

## CHAPTER V: SUMMARY AND IMPLICATIONS

The literature and prior research provides evidence of the importance of employee trust and community in the workplace. Trust is an essential aspect of healthy relationships, and scholars appear to agree that trust is a necessary aspect of business life. The literature also pointed out that human beings are more likely to dialogue, share information, and build communities with persons that they trust. Trust also appeared to be the result of verbal and non-verbal interactions within those relationships. Through interaction and in forming these relationships, one apparently learns to trust by trusting. More pointedly, the literature suggested that trust in the workplace fosters shared meaning among organizational members, enables cooperative behavior, promotes adaptive organizational forms and network relations, reduces harmful conflict, decreases transaction costs, and facilitates rapid formation of ad hoc work teams.

When employees perceive trust in their work environments it appears to encourage more open and honest communication. Informal conversations and general communication patterns in the workplace also appears to provide important social outlets for members to build community and trusting relationships. This appears to create shared meaning among peers and, therefore, gives members a clearer sense of the organization's identity and through this it strengthens member identification. The writers in this area point out that through this socialization, employees learn the appropriate social cues of the work environment and reinforce the common bonds that unite the organization as a whole. This member identification, also referred to as sense of community, serves to satisfy a basic human need to develop human connections and relationships with others.

The rise of the information age has increased the need for organizations to more rapidly acquire, capture, and disseminate knowledge. Organizations have turned to information technology as one way to quickly and efficiently distribute information to and communicate with a dispersed workforce. The e-mail technology has been sold as a vehicle to provide an ease of communication for organizations regardless of physical distance. Social interactions, therefore, are mediated through a computer-based process. A large number of organizations have established e-mail as the norm for interfacing with others in the workplace.

While the ease of use and wide accessibility of e-mail has seemed appealing, little research had been conducted to observe or measure the social impact of e-mail on the work

environment and the employee relationships within organizations. E-mail could be seen as a technology that eliminates the need for humans to be in the same physical proximity to communicate with one another. E-mail also provides the capacity to leave written messages and other written documentation to another person who is not physically present. Despite all the positive aspects of e-mail, many people in organizations have chosen the utilization of e-mail over face-to-face dialogue even when their fellow employees are in close physical proximity to them.

Thus, as the literature implied, it would appear that the abundant use of e-mail in the workplace hinders the ability of colleagues to have informal conversations, interpret non-verbal cues, and satisfy their basic human needs to connect with others. Since e-mail is capable of spreading the information it could also be seen as eliminating the need for people to share the same physical space and interpret non-verbal cues present in face-to-face conversations. Therefore, to scholars who observe human behavior, this automatically raises the question of whether the use of e-mail decreases feelings of trust and community among organizational members.

This research was conducted to explore this workplace phenomenon and its relevance in the social schema of a work environment. Specifically, the research was conducted to learn more about the relationships between e-mail, organizational trust, and psychological sense of community. Two questions guided this study: (1) Within the organization, how does physical proximity to others in the workplace relate to the amount of communication received from and sent to others through the selected channels for specified employment levels? (2) Within the organization, how does the amount of e-mail communication received from and sent to others, and the physical proximity to others, relate to organizational trust and psychological sense of community for specified employment levels? (a) What is the relationship between e-mail communication and organizational trust? (b) What is the relationship between e-mail communication and psychological sense of community in the workplace? Of course, individual characteristics and organizational environment could be important too.

## **V.1 Summary and Evaluation of Methodology**

Three hundred and fifty-one (351) employees from a large international organization responded to a questionnaire that included 3 valid and reliable instruments of trust and sense of

community. Study participants were professional, white-collar employees from one of the three operational teams within the public sector business segment of the selected organization. Respondents included individuals in staff, management, and top management positions. Because of the nature of the work environment and the dispersed population, the data were collected through an electronic questionnaire distributed through e-mail. Participants received an introductory e-mail from each of the operational team leaders. This introductory message explained the intent of the study, use of the data collected, and the confidentiality agreement. Participants were also provided with an approximate date for distribution of the questionnaire and a specific deadline for completion. Several days following, participants received another e-mail message from their respective team leaders with a link to the research questionnaire. The link contained an introductory letter with specific information about the study, an informed consent document that explained participant's rights and responsibilities, and the research questionnaire. Participants were given 3 weeks to complete the questionnaire. Approximately mid-way through the time period for the return of the questionnaire, a reminder e-mail message was sent out to participants. Each participant freely elected to provide responses for this study, and participants were able to end their involvement at any time during the study.

