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Engagement in Online Communities: the Impact of Self-Disclosure and Humor

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ABSTRACT

This study extends the IT acceptance research by proposing an engagement model that supports acceptance and use of online social network systems. Using the proposed model, this research demonstrates that sponsors of online communities created through online social networks can increase the member engagement in these online communities.

The primary contribution of this research is deepening insights into the information systems and communication artifact by conceptualizing a model that helps researchers understand the reasons why some communication types, such as appropriate humor messages, can improve the relationships between online communities members, and increase their engagement perceptions in these online communities, while other communication types may negatively affect participation and engagement within these communities.

KEYWORDS

Self-Disclosure; Humor; Engagement; Online Communities, Online Social Networks, Facebook.

INTRODUCTION

IS researchers have become increasingly interested in understanding how to organize and facilitate the development of online communities (OCs) (Nambisan and Nambisan, 2008), which is defined by Cothrel (2000) as communities interacting virtually via computer-mediated communications (CMC). Many reasons underlie this interest, including the ability of a sponsor or administrator in these communities, such as product and service providers, virtual team supervisors, or even instructors, to facilitate of deep and enduring affective bonds with communities members (Hagel and Armstrong, 1997).

Social network sites (such as Facebook, and Twitter, etc.) provide the opportunity for building and maintaining online communities around a specific interest (such as a brand product, firm, or area of educational interest). Members in the OC can be engaged around the interest of the community, for example, consumers can engage in a product development process (Di Gangi and Wasko, 2009). Some of the promise and popularity of online social networks lie in their ability to offer an alternative means to communicate, collaborate, and even to organize economic activity (Jarvenpaa, Leidner, Teigland, and Wasko, 2007). As such, they carry the potential to dramatically change the ways in which we interact with one another in both the real and online world (Chaturvedi, Dolk, and Drnevich, 2011). The rise of social network site use among OCs' members, such as customers and students, affords sponsors of these communities the opportunity to shift relationships with those members from dialogue to triologue, in which users engage in meaningful relationships with one another and with the sponsors (Hlavinka and Sullivan, 2011).

The most frequent use of social networks by businesses is to engage customers (and potential customers) via social networks as a part of a marketing effort or customer relationship management program, with some practitioner surveys reporting as many as 90% of businesses are using social networks as a part of their online marketing efforts (Stelzner, 2011). Despite widespread acceptance and use of social networks sites, there is a little empirical research on how this technology can be used to enhance individual outcomes. Existing literature focuses more on social uses of social networks sites, not on how organizations may use these sites to enhance relations with constituents or accomplish other meaningful organizational goals (e.g. Mazer, Murphy and Simonds 2007, 2009). This lack of research has led to caution on the part of practitioners trying to

use OCs. As one executive argues, “When a firm executes a customer engagement strategy, there is no room for error” (Porter, Donthu, MacElroy, and Wydra, 2011, p. 80).

Unlike prior information technologies, the central theme in research surrounding OC acceptance and use is engagement (Hassenzahl & Tractinsky, 2006), as opposed to perceived ease of use and perceived usefulness, as defined under TAM (Davis, Bagozzi, and Warshaw, 1989). This suggests that to understand the adoption and use of OCs requires an examination of engagement by users within these communities (O’Brien and Toms, 2003). This represents a fundamental shift in focus from the design of the technology itself to how the technology is used by participants within these OCs. This study extends IT acceptance research by proposing and testing a model that examines the impact of type of content posted within OCs has on engagement. Specifically, this study examines how instructors in higher education can use self-disclosure and humor within an OC to improve student engagement. While higher education is not a traditional business environment, students in higher education are typically the early adopters for the newest technologies available and using higher education for this study will allow us to understand how OCs can transform interaction in society (as called for by Agarwal and Lucas, 2005; Benbasat and Zmud, 2003; DeSanctis, 2003, and King and Lyytinen, 2004).

Most research on instructor self-disclosure and use of humor conducted to date has been in face-to-face environments; no previous research has studied their impacts in online environments, like Facebook. There is no evidence that what is true in face-to-face environments is true in online environments for several reasons. First, time constraints are different online. Facebook can provide the instructors with an opportunity to effectively disclose more information, in a richer format (images, videos, social status, etc.), without affecting lecture time. Second, interaction may be easier online, while in face-to-face environments, students might be unwilling to share or ask questions (Sullivan, 2002). Third, online environments have fewer cues about how to interpret messages. The use of humor online could potentially pose problems because people often rely on environmental cues when deciding how to interpret a humorous message (Leventhal, and Cupchik, 1976). Finally, research suggests that students may perceive an instructor use of Facebook as an attempt to foster positive relationships with students, which may have positive effects on the instructor credibility (Mazer et al., 2007). Accordingly, student expectations in Facebook environment are expected to be different than in face-to-face environments. This research will address the critical need for an improved understanding of what messages are most effective in online professional social environments.

