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ABSTRACT

The ability to remove trust concerns for online users is crucial for sustainable online development, especially relating to social networking sites. This study examines independent self-construal and interdependent self-construal as pertinent factors to increase trust on social networking sites. The classification of trust broken down into calculation-, familiarity-, structural assurance-, and situational normality-based trust was adopted in this study. Data was collected from 398 members of the leading social network site: Facebook. Regression analysis was adopted to test the data against the casual relationship among the four trust constructs. Data analysis indicates that the constructs of interdependent self-construal and independent self-construal individually, and together, can account for the increase of trust on a social networking site; however interdependent self-construal has the largest explanatory power. These results suggest that social networking sites continuously increase the degree of interdependence of users and develop new applications to engage users to stay longer for each visit. As a result of these measures, social networking sites can sustain the trust of users.

Keywords

Interdependent self-construal, independent self-construal, trust, social networking, Facebook.

INTRODUCTION

The ability to remove trust concerns for online users is crucial for sustainable online development, especially relating to social networking sites. Traditional trust formation is contingent upon the successful development of interpersonal relationships (Granovetter, 1985) and/or rules (Zucker, 1986). Although social network sites capitalize on the interpersonal relationship, the ease of connecting and tracking members' activities has resulted in many privacy-intrusion activities.

Facebook, the leading social networking site, is a primary example of trust and privacy concerns. In fact, Facebook has been criticized primarily for its lassie-fair manner of sharing personal information with third party application developers. For instance, Facebook launched Beacon software which enabled a third party website to include a script by Facebook on their site. As a result, personal information including the purchasing and gaming history of Facebook members was displayed in the user's news feed without approval. Furthermore, while users can deactivate their accounts, they cannot delete their personal information from Facebook's server. On the social networking site, the fragility of having personal information compromised demonstrates the importance of understanding how trust is formed and rules are defined.

Numerous features have been implemented online in the face of privacy-intrusion challenges. For example, Intel Corporation and MIT's Sloan Center for eBusiness added a "persona" as a "trusted advisor" to their websites in order to increase the site's effectiveness and users' satisfaction with web experience (CFO, 2004). Online social network sites, like Facebook and MySpace, have also undergone many measures to improve integrity, security, and privacy after experiencing numerous security attacks (Light, 2001). Consumers now have the option to opt out of providing personal information. Online usage policies are another mechanism designed with the purpose of improving human-to-computer trust. However, this mechanism often fails to accomplish its purpose because many users elect not to read the policy (Foltz, Schwager, & Anderson, 2008).

These examples illustrate that many changes have been made to address trust issues on social network sites. These changes have been made due to the belief that an effective online design that integrates trust traits can potentially increase online participation. Based on previous research, interdependent self-construal and independent self-construal are essential elements of operating a social networking site. Therefore, the goal of this study is to examine the influence of these elements on the formation of different kinds of trust on a social networking site. These factors were chosen based on previous research which has shown their importance in relation to online trust. Interdependent self-construal, for example, relates to one's personal value regarding relationships (Markus & Kitayama, 1991). On a social networking site, there is an absence of rich face-to-face communication and users cannot see one another to establish a relationship. Previous research has also found interdependent self-construal to be a social antecedent influencing technology acceptance (Chen, Chen, & Kazman, 2007).

The following sections present the background and theoretical development, including our hypotheses, followed by our research design and data analysis. The remaining section presents our discussion and conclusions.

BACKGROUND AND THEORETICAL DEVELOPMENT

Trust is defined as the "willingness of a party to be vulnerable to the actions of another party based on the expectation that the other party will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party" (Mayer, Davis, & Schoorman, 1995, p. 712). Previous research has found that trust does indeed have a strong effect on the use of information systems (Lippert & Swiercz, 2005) and online applications (Klein, 2007). Classifications of trust have broken the phenomenon into four categories: calculation-, familiarity-, structural assurance-, and situational normality-based trust (Gefen, Karahanna, & Straub, 2003). This classification was adopted for this study. We propose that interdependent self-construal and independent self-construal are factors that are pertinent to increase these four kinds of trust on social networking sites. In the following sections, we will discuss the importance of self-construal traits on social networking sites as well as the causal relationship between the two independent variables and four kinds of trust.