After participants completed the questionnaire, the responses from all questionnaires were electronically processed on a Microsoft EXCEL spreadsheet. Confidentiality was maintained because no information was revealed about the identity of participants and their responses. The Microsoft EXCEL spreadsheet data were transferred to an appropriate data set for use with the SPSS. The data were examined manually for completeness.

The analysis of the data consisted of a three-phased approach. In the first phase, or the preliminary analysis of the data, frequency distributions were determined and descriptive statistics were performed. Frequency distributions on gender, age, education level, time in organization, level in organization, team in organization, and work location were examined to gain a preliminary insight into the sample. Descriptive statistical methods were used to determine the Cronbach alpha scores and the standard deviations for the trust in supervisor, trust in organization, and psychological sense of community measures selected for this study. The same descriptive analyses were performed for the physical proximity to others and communication channel items. Percentages for these items were also calculated.

In the second phase, bi-variate analyses were performed to examine the relationship between physical proximity to others and the use of various communication channels. Gammas were used to determine how specified employment levels used the four communication channels. The same analyses were conducted to examine the use of the four channels by work location, education level, and other important variables.

The trust and psychological sense of community in the workplace items were averaged to create the three scale scores. Correlation analyses were performed using these scales and selected demographic data. Based on these preliminary results, several of the demographic variables (i.e., age, time in organization, and education level) were recoded to facilitate further analyses. Several gammas were performed to re-examine the recoded variables and their relationship to the distributions of the four selected communication channels.

There were minimal differences between scores related to the items “received from” and “sent to” others, so these items were combined to obtain a total communication score for each communication channel. Descriptive statistics were used to determine the means and standard deviations for these variables. A correlation analysis was performed for each of the selected employment levels to examine the relationship between the three scales and the communication across the four channels. One-way analyses of variance (ANOVA) were run where appropriate to examine total communication volume by physical proximity, work location, gender, age, time in organization, employment level, team in organization, and education level. The mean differences for the significant relationships of these items were examined. Appropriate one-way ANOVAs were performed with the three scales and selected demographic items (including the recoded items), and the mean differences for the significant relationships of these items were examined.

While the sum of total communications among the four media resulted in significant relationships with the three scales, the primary focus of this research was to examine e-mail communication. Therefore, a communication ratio was created to examine the relationship of e-mail compared with the three other communication channels. Descriptive statistics were used to obtain means and standard deviations on the communication ratios for the four employment levels. Correlation analyses were used to determine the communication ratio for each of the selected employment levels and the three scales. One-way ANOVAs were performed using the

communication ratios and selected demographic data. The mean differences for the significant relationships of these items were examined.

For the third phase of the data analysis, the GLM statistical method was used to perform the multiple variable analyses. This model, unlike multiple regression analysis, allowed for the simultaneous presentation of results for continuous and categorically independent variables. The purpose for using the GLM was to draw inferences about which independent variables were related to the communication ratios as well as to the trust and psychological sense of community variables.

Initial GLMs were investigated to determine the relationship between the respondents' communication patterns by the communication ratios and the factors that could influence these ratios. The results were examined to identify significant relationships. Many of the independent variables used in the original GLMs were eliminated because of their lack of significance, resulting in a reduced set of more important independent variables for the communication ratios and scales. These reduced sets of independent variables were used to create the final models. The examination of the communication ratio for colleagues and immediate supervisor showed that only continuous variables were significant, thus these GLMs reduced to regression analyses.

Overall, the methodology selected for use in this study was sufficient. The three measures were reliable and valid, and the use of the instruments appeared easy to understand and their lengths appropriate. However, the field remains limited in its choice of instrumentation to examine trust and sense of community. Given the importance of trust and community in the workplace, as evident in the literature, further research should be dedicated to improving the current measures available to researchers in this area. Also, more attention should be focused on developing a universal definition of the variables of trust and sense of community, especially as they pertain to workplace attitudes, behaviors, and relationships. The meanings of these terms are vague and they continue to foster debate among scholars. And, without a universal definition, these issues may continue to impede the development of instruments that can accurately measure them and their influence in workplace relations.