THEORETICAL BACKGROUND

Technology Acceptance

Information technology (IT) acceptance research has yielded many competing models, each with different sets of acceptance determinants. The most popular model used to understand the acceptance to use of technology within organizations is the Technology Acceptance Model (TAM). Under TAM, an individual intention to use a system is largely influenced by the perceived usefulness and perceived ease of use of the system (Davis et. al. 1989). TAM has been used to explain the acceptance to use of technology in a wide variety of domains. However, the technologies that have been studied in many of these IT acceptance models have been relatively simple, individual-oriented information technologies as opposed to more complex and sophisticated technologies like human-computer interaction systems (Venkatesh, Morris, Davis G, and Davis F, 2003).

Communication Types

Initial research on the use of online social networks in OCs suggests they can be helpful for connecting with OC members. However, research has not addressed how sponsors may best use these tools to connect with their OC members. This study examines how self-disclosure (both course related and personal) and the use of humor via the Facebook social network can be used to improve student engagement.

Self-disclosure

One type of communication that can be used in online communities by sponsors of these communities is self-disclosure. Wheelless and Grotz (1977) defined self-disclosure construct as “any message about the self that a person communicates to another”. In academic context, self-disclosure occurs when the instructors share information about themselves, telling personal stories, and conveying their personal beliefs (Nussbaum, Comadena, and Holladay, 1987). Self-disclosure can either be purely personal or it can be relevant to the interests of the students. Cayanus and Martin (2002) studied the instructor self-disclosure relevance, and defined it as the relationship between the disclosure and the course content.

Past research suggests that type of information shared impacts the student learning (Cayanus and Martin, 2008). This study extends prior research by investigating the impact of instructor self-disclosure about their work experience, and instructor self-disclosure about personal issues unrelated to the course.

Impact of Self-disclosure on Engagement

Engagement, or the feeling that a system has caught, captured, and captivated user interest (Jacques, Preece, and Carey, 1995), is an important goal for system design (Mayes, 1992) and may even encourage users to revisit websites (Kim and Moon, 1998). In the organizational behavior literature, employee engagement has been found to generate heightened morale, cohesion, job satisfaction, organizational commitment, citizenship behaviors, customer evaluations, reduced absenteeism, and consequently improved financial performance (Salanova, Agut, and Peiro', 2005). In online communities, Members' engagement is a critical factor for their positive development (Koh and Kim 2003). Getting customers engaged is the greatest obstacle to success for firm-sponsored online communities (Porter et al., 2011).

In higher education, student engagement has been defined as "how involved or interested students appear to be in their learning and how connected they are to their classes, their institutions, and each other" (Axelson and Flick, 2011, p. 38). Cayanus, Martin, and Weber (2003) provided evidence that instructor self-disclosure was positively related to student participation, out-of-class communication, and student motives for communicating. Instructor self-disclosure has also shown a relationship to student social attraction to their instructors (Cayanus and Martin, 2004), which could increase student engagement in their courses. Researchers found that instructor self-disclosure creates an environment that encourages student participation inside (Goldstein and Benassi, 1994) and outside of the classroom (Fusani, 1994). However, research by Chua (2009) suggests that people can be annoyed by frequent posts about trivial topics. Posts perceived by receivers as inappropriate can cause individuals to leave the online community (Herring, Job-Sluder, Scheckler, and Barab, 2002). Students may not have the choice of leaving the classroom community; however, inappropriate self-disclosure by instructors may cause students to be less engaged with their classrooms. Therefore, the following research hypotheses are proposed:

H1: Self-disclosure via online social networks about related interests will have a positive impact on engagement.

H2: Self-disclosure via online social networks about unrelated interests will have a negative impact on engagement.