The Importance of Self-Construal Traits on Social Networking Sites

Social networking sites have been designed to attract users with different motivators. MySpace has become a rendezvous for teenagers and amateur signers to entertain each other and promote personal albums. Users take advantage of Facebook to keep each other updated and informed about upcoming events on campus. LinkedIn primarily attracts working professionals interested in exchanging career-related information with each other. All these sites have strived to increase the number of users, the duration of their each visit, as well as the frequency and quantity of items sold on their sites. Underlying the proliferation and success of social networking sites is the pursuit of a higher degree of interdependence among members.

In the meantime, members can utilize social networking sites to reinforce and promote their self-identity. The pursuit of personal identity can also be a crucial factor conductive to the success of social networking sites. However, it is unclear if interdependent relationship among members or individual self identity has a stronger predictive power for the success of social networking sites. We suspect that users with a higher degree of independence and interdependence could be more attracted to the use of social networking sites, such as Facebook and MySpace, respectively. Therefore, it is important to assess the degree of influence of these two self-construal factors on the formation of trust, thereby contributing to the success of a social networking site.

Self-construal is a personal value about one's relationships with others. Self-construal plays an important role in dictating one's behavior whether it be related to purchasing or adoption. For example, self-construal is an effective mechanism to influence the purchase behavior of reference groups, such as parents, peers and siblings (Culnan & Armstrong, 1999). This personal value can shape and form social norms of interpersonal relationships (Markus & Kitayama, 1991). When forming relationships with others, a person can be oriented towards independent or interdependent self-construal values (Markus & Kitayama, 1991). *Independent self-construal* is an individual's pursuit of unique identity. *Interdependent self-construal* is about an individual's pursuit of a harmonic relationship with others. In the process of reaching personal goals, interdependent self-construal often puts oneself into the situation of others and focuses on fulfilling others' needs, desires, and goals. Therefore, interdependent self-construal is more likely to achieve a higher degree of social interactions than independent self-construal (Yeh & Arora, 2003).

Online social sites are a consumer-to-consumer business model involving individual users interacting with each other in a high-level relational context. In order to determine if the invitation should be extended or be accepted, invitation sender and recipient rely on information accuracy provided by users, and perceptions about the reliability and integrity of each other. Social network sites can voluntarily decide what and how much of information to disclose. Interdependent self-construal is more likely to engage the other party in the social networking process than independent self-construal. A user who increases efforts in enhancing one's image has a strong interdependent self-construal culture (Pfeffer & Cialdini, 1998).

Most importantly, interdependent self-construal has a direct, strong effect on trust (Chen, 2001). A further investigation of the effect of self-construal traits on different kinds of trust can provide insights on how to incorporate the personal trait into building and communicating different forms of trust on a social networking site.

The Influence of Self-Construal on Calculation-based Trust

Some social networking users are very proactive in organizing their personal profile and responding to posted messages and invitations, whereas others are reluctant to do so. Self-construal traits could be one of major reasons for the difference in the behavior of users on a social networking site.

Individuals primed with interdependent self-construal could easily develop affection, love, friendship, agreement, relaxation, and comfort for others, in comparison with individuals with independent self-construal. Along with the development of these emotions, users are more likely to open to each other and begin trusting in each other on a social networking site.

Calculative-based trust is based on the belief that people are rational and will act in their own self-interest (Gefen, et al., 2003; Zhu, O'Neal, Lee, & Chen, 2009). In relation to social networking sites, this kind of trust suggests that social networking site users believe that the other social networking users and the social networking site have more to lose than to gain by cheating them.

Trust-building is a self-regulatory process because information sender and recipient need to adjust themselves by increasing their visibility to friends (e.g., cell phone number and vacation plan) in order to progress toward personal goals. The process of regulating actions in response to the needs of sincere users can give rise to positive emotion (e.g., feelings of connection) and diminish negative ones (e.g., shame) (Markus & Kitayama, 1991). The process of building trust is an emotional and logical act that the probability of gain and loss can be carefully calculated (Nikitkov & Bay, 2008). To individuals primed with independent self-construal, the regulation process is not emotion and logical. Without being able to clearly assess the probability of gains and loss for each social exchange activity, these individuals will have hard time in engaging the process of building and communicating trust with unfamiliar friends on the social networking site. Based on this background, we present the following hypothesis:

Hypothesis 1: Interdependent self-construal has a stronger predictive power than independent self-construal for the formation of calculation-based trust on social networking sites.