The difficulty with defining trust and community may be further complicated by the inability of participants in research to clearly point to the phenomenon itself. For instance, participants in this study said that e-mail was often used as a "C.Y.A." mechanism in workplace relations. This perceived need by employees to keep a paper trail of their communication with

others in the workplace may be related to their feelings of trust of their peers and management, but clearly identifying their actions to feelings of distrust may be more complex. Therefore, future research in this area may be best conducted using case study methodology where participants could be interviewed and observed over a period of time.

## **V.2 Summary and Implication of Findings**

The concept of trust in human relationships has gained much attention over the past decade. The majority of the trust literature focuses on the definition of trust, and the development and maintenance of trust. Most scholars agree that trust is developed and maintained through dialogue and socialization, including verbal and nonverbal social cues. The literature suggests that individuals share information and build communities with persons they trust. Within an organizational environment, higher degrees of trust enhance the discovering processes and, ultimately, the ability of groups and organizations to fully function. Communication among members in an organization helps to build common bonds, shared meanings, and a sense of community. Community is created in environments that encourage open and honest communication among their members.

Technology has changed the need for organizational members to meet face-to-face to simply pass information. E-mail communication is a tool that enables members of an organization to communicate with one another despite differences in time and location, and it is used in a vast majority of corporations. While e-mail communication provides many advantages, the literature in this area suggests that this tool may limit the opportunities for organizational members to dialogue and create relationships with one another. Thus, one might question whether decreased opportunities to engage in informal face-to-face conversations with others in the workplace would result in decreased levels of trust and feelings of community. Despite the research underscoring the importance of socialization and communication in building trust and creating community in the workplace, there is a paucity of research that specifically addresses the relationship between e-mail, organizational trust, and sense of community.

This exploratory research was conducted to learn more about the use of e-mail communication in the workplace and to observe its interaction with trust and sense of community. The first of the research question was aimed at learning more about the relationship

between physical proximity to others in the workplace and the amount of communication received from and sent to others through the four selected communication channels for the specified employment levels. This question was developed from extensive observation of workplace behavior. It was expected that e-mail would be used to communicate with others that are located at a distance. However, in observing members in the sample organization, it appeared that employees elected to use e-mail to communicate with others that were in close physical proximity. As anticipated, the findings from this research showed that e-mail is the primary means by which the specified employment levels communicated with others in the workplace. Face-to-face was the second most frequently used medium for communicating with others. The use of the telephone and paper were used less frequently.

In the organization selected for this study, employees that were located closer in physical proximity to others in the workplace used significantly more face-to-face communication. The majority of employees were physically distant to very distant from their top management. Most respondents used more face-to-face communication with their colleagues and immediate supervisor than with top management. Similarly, employees that were located at headquarters rather than entirely off-site used significantly more face-to-face communication in interacting with their immediate supervisor.

There were differences in the use of face-to-face communications regardless of location by employment type. For instance, staff and management used face-to-face communications more with others that were located in close physical proximity, while top management tended to use face-to-face communications only with their immediate supervisor when they were located in close physical proximity. The majority of persons in top management positions were physically distant from employees other than their immediate supervisors. Thus, most top management relied on media other than face-to-face communications to interact with employees.

While face-to-face communication was used among employees that are physically close to one another, e-mail was used regardless of close or distant physical proximity. All employment types (i.e., staff, management, and top management) use e-mail to communicate with other employees in both close and distant physical proximity. However, employees that sat close to one another communicated more with each other than employees who were distant from one another. E-mail communication among all four types of employees was also found to have a significant relationship with work location. Significantly more e-mail was used to communicate

with colleagues, other colleagues, and immediate supervisor by those employees located at headquarters versus those located entirely off-site.

The analyses of the data also revealed relationships between selected demographic variables and the use of e-mail. Employees between ages 21 and 30 years used more face-to-face and e-mail to communicate with their colleagues and immediate supervisor than their older counterparts. This finding may be because of the importance of the employee-supervisor relationship in the early years of one's career. For instance, younger employees may need to seek more guidance and direction from their immediate supervisors than their more seasoned peers. The use of more e-mail by younger employees may also be a reflection of their preference in medium and their natural tendency to use communication technology because of increased exposure to the tool. As the younger employees move into management and top management positions, the trend toward using e-mail to communicate with others may become more pervasive.