Humor

Humor is defined as communication that involves of multiple, incongruous meanings that are amusing in some manner (Martin, 2007). Gorham and Christophel (1990) identified humor in academic context as an important immediacy behavior that can be used appropriately in the classroom to enhance learning. However, other research has demonstrated a negative impact of humor on learning (e.g., Gorham and Christophel, 1990). Recent research distinguished between appropriate and inappropriate use of humor. Wanzer, Frymier, Wojtaszczyk, and Smith (2006) found that some forms of humor will violate classroom norms and be perceived as inappropriate (e.g., the instructor tells sexual jokes or makes sexual comments in an attempt to be humorous) while other forms of humor is perceived as appropriate. They identified four different categories of appropriate teacher humor (i.e., related humor, unrelated humor, positive self-disparaging humor, and unplanned humor), similar to those identified in prior research (e.g. Gorham and Christophel, 1990). Four other broad categories of inappropriate teacher humor were identified and labeled as offensive humor, disparaging student humor, disparaging other humor, and negative self-disparaging humor.

Impact of Use of Humor on Engagement

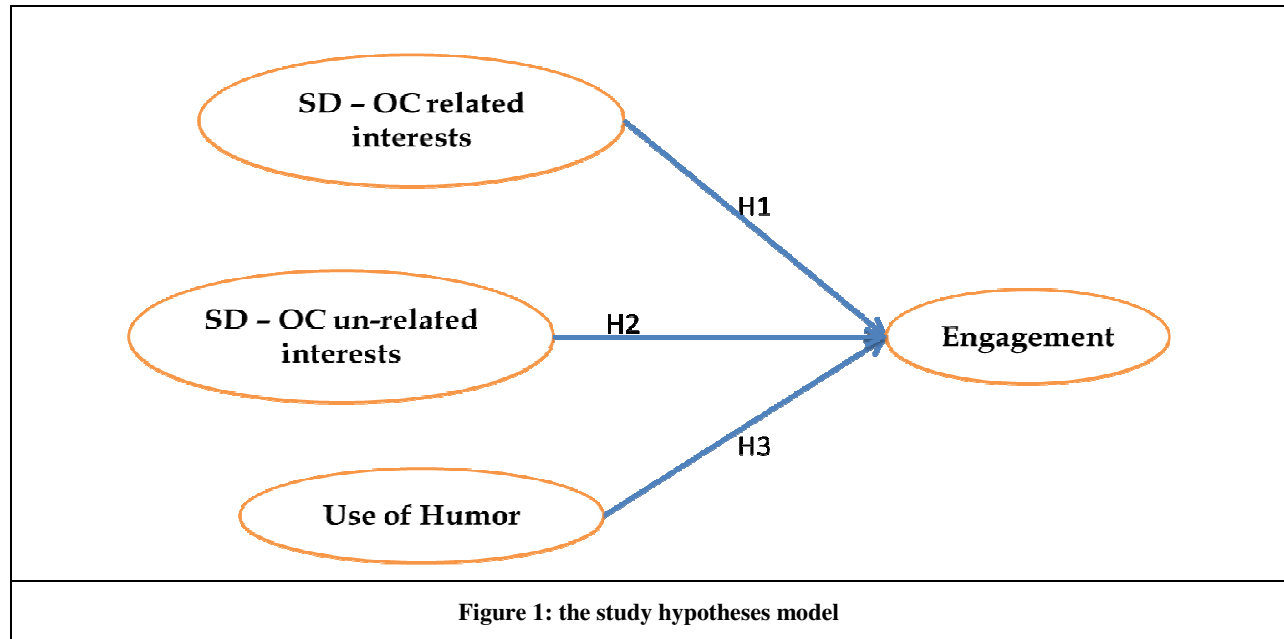
Baumgartner and Morris (2008) showed humor-based teaching is clearly more interesting for students. Jaasma and Koper (1999) found that instructor use of humor in teaching was superior as a predictor for formal and informal out of class communication between instructors and students. Out of class communication (e.g. contributing to the course Facebook page) is an indicator of student engagement. Milem and Berger (1997) found a positive relation between student engagement in out of class communication with their instructors and their academic integration.

Perceived instructor immediacy, which refers to an instructor use of communicative behaviors (e.g. using humor in teaching), reduces physical and psychological distance with students in the classroom (Andersen, 1979), and is positively associated with student engagement (Menzel and Carrell, 1999). Accordingly, the following hypothesis is proposed.

H3: OC sponsor's use of humor via online social networks will have a positive impact on the members' engagement in online communities.

Construct Model

Figure 1 represents the hypotheses model being tested in this study.