The Influence of Self-Construal on Familiarity-based Trust

Familiarity-based trust is related to the experience with who, what, when, and how of what is happening (Gefen, et al., 2003). The uncertainty of having personal information compromised on social network sites is higher than that of face-to-face networking. This element poses risks to users because they are unfamiliar with the social environment and many of their virtual friends. A higher degree of uncertainty requires a higher degree of trust between information exchange parties be established (Doney, Cannon, & Mullen, 1998; Moorman, Deshpande, & Zaltman, 1993). Trust is a proven factor to assist consumers in lowering information exchange risks (Hoffman, Novak, & Peralta, 1999), especially in e-business (Gefen, 2000).

One's desire to interact with others in order to satisfy the collective needs is a key deciding factor of building trust (Tyler & Degoey, 1996). Interdependent self-construal emphasizes the connection and attention from one person to others (Markus & Kitayama, 1991). An individual with high interdependent self-construal value is more likely to trust others because of his/her inherent nature of working with others. This trait can result in detail description of personal profile and the immediate feedback of a user to friend's posted messages and request on a social networking site. All these activities can increase information transparency, thereby lowering the uncertainty of the social exchange process. As a result, familiarity-based trust can be largely improved. Based on this background, we present the following hypothesis:

Hypothesis 2: Interdependent self-construal has a stronger predictive power than independent self-construal for the formation of familiarity-based trust on social networking sites.

The Influence of Self-Construal on Structural Assurance-based Trust

Users with no or little experience of using social networking sites may not trust sharing personal information and interacting with others. In the absence of personal relationship, institutional-based trust becomes more important than personal-based trust in enticing users into an online environment (Zucker, 1986). *Structural assurance* is an important institutional-based trust on the Internet. Contextual conditions, such as promises, contracts, regulations and guarantees, are structural assurance that can increase the success rate of each transaction (McKnight, Cummings, & Chervany, 1998, p. 478). Structural assurance is an effective antecedent for the building of initial trust in the virtual environment like mobile banking (Kim, Shin, & Lee, 2009). Seals of approval and vendor-specific guarantees can influence customer perceptions, thereby increasing trusting intentions (Sha, 2009). Many social networking sites have been advocating the use of security and privacy policy in order to increase customer trust and retention rate. Other sites further assert that they comply with the existing legal and regulatory requirements, and have received a seal of proof from a trusted third party.

Self-construal has differential effects on the use of information systems. Users who are interdependent self-construal are more likely to adopt a system based on external reference prices (Chen, 2009). In contrast, users who are independent self-construal are more likely to adopt a system based on internal reference prices. External reference is a form of structural assurance that is more attractive to users who are interdependent self-construal than independent self-construal. On a social

networking site, users who are interdependent self-construal are more likely to rely on structural assurance to socialize with each other than users who are independent self-construal. Based on this background, we present the following hypothesis:

Hypothesis 3: Interdependent self-construal has a stronger predictive power than independent self-construal for the formation of structural assurance-based trust on social networking sites.

The Influence of Self-Construal on Situational Normality-based Trust

Situational normality is another institutional-based trust that is influential to forming initial trust. Individuals are more likely to transact with each other when they feel the situation or the marketplace is safe to do so (McKnight, et al., 1998). Many websites have used customer's testimonials, ratings, user friendly website design and brand awareness to increase situational normality-based trust.

Customer's testimonials and ratings capitalized on the degree of interdependence of personal relationships. When two sides of a transaction are separated in time and space, it is critical to build and communicate trust in order to minimize transactional risks. However, the easiness of doing so varies with trustworthiness of an individual. The personal trait is a parsimonious set of ability, integrity and benevolence (Mayer, et al., 1995). Trustworthiness is a trusting belief that can ease the process of building the foundations of trust (McKnight, et al., 1998). It could be easier to build and communicate trust with someone than others on a social networking site when the trusting belief is present between users.

Interdependent personal relationships on a social networking site in general are mutual beneficial, and the users involved have considerable influence over the actions of others. The benefits enjoyed out of the relationship could include a closer friendship, reaching out new friends, and keeping oneself updated with the new development of virtual and local communities. On the other hand, asymmetries of power can be developed to favor users with opportunistic behavior to take advantage of others.

Individuals with a strong trusting belief are more likely to rely on others to collectively complete a transaction. Trusting belief is a form of behavioral willingness that can contribute to a greater commitment to trust (Doney, et al., 1998). Therefore, social networking users who are interdependent self-construal are more likely to possess these factors because they understand the importance of behaving ethically and consistently according to the norms (e.g., providing an update on weekly events of a student club and posting personal photos) of a social networking site. In contrast, online users who are independent self-construal are more likely to pursue personal goals (e.g., using Facebook as a marketing tool and mocking friends' photos) at the expense of collective interests. Therefore, it is possible that interdependent self-construal can have a higher effect than independent self-construal on the formation of situational normality. Based on this background, we present our final hypothesis:

Hypothesis 4: Interdependent self-construal has a stronger predictive power than independent self-construal for the formation of situational normality-based trust.