Males and females at various levels used different amounts of e-mail. For instance, males in staff and management positions used e-mail more than their female counterparts. However, as males and females reached top management positions, females used significantly more e-mail than males. Also, the three teams used different amounts of e-mail. Team 3 consistently used more e-mail than Teams 1 and 2. There were differences in the gender distributions on the three teams. The most apparent difference was between males and females on Team 3. As female members of Team 3 advanced in level, so did their e-mail communication. In contrast, males on Team 3 decreased the amount of e-mail as they advanced in rank. While the communication ratios of males and females on Team 1 were different, there was some consistency in their communication patterns as they advanced in level. Team 2 showed relatively little difference between males and females in staff and management positions. However, as males moved into top management, their use of e-mail communication increased. Unfortunately, not enough data were available to gauge the communication ratio for Team 2 females in top management positions. While this was an exploratory study, these findings suggest that the differences in gender may be reflected in the amount of e-mail used.

The intent of the second research question was to examine the relationship between physical proximity, the amount of e-mail communication, and organizational trust and psychological sense of community in the workplace. The findings revealed that the

communication ratios, developed to measure the amount of e-mail versus the three remaining media, were not important intermediate variables for explaining organizational trust and psychological sense of community in the workplace. More e-mail and less communication through other media, thus, did not necessarily relate to organizational trust and sense of community in this study. On the other hand, factors other than communication medium, like team culture, influence feelings of trust and sense of community among employees.

First, Team 3 had significantly less trust in their supervisor than Teams 1 and 2, and the relationship of gender to trust in supervisor differed by team. Females on Teams 1 and 3 had less trust in supervisor than males. Males on Team 2 had less trust in supervisor than females. As noted above, males and females in staff and management positions on Team 2 showed relatively little difference in communication patterns until they advanced in position. Further analyses showed no other significant relationships existed between the communication ratios, team in organization, gender, and trust in supervisor. The differences among teams and genders for trust in supervisor may indicate underlying cultural issues within the teams.

Second, as employees advance in the organization, trust in organization appears to increase. This finding may result from management and top management having more invested in the organization than staff. For instance, staff tends to be younger at the beginning of their careers, and may seek new opportunities outside the organization. On the other hand, management and top management may be more seasoned and settled in their careers, and may seek stability and career growth within the organization. Also, organizational benefits, like bonuses, additional vacation time, social gatherings, and other amenities increase as one moves up the ladder and these trappings may foster greater feelings of trust in the organization among those in higher positions. It is also possible that those who seek to rise in the organization are inherently different than others.

As with the trust in supervisor, Teams 1 and 2 had significantly more trust in the organization than Team 3. As previously found, Team 3 had higher communication ratios for other colleagues and immediate supervisor, suggesting that Team 3 used more e-mail than Teams 1 and 2. In general, females tended to have less trust in the organization than their male counterparts. Females on Teams 2 and 3 had higher communication ratios than their male counterparts in communicating with top management. Females in top management positions on Team 3 had significantly higher communication ratios than their male counterparts for

communicating with other colleagues. These relationships between trust and gender appear to vary by age. Females 21 to 30 years old across the three teams had significantly less trust in the organization than males of the same age, and females 46 to 68 years old on Teams 2 and 3 had significantly less trust in the organization than males in that age range.

The communication ratios were not involved in any of these interactions. There also may be other interactions that cannot be detected. For instance, there appeared to be a pattern among higher educated employees outside of top management between the ages of 46 and 68 and the three scales. Although not statistically significant, these employees consistently showed a noticeable drop in trust and sense of community across all teams and with both genders. The parallels of these relationships are fascinating and worth additional exploration.

Third, consistent with trust in organization, level in organization did appear to relate to one's psychological sense of community. Top management had significantly more sense of community than staff and management. Similar to the data on trust in the organization, top management may also have a greater commitment to and investment in the organization that, in turn, may increase feelings of community. This also may reflect the organization's commitment to and investment in persons in top management positions. Those who have advanced in the organization may feel that their value to the organization has been affirmed. Lower level employees, especially new ones, may be less secure in this respect.

