at all. It may take multiple attempts and a trial-and-error approach to find the right combination of members, message, and channel to allow an “architecture of commitment” (Ley, 2007, p. 1389) to emerge. However, the potential value of an unstructured online communicative space to those participating in it and to any sponsoring organization provides a compelling motivation to make the attempt.

Challenges and Limitations

This project presented challenges and limitations related to the use of grounded theory in general and to the specifics of this research project. In research on the advantages and disadvantages of the use of grounded theory, El Hussein, Hirst, Salyers, and Osuji (2014) reveal five disadvantages of a grounded theory approach: exhaustive process, high potential for methodological error, developing assumptions as a result of the literature review, multiple approaches to grounded theory, and limited generalizability. Additionally, Charmaz (2006) includes researcher bias as a challenge/limitation, as is true in many constructivist approaches.

Challenges and limitations unique to this project were the issues of researcher bias and data composition. In addition to the researcher bias inherent in grounded theory, the researcher for this project was also a member of the group that provides the source of data for the project. Further, while this project provides a robust text for analysis, the group is gendered female—there were no male participants in the chat at any time. This presented the possibility that gendered communication patterns may also play a role in the findings of the study. Efforts were made to mitigate challenges and limitations through the addition of a second coder.

Conclusion and Future Research

For the group of students participating in this long-term Facebook chat, the chat group became a communicative home. Through content focused on solutions and support, the group

built patterns of interaction focused on sensemaking. In the process of sensemaking (task and affective), frequent engagement and reciprocal self-disclosure led to the formation of group identity. This commitment to the group subsequently impacted the decision making of individuals regarding staying in the program. The group evolved from a study group, to a support group, to a collaborative space for both school and life. For the most active participants, this online space became a fully-integrated part of both their coursework/routine and their daily habits. Group members repeatedly credited the existence of this unstructured safe space as allowing them to successfully complete a rigorous program conducted entirely at a distance. Thus, both students and organization benefited from this unstructured communicative space.

This study opens opportunities for future research in the areas of gender studies, organizational communication, and the structured-unstructured. The members of the group in the study were all cis-gender female. The role of gender-based communication in driving content and engagement patterns remains to be studied. Further, comparative studies of groups that are predominantly/entirely male or that are balanced in relation to gender could reveal new and different models. In terms of organizational communication, group members in this study were in a noncompetitive educational environment. A study of groups in competitive environments, where members are in competition with one another for organizational advancement, might reveal different themes and patterns. Finally, research into an unstructured group that attempted some form of structure, either as a private group facilitated by an organization, or with a group of members attempting to use e-leadership would lend insights into the recommendations of this study regarding the viability of a structured-unstructured space.

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Appendix A
Frequency of Posts

Table A1

Frequency of Posts by Course

Course	Posts
Phase 1	
1*	1,106
2	1,552
Break 1	158
Phase 2	
3	1,985
4	1,671
5	1,864
Phase 3	
6	2,030
7	2,819
8	2,366
Break 2	133
Phase 4	
9	1,229
10	1,796
Break 3	563
11*	3,366

*Half-course

Table A2

Frequency of Posts by Day of the Week

Day	Posts
Monday	3,647
Tuesday	3,170
Wednesday	3,893
Thursday	3,404
Friday	2,767
Saturday	2,476
Sunday	3,460
Total	22,817

Appendix B

Content Types

Table B1

Task Discussion Content: Detailed

Subtype	Content
Requesting/Offering	Resources Advice Strategy Brainstorming Problem-solving Distractions/play Debriefing (assignment, course) Moral support Cheerleading Progress reports Opinion Peer feedback Time management/productivity Organizational communication
Offering	Anticipating problems--group, individual
Sensemaking	Metaphor/analogy (Re)framing Polling the group Q&A course specifics, assignment details Comparing (instructors, courses, outside experiences) Mirroring/acknowledging/validating Announcing online availability Clarifying Speculation (anticipating next course, next professor, next stage/phase of program) Decision-making
Bridging	Organization (instructor, university, advisor)
Collaboration	Task coordination Brainstorming Pitching topics
Group management	Onboarding new members Recruitment

Table B2

Pattern Discussion Content: Detailed

Subtype	Content
Self-disclosure/reciprocity	Expressions of emotion Ennui Self-doubt Overwhelm Fear Confusion Anger Sharing personal mistakes Complaints (organization, home, work) Motivation Procrastination Mirroring Commiserate (task, program, experience, personal) Discussing group with family Ranting Considering exiting the program Venting
Cheerleading	“We/You can do it!”/ “We/You got this!” Platitudes Cheerleading with advice, resource Encouragement Comforting Focus on end goal--graduating/career Affirming/validating “B's get degrees” Expressing gratitude/appreciation Downplaying personal success

Table B3

Off-topic Discussion Content: Detailed

Subtype	Content
Personal/Work	
Family	Spouses/partners Children/childcare advice Aging parents/caregiving Death of a parent Dogs Engagement (announcement, wedding planning) Vacation/time off Relationships
Health	Eating disorders (disclosure) Accidents/hospital visits Panic attacks Chronic illness Surgery
Job/Work	Challenges Environment Changing/desire to change Complaints
Humor	Memes Emoticons <i>LOL (lololol, LMAO)</i> <i>haha (Bwahahaha, Ahahaha, hahahaha, etc.)</i> <i>GAS (Give a Shit)</i> <i>DGAF (Don't Give A Fuck)</i> Virtual drinking Profanity Word play Inside jokes/jokes about course material Funny stories Sarcasm Jokes about typing mistakes/autocorrect Sex jokes
Pop culture	TV/movies/entertainment (<i>Magic Mike, House of Cards, Harry Potter series</i>) Sports (baseball, football) Social media memes
Current Events	Local events National events

	Politics
	Inclement weather
Individual	Birthdays greetings
	Hair/hairstyles
	Inquiries about those not in the group
	Request for offline assistance
Other	What the person is doing at the time of posting
	Online shopping
	Apps and tech tools/phones
	Wine drinking
	Coffee drinking
	Horoscopes
	Graduation party/planning own graduation
	Comments on members' Facebook posts/social media posts