RESEARCH DESIGN

Survey Participants

The purpose of this study is to discover the causal relationship between trust and privacy awareness of individual users on the social network website. Therefore, the unit of this study is individual users who have social network experience. To research these individuals, we sampled members of Facebook, the leading social network service provider with over one billion users.

An online questionnaire was distributed to Facebook members currently studying in a public university in a southern state soliciting for their participation. The data collection effort lasted for three weeks. Students were motivated to participate for extra credit. Participants were able to receive 1% extra credit on their final grade from their respective courses for participating in this study.

A total of 391 responses were collected, with four invalid responses, therefore 387 valid responses were selected for further data analysis. Of the total population there were 238 males (60.9%) and 153 females (39.1%). Participants who reported three to four years of experience represented the largest proportion of the population (35.3%), followed by four to five years (22.8%), and two to three years of experience (16.6%). Participants, who visited Facebook more than 14 times per week, accounted for the largest percent of the population (28.6%).

Instrumentation

To gather data about self-construal and the four types of trust, we asked respondents 18 questions from previous research. We used a 5-point Likert scale to measure the four types of trust from Gefen et al. (2003) and scales of self-construal from Markus and Kitayama (1991) (1=Strongly Disagree, 5=Strongly Agree). These questions as adapted for our survey are shown in Table 1.

Measurement Items
TC1: Honesty is important when using Facebook.
TC2: Facebook provides me enough information and assistance to use its service.
TF1: I became familiar with Facebook via advertisements in magazines and newspapers.
TF2: I became familiar with Facebook via Internet search engines such as Google and Yahoo.
TF3: I became familiar with Facebook because my friends were using it.
TSA1: It is safer to use Facebook than other social networking websites (e.g. MySpace and LinkedIn) because Facebook has comparatively better protection of my personal information.
TSA2: I feel safe using Facebook because it provides password security.
TSA3: I feel safe using Facebook because of its guaranteed services.
TSA4: I feel safe using Facebook because of its user-friendly interface.
TSN1: Service offerings on Facebook are similar to those at alternative social network sites.
TSN2: Information available on Facebook is similar to that at alternative social network sites.
TSN3: Business transaction methods on Facebook are similar to those at alternative social network sites.
INT1: I carefully maintain harmonious relationships with others.
INT2: I use caution about what I say in a group in order to avoid harming others.
INT3: It is important that everyone in a group accepts me.
IND1: Having my identity unique and different from others is important to me.
IND2: I am different from others and like to take actions independently.
IND3: I like to be independent, and different from others.

Table 1. Theoretical Construct Measures

The survey instrument also included demographic questions including questions of social networking site use. The findings from these questions were presented in the previous section.

DATA ANALYSIS AND FINDINGS

Table 2 shows the overall response to the six constructs (four types of trust and two types of self-construal) adopted in this study. Respondents rated calculation-based trust (m=3.99, sd=0.7) the highest, followed by structural assurance-based trust (m=3.48, sd=0.81), situational normality-based trust (m=3.28; sd=0.64), and familiarity-based trust (m=2.69, sd=0.62). More subjects in this study valued the importance of independent self-construal (m=3.76, sd=0.69) than that of interdependent self-construal (m=3.55, sd=0.67).

Constructs Measured in this Study	Mean	S.D.
Calculation-based Trust	3.99	0.70
Familiarity-based Trust	2.69	0.62
Structural Assurance-based Trust	3.48	0.81
Situational Normality-based Trust	3.28	0.64
Interdependent Self-Construal	3.55	0.67
Independent Self-Construal	3.76	0.69

Table 2. Mean and Standard Deviations Construct Values

We further adopted regression analyses to analyze causal relationships with respect to the four different kinds of trust as follows:

Independent variables (Interdependent Self-Construal + Independent Self-Construal) = Dependent variables (Four types of trust: calculation-, familiarity-, structural assurance-, or situational normality-based trust)

All of the data was entered for regression analysis to assess the causal relationship between the independent variables and each type of trust: i.e., calculation-, familiarity-, structural assurance-, and situational normality-based trust. Because the same procedure was applied to each trust variable, we were able to examine the difference of coefficients or of predictive power of independent variables for the variance in each trust variable. Table 3 summarizes the analysis results of these four tests.