The correlations of all communication mediums to the three scales for top management were significantly related. This finding may indicate that top management already has a high degree of trust and sense of community and, due to the nature of their positions, communicate more through all communication channels. This may also suggest that more communication in general, rather than the type of communication medium, is related to organizational trust and psychological sense of community, particularly in receiving from and sending communication to top management. However, despite all the previous data, and the results of the trust scales, it was surprising not to find more variables with explanatory value for psychological sense of community.

Overall, the findings from this research indicate, as expected, that e-mail was a widely used communication tool. As the results signify, e-mail was used despite close or distant physical proximity. Face-to-face communication, naturally, was used more between those in close physical proximity, but employees also choose to use e-mail to communicate with others in

close proximity. The inability to determine stronger relationships between e-mail and feelings of trust and community was disappointing. However, it did appear that factors other than the communication medium alone might have been influencing employees' feelings of trust and community in the workplace. The importance of these factors to respondents' feelings of trust and community may be worth further exploration.

The perusal of the participant responses to the open-ended questions, however, did surface an apparent frustration with e-mail. The inability to gauge tone and facial expressions, incapacity for dialogue, and loss of human context were all aspects of e-mail that these participant's narrative responses suggested were the weaknesses of this communication tool. Because communication plays such a vital role in relationship development and maintenance, it may be likely that the weakness of the human context in e-mail might, over time, influence employees' feelings of trust and community toward others in the organization and the organization itself.

Overall, the findings from this exploratory research uncovered interesting insight into workplace communication and its relationship to trust and community. First, e-mail was used regardless of the physical distance to others in the workplace, and e-mail was the most used communication medium in this work environment. Second, factors other than the communication medium play a role in the degree of trust and community reported by employees. The most apparent factors that may have influenced trust and community in the organization used for this study were the differences that appeared among the genders and teams. Females consistently reported lower levels of trust and community than males. Team 3 had less trust and sense of community than the other teams. Further research into these two areas may reveal additional discoveries about communication differences among the genders and the diverse team cultures. Third, the open-ended questions uncovered some of the challenges with e-mail use in the workplace. While many respondents highlighted the positive aspects of e-mail, it was clear that there was an equal amount of aggravation with the technology. A more extensive research study, possibly utilizing case method techniques, might provide greater insight into individuals' attitudes and feelings about e-mail.

### V.3 Limitations of the Research

No research is without limitations, and this study is no exception. The most apparent limitation was that this was an exploratory study and it only examined one organization, making generalizations impossible. It would have been ideal to include other organizations in the study. However, because of the sensitivity of the research, it was difficult to find organizations available and willing to disclose employees' feelings of trust and community. Despite the selected organization's willingness to participate, constraints were set on the number of employees that could receive the questionnaire. These constraints limited the ability to conduct true sampling procedures because organizational leaders dictated the sub-teams that would receive the questionnaire.

Another limitation of this study was the inability to track non-respondents. The research questionnaire was administered through e-mail, and responses were anonymously submitted to a database to ensure confidentiality. This method of confidentiality made it impossible to verify who responded and who did not respond, hindering the ability to determine the degree to which non-respondents were similar to respondents. For instance, the non-respondents may have been employees with more or less feelings of trust and community in the organization. However, without the ability to identify the non-respondents, this type of information could not be obtained.

In addition to the issues with the sample, and the inability to track non-respondents, the questionnaire itself posed some limitations. The number of questions in this study could have affected the willingness of participants to respond. It might have been more efficient to combine the communication received from and sent to items from the outset, reducing the number of questions by half. Also, it may have been better to limit the number of employment types to only two—colleagues and immediate supervisor. A preponderance of the literature on workplace relations suggests that the colleague-immediate supervisor relationship is one of the more important associations linking individual's positive or negative feelings to the organization.

While many scholars agree about the importance of trust and community in the workplace, there continues to remain debate about specific meanings and definition of the terms, and to some extent the terms are abstract. The inability to clearly identify definitions of trust and community complicates the development of sound and diverse measures. As obvious in the

literature, trust and community are two aspects critical to the human condition and human relations. This is especially true in the workplace where people spend countless hours with others and rely on one another to complete tasks. Therefore, it would be beneficial to learn more about trust and community in the workplace, particularly as it relates to more modern means of socialization and communication in the workplace. There is also a great amount of discussion about the difference between general communication and the process of just notifying people about important information.