METHOD

An exploratory study is being conducted in which subjects are asked to read a simulated Facebook page for a specific course, and respond to survey questions related to their perceptions of the instructor self-disclosure and use of humor via this page. In this study, the instructor discloses about himself via a Facebook page specifically created for the course. This type of self-disclosure is more likely to be perceived as being targeted at the students in the course and as a result, is more likely to be accessed by students. Social norms have clearly demonstrated that inappropriate humor, e.g. sexual jokes, is not accepted in classroom, as such only appropriate types of humor were used as a part of this study.

Participants

The participants are undergraduate students, enrolled in business courses at the University of Colorado Denver. Most of the students received extra credit for participating in the study. Students were asked but not required to participate in this study.

Manipulation

The independent variables in this study are manipulated using a simulated Facebook pages for a university course. The Facebook pages include posts represent the different independent variables, along with some other posts about course related topics. The page was designed to be similar to a normal Facebook page that might have been created for the simulated course.

Procedures

There are eight different simulated Facebook pages for the same course, each with a different combination of posts representing the independent variables. The participants are randomly directed to one of these treatments, producing random assignments of the participants to the treatment groups. The total number of posts on each Facebook page is 12 posts, similar to the number of posts initially displayed on a normal Facebook page. After exposing each group of participants to the treatment, they are asked to respond to survey questions that measure the engagement along with manipulation check questions.

Measurement

There are four constructs in this research. Rather than developing new scales to measure these constructs, predefined and established measures that have been validated and utilized in previous research in off line contexts is used in this study, see table 1. However; because most of these scales includes a large number of items, an initial ranking procedure was conducted to reduce the number of items within each measure to have a reasonable total number of survey items. 8 graduate student judges were asked to rank the items. This ranking led to five items for each of the measures, or total of 20 questions in the survey.

Construct	Question example	Source
Self-disclosure - related	This instructor reveals relevant work experience in his/her posts.	Cyanus and Martin, 2002
Self-disclosure - unrelated	This instructor often posts examples from his/her personal life.	Cyanus and Martin, 2002
Use of humor	This instructor posts appropriate type and amount of humor in his/her class	Booth-Butterfield and Booth-Butterfield, 1991
Engagement	I would contribute to the course page without hesitation	Fassinger, 1995
Table 1: Measurements		

RESULTS

The experiment was conducted using 217 participants. 94 percent of the subjects were below 35 years old, and 53 percent of the subjects were male. Hypotheses were tested with structural equation modeling (SEM) using AMOS. Figure 2 represents the measurement model. Table 2 summarizes the results for the structural equation analysis and shows that all of the 3 hypotheses.

	P
H1:Engagement <--- Self-Disclosure-Related	***
H2: Engagement <--- Self-Disclosure-Unrelated	***
H3: Engagement <--- Humor	.004
Table 2: Regression Weights	