Four Types of Trust	Essential Statistical Data	Self-Construal Values	B	Beta	T	Sig.
Model 1 Interdependent and independent self-construal values predict calculation-based trust						
Calculation-based Trust	$N=387$, $R^2=0.180$	Interdependent	0.305	0.291	5.916	0.000
	$F=42.208$, $p=0.00<0.05$	Independent	0.230	0.225	4.575	0.000
Model 2 Interdependent and independent self-construal values predict familiarity-based trust						
Familiarity-based Trust	$N=387$, $R^2=0.056$	Interdependent	0.175	0.190	3.605	0.000
	$F=11.430$, $p=0.00<0.05$	Independent	0.081	0.090	1.714	0.087
Model 3 Interdependent and independent self-construal values predict structural assurance-based trust						
Structural assurance-based Trust	$N=387$, $R^2=0.093$	Interdependent	0.306	0.252	4.878	0.000
	$F=19.613$, $p=0.00<0.05$	Independent	0.124	0.104	2.017	0.044
Model 4 Interdependent and independent self-construal values predict situational normality-based trust						
Situational normality-based Trust	$N=387$, $R^2=0.116$	Interdependent	0.259	0.270	5.295	0.000
	$F=25.188$, $p=0.00<0.05$	Independent	0.125	0.134	2.625	0.009

Table 3. Two Self-Construal Values Predict Four Types of Trust

The following analysis describes what is shown in Table 3.

MODEL1 Calculation-based Trust = Interdependent self-construal +Independent self-construal

ANOVA analysis showed that the first model is significant ($F=42.208$, $p=0.000<0.05$). The degree of freedom is 384 and R-square value is 0.180. The coefficients of predictors for the calculation-based trust are 0.291 ($p=0.00<0.05$) and 0.225 ($p=0.00<0.05$) for independent and interdependent self-construal, respectively. These two independent variables have significant influence on the calculation-based trust. In addition, interdependent self-construal has a higher predictive power for the creation of calculation-based trust.

MODEL2 Familiarity-based Trust = Interdependent self-construal +Independent self-construal

ANOVA analysis showed that the second model is also significant ($F=11.430$, $p=0.000<0.05$). The degree of freedom is 384 and R-square value is 0.056. The coefficients of predictors for the familiarity-based trust are 0.190 ($p=0.00<0.05$) and 0.090 ($p=0.087<0.1$) for independent and interdependent self-construal, respectively. These two independent variables have significant influence on the familiarity-based trust. In addition, interdependent self-construal has a higher predictive power for the creation of familiarity-based trust.

MODEL3 Structural assurance-based Trust = Interdependent self-construal +Independent self-construal

ANOVA analysis showed that the third model is significant ($F=19.613$, $p=0.000<0.05$). The degree of freedom is 384 and R-square value is 0.093. The coefficients of predictors for the structural assurance-based trust are 0.252 ($p=0.00<0.05$) and 0.104 ($p=0.044<0.5$) for independent and interdependent self-construal, respectively. These two independent variables have significant influence on the structural assurance-based trust. In addition, interdependent self-construal has a higher predictive power for the creation of structural assurance-based trust.

MODEL4 Situational normality-based Trust = Interdependent self-construal +Independent self-construal

ANOVA analysis showed that the fourth model is significant ($F=25.188$, $p=0.000<0.05$). The degree of freedom is 384 and R-square value is 0.116. The coefficients of predictors for the situational normality-based trust are 0.270 ($p=0.00<0.05$) and 0.134 ($p=0.009<0.5$) for independent and interdependent self-construal, respectively. These two independent variables have significant influence on the situational normality-based trust. Like the others, interdependent self-construal has a higher predictive power for the creation of situational normality-based trust.

DISCUSSION AND CONCLUSIONS

The goal of this study was to examine the influence of interdependent self-construal and independent self-construal on the formation of four different kinds of trust, including calculation-, familiarity-, structural assurance-, and situational normality-based, on a social networking site. Based on the regression analysis of data collected from 398 Facebook members we did indeed find a casual relationship.

Our data analysis indicates that the constructs of interdependent self-construal and independent self-construal individually, and together, can account for the increase of trust on a social networking site; however interdependent self-construal has the largest explanatory power for all types of trust.