#### **V.4 Recommendations for Practice and Future Research**

Even though no relationship was found between level of e-mail use and organizational trust and psychological sense of community in the workplace, e-mail is here to stay. Therefore, it is important for organizational leaders to understand its potential for long-term influence on organizational attitudes and behaviors. For instance, as younger employees advance in organizations, they may become over-dependent on this technology to communicate with others in the workplace, because this population tends to use such tools more readily than its older counterparts. As found in this study, gender differences exist in communication patterns and attitudes about the organization. Also, teams within the same organization can differ in communication patterns and feelings about the organization. Therefore, it is essential to continue to explore the use of e-mail in the workplace as organizations grow and become more dispersed. These changes will force employees then to rely more on e-mail to foster and maintain relationships.

The literature on building and maintaining trust consistently highlights the importance of socialization and communication. Adults learn to trust, previous research has confirmed, through regular and frequent interaction with others. As organizations use more and more technologies, it still will be vital to create frequent opportunities for employees that will be working together to interface and interact with one another face-to-face. The relationship of the “human moment” to the human condition and its significance in the workplace is an area that should continue to be explored. More research should focus on the aspects of adult learning in the workplace, especially as it relates to electronic communication. The findings from research in this area can assist organizational leaders in determining how much human interaction and the type of socialization their employees need.

Another area that should receive further attention is the proper use of e-mail communication. As indicated in the participant responses, e-mail messages can be misinterpreted and misunderstood because of the inability to gauge tone and observe facial expressions. This possible miscommunication may lead to more acts of incivility in the workplace, thus damaging the work relationship. More research should be conducted to understand what type of e-mail messages are perceived as positive and negative; what messages should be conveyed face-to-face rather than through e-mail; and what ways e-mail can be used to foster greater feelings of trust and community in the workplace. The findings from this type of research will help organizational leaders understand the communication needs of their employees and establish some guidance concerning civility in the workplace that would improve all employee relationships.

New communication technologies, like instant messenger (also known as IM) and wireless handheld computers, are continuously being introduced into the work environment. Similar to e-mail, these technologies do not require face-to-face communication and may further limit opportunities for organizational members to build satisfying personal relationships. More research is needed to learn about the influence of these technologies on the human relations in the workplace. A deeper understanding of human needs—the balance between autonomy (the sense of separateness) and homonomy (the sense of connection)—would enable organizations to create opportunities for members to create relationships with one another while maintaining a level of independence.

## **V.5 Conclusion**

Communication technologies are fascinating and, when used properly, can be effective tools for passing important information in organizations. As e-mail and other technologies become more prevalent in the workplace, it will be important for organizations to understand how these technologies influence employee attitudes and behaviors. It will also be essential for organizations to build opportunities for their employees to create relationships with one another. These human moments allow employees to socialize with others and build long-lasting relationships that benefit the productivity of the organization.

This research provided insight into the dynamics of e-mail and its possible influence on employees' feelings of trust and community in the workplace. Results from this research

indicate that there may be factors other than communication media that relate to employee attitudes. This research should be used to foster new interest in understanding workplace communication, particularly as it relates to new forms of technologies. These new technologies, like e-mail, allow employees to communicate with others without the need to be physically present. Not much is known about the influence these technologies have or will have on human relationships in the work environment.

Future research should focus on developing a deeper understanding of the importance of building trust and creating community in the workplace. This may best be accomplished through a qualitative research approach, as quantitative analysis often makes it difficult to accurately capture the finer-points such as employee attitudes, behaviors, and feelings of organizational members. Understanding the basic human need for connection may help organizational leaders to develop more opportunities for their employees to socialize and bond with one another.

As the younger population moves into management positions, it will be important to continue to research the ways in which employees' communicate with one another in the workplace. The goal, ultimately, is to create working environments where employees can build trust with their colleagues and feel connected to their productive organizations. As the literature clearly suggested, this is achieved through open, honest, and regular communication. Whether this is effectively accomplished through electronic communications is still open to debate.