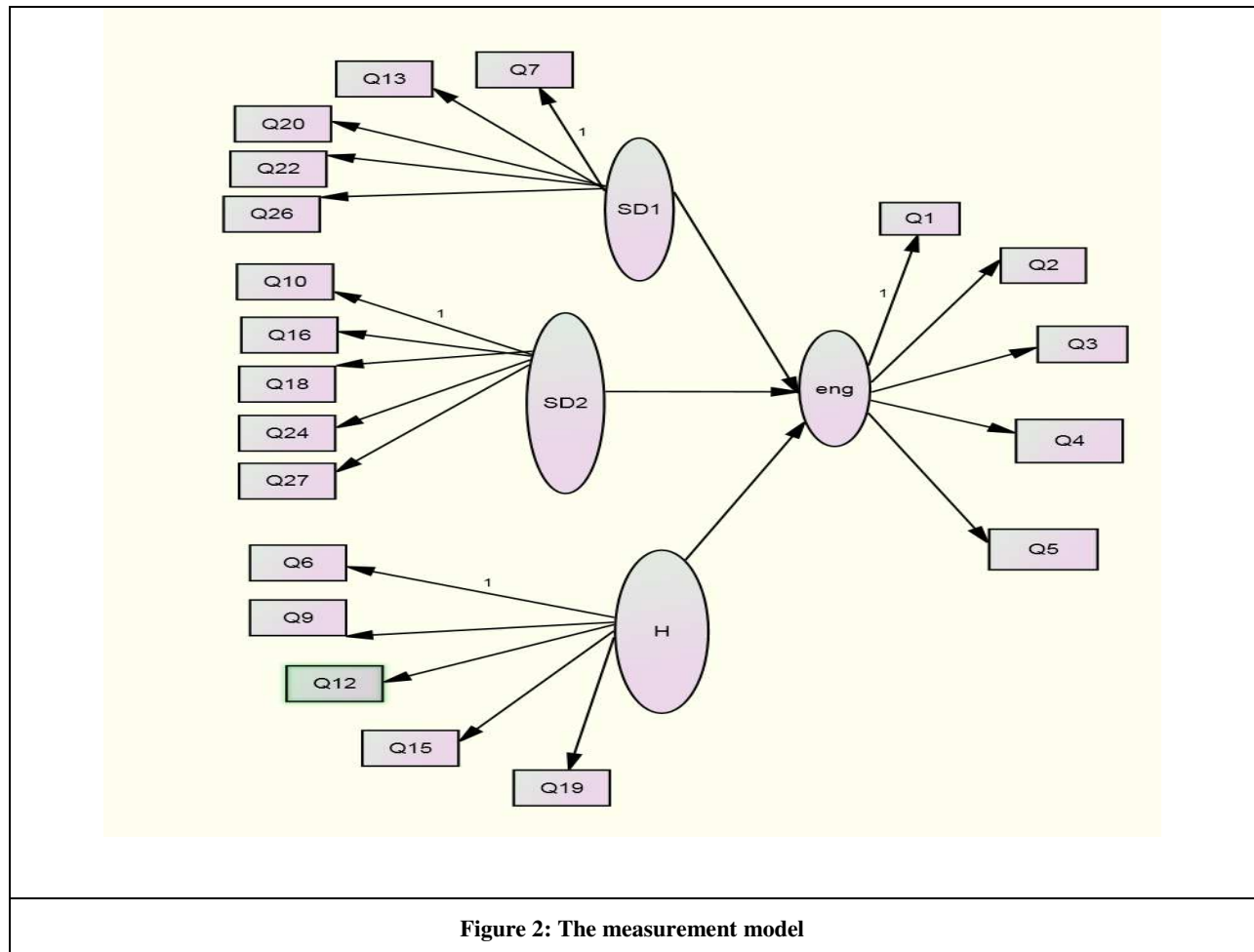


Figure 2: The measurement model

The weights in our measurement model range from 0.72 to 0.92, indicating that more than half of the variance is captured by the latent construct. Correlations between the items that belong to the same construct are high, and higher than correlations between the items that belong to different constructs. Thus, it can be concluded that model exhibits properties of convergent validity. The correlations between the items that belong to different constructs are lower than correlations between the items that belong to the same construct. This indicates that the model has good discriminant validity. The Cronbach's Alpha value for all of the measures exceeded .9 (self-disclosure: .902; use of humor: .902; and engagement: .92).

Chi-square statistic (288.08) divided by the degrees of freedom (163) is 1.767, which is well below the value of 2 that researchers use as a guideline for acceptable fit (Kline, 2005). The CFI value of 0.955 and NFI value of 0.903 are both above the recommended value of 0.90 (Kline, 2005). The RMSEA of 0.063 is below the 0.08 threshold for acceptable fit (Browne and Cudeck, 1993). Hence, based on these guidelines, our data has good model fit.

DISCUSSION

Hypotheses model is supported. This research confirms findings from prior studies which found when instructors disclose some information about themselves, like photographs and bibliographies, that it positively affects higher education efficiency. However; this study finds that there are different impacts depending on the different types of information that is disclosed. For example, when the instructor posts about his/her related work experience to support the course related concepts and content; this could have a completely different effect than when he/she posts about unrelated personal issues,

e.g. the instructor belief or his/her life events and plans. That is because the later type of information found to be distracted from the academic environment of the course.

Similarly, humor has a positive impact on the engagement of members within an online community. That is because humor supports the sponsor-member relationship in online communities, e.g. instructor-students relationships, and removes barriers between them. The results of this study also help to clarify contradictory results about the impact of using humor in educational environments. This study demonstrates that appropriate humor does enhanced educational outcomes when an instructor is communicating with students outside of the classroom via Facebook.

Theoretical Contributions and Implications

This paper contributes to IS research by deepening our understanding of member engagement in online communities by conceptualizing an engagement model that extends IT acceptance research. The proposed model demonstrates that engagement is an important factor when studying more interactive and complicated systems like online social network systems. Moreover, this research provides IT acceptance research with new determinants that impact IT acceptance, self-disclosure and use of humor. These factors can be utilized by IS researchers in order to study the antecedents and consequences of different types of communication content that are used via online social networks, and understand the relationships between these communication content and engagement in online communities. The move to email more than a decade ago is similar to the move to social media today - at some point communicating on online social networks is expected and we will need to understand the appropriate way to communicate in this new medium.