These results suggest that social networking sites continuously increase the degree of interdependence of users and develop new applications to engage users to stay longer for each visit. As a result of these measures, social networking sites can sustain the trust of users.

REFERENCES

1. CFO (2004). In Web We Trust. *CFO 0*(15), 12.
2. Chen, C. Y. (2009). Who I am and how I think: The impact of self-construal on the roles of internal and external reference prices in price evaluations *Journal of Consumer Psychology, 19*(3), 416-426.
3. Chen, J. (2001). *Trust and privacy in electronic monitoring workplaces.* University of Hawaii, Hawaii.
4. Chen, Q., Chen, H. M., & Kazman, R. (2007). Investigating Antecedents of Technology Acceptance of Initial eCRM Users Beyond Generation X and the Role of Self-Construal. *Electronic Commerce Research, 7*(3-4), 315-339.
5. Culnan, M. J., & Armstrong, P. K. (1999). Information privacy concerns, procedural fairness, and impersonal trust: An empirical investigation. *Organization Science, 10*, 104-115.
6. Doney, P. M., Cannon, J. P., & Mullen, M. R. (1998). Understanding the influence of national culture on the development of trust. *Academy of Management Review, 23*, 610-620.
7. Foltz, C. B., Schwager, P. H., & Anderson, J. E. (2008). Why users (fail to) read computer usage policies. *Industrial Management & Data Systems 108*(6), 701-712.
8. Gefen, D. (2000). Customer loyalty in e-commerce. *Journal of the Association for Information Systems, 3*, 27-51.
9. Gefen, D., Karahanna, E., & Straub, D. W. (2003). Trust and TAM in Online Shopping: An integrated model. *MIS Quarterly, 27*(1), 51-90.
10. Granovetter, M. S. (1985). Economic action and social structure. *American Journal of Sociology, 91*, 481-510.
11. Hoffman, D. L., Novak, T. P., & Peralta, T. (1999). Building consumer trust online. *Communications of the ACM, 42*, 80-85.
12. Kim, G., Shin, B., & Lee, H. G. (2009). Understanding dynamics between initial trust and usage intentions of mobile banking. *Information Systems Journal, 19*(3), 283-311.
13. Klein, R. (2007). Internet-Based Patient-Physician Electronic Communication Applications: Patient Acceptance and Trust. *E - Service Journal 5*(2), 27-50.
14. Light, D. A. (2001). Sure, You Can Trust Us. *MIT Sloan Management Review, 43*(1), 17.
15. Lippert, S. K., & Swiercz, P. M. (2005). Human resource information systems (HRIS) and technology trust. *Journal of Information Science, 31*(5), 340.
16. Markus, H., & Kitayama, S. (1991). Culture and the self: implications for cognition, emotion and motivation. *Psychological Review 98*, 224-253.
17. Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy of Management Review, 20*(3), 709-734.
18. McKnight, D. H., Cummings, L. L., & Chervany, N. L. (1998). Initial trust formation in new organizational relationships. *Academy of Management Review, 23*, 472-490.
19. Moorman, C., Deshpande, R., & Zaltman, G. (1993). Factors affecting trust in marketing relationships. *Journal of Marketing, 57*(1), 81-101.
20. Nikitkov, A., & Bay, D. (2008). Online Auction Fraud: Ethical Perspective. *Journal of Business Ethics 79*(3), 235-244.
21. Pfeffer, J., & Cialdini, R. B. (Eds.). (1998). *Illusions of influence*. Thousand Oaks, CA: Sage.
22. Sha, W. (2009). Types of structural assurance and their relationships with trusting intentions in business-to-consumer e-commerce. *Electroic Markets, 19*(1), 43-54.
23. Tyler, T. R., & Degoey, P. (Eds.). (1996). *Trust in organizational authorities: The influence of motive attributions on willingness to accept decisions*. Thousand Oaks, CA: Sage.
24. Yeh, C. J., & Arora, A. K. (2003). Multicultural Training and Interdependent and Dependent Self-Construal as Predictors of Universal-Diverse Orientation Among School Counselors. *Journal of Counseling & Development, 81*(1), 78-83.
25. Zhu, D.-S., O'Neal, G. S., Lee, Z.-C., & Chen, Y.-H. (2009). *The Effect of Trust and Perceived Risk on Consumers' Online Purchase Intention*. Paper presented at the International Conference on Computational Science and Engineering.
26. Zucker, L. G. (1986). Production of trust: Institutional sources of economic structure. *Research in Organizational Behavior, 8*, 53-111.