Faculty members in higher education institutions can use the results of this research to improve student engagement. This study provided guidance about what content is appropriate to post in OCs like Facebook and what content is not appropriate. Students will have the opportunity to use technologies they already use in everyday life, in the classroom.

This research also has implications outside the higher-education domains. Today 90% of firms are using social networks as a part of their online marketing efforts (Stelzner, 2011). This study can help improve their understanding how to engage their customers around their products, services and brands, and increase customer loyalty. Results of this study can also be used to increase the confidence of firms that are not already using social network sites for building an online community. Moreover, providing a model that can be used to understand customer engagement in OCs can facilitate deep and enduring affective bonds between customers and suppliers in the firm-hosted online community. This can support a variety of organizational activities beyond marketing like customer relationship management (CRM), the innovation process for products, and the recruitment of talent for these firms.

Limitations and Future Research

Only two levels of each independent factor have been used, treatment or no treatment (e.g., use humor vs. no humor). There may be an optimum amount of each type of message to use when communicating in OCs, for example, a little humor may improve outcomes, but too much may have negative consequences. Future research could replicate this study with more groups and additional factor levels to help capture the impact of different amounts of these factors on student outcomes.

External validity of this study was good, since the sample included undergraduate students from a variety of majors and university levels. The internal validity of this research could be less strong, since the Facebook simulated pages treatment may not adequately represent the independent variables effect that a longer and deeper experiment can provide. Engagement is measured by asking the participants about their expected engagement. A longer treatment will provide the opportunity to record and measure the actual engagement by noticing the student interaction rate on an actual Facebook course page. Building on this, future research can start with the results of this study, about the best combination of communication types that can be used via Facebook, and design a longer experiment which actually engages students participating in a real course via Facebook. This can guarantee a high level of internal validity where the impact on the outcomes measures comes only from the treatment factors.

CONCLUSIONS

Social network sites are increasingly being used in different fields. In higher education, students and faculty members have begun to realize the benefits that can be achieved when adopting SNSs like Facebook in the classroom. However, little are

known about the types of communications that can best be used via Facebook to enhance engagement in online communities. This research enhances our knowledge about the use of Facebook in classrooms, by investigating how instructors can use such a technology to engage the students, and improve their learning.

REFERENCES

- Agarwal, R., Lucas, H., (2005). The information systems identity crisis: Focusing on high-visibility and high-impact research. *MIS Quart.* 29(3) 381–398.
- Andersen, J. F. (1979). Teacher immediacy as a predictor of teaching effectiveness. In D. Nimmo (Ed.), *Communication Yearbook 3* (pp. 543–559). New Brunswick, NJ: Transaction.
- Axelson, R. D., & Flick, A. (2011). Defining student engagement. *Change*, 43, 38-43. doi:10.1080/00091383.2011.533096
- Bagozzi, R.P. and Dholakia, U.M., (2006). Antecedents and purchase consequences of customer participation in small group brand communities. *International Journal of Research in Marketing*, 23 (1), 45–61.
- Baumgartner, J. C., & Morris, J. S. (2008). Jon Stewart comes to class: The learning effects of America (The Book) in Introduction to American Government Courses. *Journal of Political Science Education*, 4, 169-186. doi:10.1080/15512160801998015
- Benbasat, I., and Zmud, R. (2003) “The Identity Crisis within the IS Discipline: Defining and Communicating the Discipline’s Core Properties,” *MIS Quarterly* (27:2), pp. 183-194.
- Booth-Butterfield, S., & Booth-Butterfield, M. (1991). Individual differences in the communication of humorous message. *Southern Communication Journal*, 56, 205_217.
- Browne, M. W., and Cudeck, R. 1993. “Alternative Ways of Assessing Model Fit,” in *Testing Structural Equation Models*, M. A. Bollen and J. S. Long (eds.), Newbury Park, CA: Sage Publications, pp. 136-162.
- Cayanus, J. L., & Martin, M. M. (2002). Development of a teacher self-disclosure scale . Paper presented at the meeting of the National Communication Association, Atlanta, GA.
- Cayanus, J. L., & Martin, M. M. (2004). The relationships between instructor selfdisclosure with credibility, clarity, relational certainty, and interpersonal attraction. Paper presented at the annual meeting of the Central States Communication Association, Cleveland, Ohio.
- Cayanus, J. L., & Martin, M. M. (2008). Teacher Self-Disclosure: Amount, Relevance, and Negativity, *Communication Quarterly*, 56:3, 325-341
- Cayanus, J. L., Martin, M. M., & Weber, K. D. (2003). The relationships between teacher self-disclosure with out-of-class communication, student interest, and cognitive learning. Paper presented at the annual meeting of the Southern States Communication Association, Birmingham, Alabama.
- Chaturvedi, Alok; Dolk, Daniel R.; and Drnevich, Paul L.. (2011). "Design Principles for Virtual Worlds," *MIS Quarterly*, (35: 3) pp.673-684.
- Chua, C. E. H. (2009). Why do virtual communities regulate speech? *Communication Monographs*, 76(2):234–261.
- Cothrel, J. P. (2000). “Measuring the Success of an Online Community,” *Strategy and Leadership* (20:2), pp. 17-21.
- Davis, F. D., Bagozzi, R. P., and Warshaw, P. R. (1989). “User Acceptance of Computer Technology: A Comparison of Two Theoretical Models,” *Management Science* (35:8), pp. 982-1003.
- DeSanctis, Gerardine (2003) "The Social Life of Information Systems Research: A Response to Benbasat and Zmud's Call for Returning to the IT Artifact," *Journal of the Association for Information Systems: Vol. 4: Iss. 1, Article 16.*
- Di Gangi, P., and Wasko, M. (2009). “Open Innovation through Online Communities,” in *Knowledge Management and Organizational Learning*, Annals of Information Systems, W. R. Kind (ed.), New York: Springer Science+Business Media, pp. 199-213.
- Fassinger, P. A. (1995). Understanding classroom interaction: Students’ and professors’ contributions to students’ silence. *Journal of Higher Education*, 66, 82-96.

- Fusani, D. S. (1994). "Extra-class" communication: Frequency, immediacy, self-disclosure, and satisfaction in student-faculty interaction outside the classroom, *Journal of Applied Communication Research*, 22, 232-255.
- Goldstein, G. S., & Benassi, V. A. (1994). The relation between teacher self-disclosure and student classroom participation. *Teaching of Psychology*, 21, 212-216.
- Gorham, J., & Christophel, D. M. (1990). The relationship of teachers' use of humor in the classroom to immediacy and student learning. *Communication Education*, 39, 46-62.
- Gartner, "Gartner Says More Than 60 Percent of Fortune 1000 Companies With a Web Site Will Connect to or Host a Form of Online Community by 2010" Gartner Inc., press release, October 2, 2008, available at <www.gartner.com/it/page.jsp?id=770914>.
- H. O'Brien and E. Toms (2003). The development and evaluation of a survey to measure user engagement. *Journal of the American Society for Information Science and Technology*, 61(1):50-69.
- Hagel, J. and Armstrong, A.G., (1997). *Net gain: expanding markets through virtual communities*. Boston, MA: Harvard Business School Press.
- Hassenzahl, M., & Tractinsky, N. (2006). User experience: A research agenda. *Behaviour and Information Technology*, 25(2), 91-97.
- Herring, S. C., Job-Sluder, K., Scheckler, R., & Barab, S. (2002). Searching for safety online: Managing "trolling" in a feminist forum. *The Information Society*, 18(5), 371-384.
- Hulland, J. (1999). "Use of Partial Least Squares (PLS) in Strategic Management Research: A Review of Four Recent Studies," *Strategic Management Journal* (20:2), pp. 195-204.
- Jaasma, M. A. & Koper, R. J. (1999). The relationship of student-faculty out-of-class communication to instructor immediacy and trust and to student motivation. *Communication Education*, 48, 41-47.
- Jacques, R., Preece, J. & Carey, T. (1995). Engagement as a Design Concept for Hypermedia. *Canadian Journal of Educational Communications*, special issue on Multimedia Development, Spring 1995, 49-59.
- Jarvenpaa, S., Leidner, D., Teigland, R., and Wasko, M. (2007). "MISQ Special Issue: New Ventures in Virtual Worlds," *MIS Quarterly Call for Papers*.
- Kelly Hlavinka and Jim Sullivan, (2011) "Urban Legends: Word-of-Mouth Myths, Madvocates and Champions," *Colloquy*, pp. 1-14.
- Kim, J. and Moon, J. Y. (1998) "Designing Towards Emotional Usability in Customer Interfaces: Trustworthiness of Cyber-Banking System Interfaces," *Interacting with Computers* (10), pp. 1-29.
- King, J.L. and Lyytinen, K. (2004) Reach and grasp. *MIS Quarterly*, 28(4), 539-551.
- Kline, R. B. (2005). *Principles and Practice of Structural Equation Modeling*, New York: The Guilford Press.
- Koh, J. and Kim, Y.-G., (2003). Sense of virtual community: a conceptual framework and empirical validation. *International Journal of Electronic Commerce*, 8 (2), 75-93.
- Leventhal, H. and Cupchik, Gerald (1976) "Process Model of Humor Judgment," *Journal of Communication*, 26, 3, 190-204
- Martin, R.A. (2007). *The psychology of humor: An integrative approach*. Oxford: Elsevier Academic Press.
- Mayes, J. T. (1992) "The 'M-Word': Multimedia Interfaces and Their Role in Interactive Learning Systems," in *Multimedia Interface Design in Education*, A. D. N. Edwards and S. Holland (eds.), Springer-Verlag. Berlin. pp. 1-22.
- Mazer, J. P., Murphy, R. E., & Simonds, C. J. (2007). I'll see you on "Facebook": The effects of computer-mediated teacher self-disclosure on student motivation, affective learning, and classroom climate. *Communication Education*, 56(1), 1-17.
- Mazer, Joseph P., Murphy, Richard E. and Simonds, Cheri J.(2009) 'The effects of teacher selfdisclosure via Facebook on teacher credibility', *Learning, Media and Technology*, 34: 2, 175 — 183
- Menzel, K. E., & Carrell, L. J. (1999). The impact of gender and immediacy on willingness to talk and perceived learning. *Communication Education*, 48, 31-40.

- Milem, J. F., & Berger, J. B. (1997). A modified model of college student persistence: Exploring the relationship between Astin's theory of involvement and Tinto's theory of student departure. *Journal of College Student Development*, 38, 387-400.
- Nambisan, S. and Nambisan, P., (2008). How to profit from a better 'virtual customer environment.' *MIT Sloan Management Review*, 49 (3), 53-61.
- Nussbaum, J. F., Comadena, M. E., & Holladay, S. J. (1987). Classroom verbal behaviors of highly effective teachers. *Journal of Thought*. 11. 73-80.
- Porter, C., Donthu, N., MacElroy, W., and Wydra, D., (2011). "How to Foster and Sustain Engagement in Virtual Communities". *California management review* (0008-1256), 53 (4), p. 80.
- Rutledge, P. (2011) Should Teachers and Students Be Facebook Friends?, *Psychology Today*, available at <http://www.psychologytoday.com/blog/positively-media/201106/should-teachers-and-students-be-facebook-friends>
- Salanova, M., Agut, S., & Peiro', J.M. (2005). Linking organizational resources and work engagement to employee performance and customer loyalty: The mediation of service climate. *Journal of Applied Psychology*, 90(6), 1217-1227.
- Sandelands. L. E., and Buekner. G. C- (1989). "Of Art and Work: Aesthetic Experience and the Psychology of Work Feelings," in *Research in Organizational Behaviour*, L. L. Cummings and B.M. Staw(eds.). JAI Press, Greenwich, CT, 1989, pp. 105-131.
- Stelzner, M.A. (2011) "2011 Social Media Marketing Industry Report," *Social Media Examiner*, available at <http://www.socialmediaexaminer.com/SocialMediaMarketingReport2011.pdf>
- Sullivan, P. (2002) "It's Easier to Be Yourself When You Are Invisible: Female College Students Discuss Their Online Classroom Experiences" *Innovative Higher Education*, 27, 2, 129-144
- Viswanath Venkatesh, Michael G. Morris, Gordon B. Davis, Fred D. Davis (2003). *User Acceptance of Information Technology: Toward a Unified View* Vol. 27, No. 3 (Sep., 2003), pp. 425-478. Published by: Management Information Systems Research Center, University of Minnesota. Stable URL: <http://www.jstor.org/stable/30036540>
- Wanzer, M. B., Frymier, A. B., Wojtaszczyk, A. M., & Smith, T. (2006). Appropriate and inappropriate uses of humor by instructors. *Communication Education*, 55, 178-196.
- Wheless, L. R., & Grotz, J. (1977). The measurement of trust and its relation to self-disclosure. *Human Communication Research*, 3, 250-257.