

## Investigating the Relationship between Sense of Classroom Community and Interpersonal Sensitivity

Gazanfer Anlı<sup>i</sup>  
Bursa Technical University

### Abstract

The aim of this study is to examine the relationship between sense of classroom community and interpersonal sensitivity in high school students. The research population was composed of 409 students from an Anatolian high school located in Ümraniye county of Istanbul city. The sample consisted of 208 females and 201 male students and the mean age was 15.37. The data were obtained by using the Classroom Community Index and Interpersonal Sensitivity Scale. The descriptive statistics, Pearson correlation coefficient and path analysis were used in the analysis of the data. There were significant and negative correlations among high school students' sense of classroom community and interpersonal worry and dependency, unassertive interpersonal behavior and low self-esteem levels which are the subscales of the interpersonal sensitivity. Results of the path analysis indicated that interpersonal sensitivity had a significant, negative predictive role on sense of classroom community. This analysis also stated that the fit indices for the proposed structural model were good ( $\chi^2/df = 1.61$ , SRMR = 0.01, GFI = 0.99, RMSEA = 0.039, CFI = 0.99, TLI = 0.98).

**Keywords:** Sense of classroom community, interpersonal sensitivity, high school students.

**DOI:** 10.29329/ijpe.2019.212.24

-----  
<sup>i</sup> **Gazanfer Anlı**, Assist. Prof. Dr., Psychology, Bursa Technical University, **ORCID:** 0000-0002-6141-7964

**Correspondence:** anligazanfer@gmail.com

## INTRODUCTION

### Sense of Classroom Community

McMillan and Chavis (1986) defined the sense of community as, "a feeling that members have of belonging, a feeling that members matter to one another and to the group, and a shared faith that members' needs will be met through their commitment to be together" (McMillan & Chavis, 1986, p. 9). Membership, shared emotional connection and integration and fulfillment of needs are the three main components of the sense of community. McMillan and Chavis (1986) explained that membership includes feelings of belonging to the group, boundaries, personal investment, emotional safety, relatedness among members, and willingness to sacrifice for the group. Shared Emotional Connection is based on the belief that members will continue to share a group history with common experiences, places, and time spent together (Sarason, 1974). Influence covers both members feeling they have influence on the group and that the group influences them. Integration and Fulfillment of Needs addresses the belief that needs will be met by resources available due to group membership, members are competent and can help each other, and the group can progress (McMillan & Chavis, 1986).

Some studies have showed that higher levels of sense of community are related to higher levels of physical health, mental health, and economic prosperity (Chavis & Pretty, 1999; Peterson, Speer, & McMillan, 2008) as well as lower levels of loneliness (Prezza, Amici, Roberti, & Tedeschi, 2001) and depression (Peterson, Speer, & McMillan, 2008). Socio-demographic features like ethnic homogeneity, marriage, and higher income levels are related to strong sense of community (Davidson & Cotter, 1986; Nasar & Julian, 1995; Wilson & Baldassare, 1996). Furthermore, the length of residency (Buckner, 1988; Chavis, Hogge, McMillan, & Wandersman, 1986; Glynn, 1981; Skjaeveland, Garling, & Maeland, 1996), homeownership (Davidson & Cotter, 1986; McMillan & Chavis, 1986), gender and age (Campbell & Lee, 1992), presence or absence of children (Buckner, 1988; Nasar & Julian, 1995; Riger & Lavrakas, 1981; Skjaeveland, Garling, & Maeland, 1996) are also linked to the sense of community.

Sense of classroom community is an important topic for online and offline learning environments. As a result of the increase in technological tools, students started to discuss, learn and interact among themselves or with teachers by using them (Wang, 2008). According to Sergiovanni (1994), there is a need for authentic communities connecting students and teachers in schools within the framework of shared values, ideas and goals. In the context of social learning, learning is defined as an area in which people identify the problems that affect themselves, produce solutions, and learn through group activities where they perform solutions. As the community evolves, new informations and skills may be gained (MacNeil, 1997).

Rovai and Jordan (2004) used a causal-comparative design to examine the relationship of sense of community and traditional classroom, blended, and fully online higher education learning environments. Participants consisted of 51 females and 17 males. The Classroom Community Scale (CCS) was completed by the traditional and blended course participants during face-to-face meetings proctored by the course's professor while fully online course participants completed the CCS via an online survey. It was pointed out that students with high levels of sense of classroom community are highly committed to the educational environment, do not feel isolated and have high academic achievement in online learning environments (Rovai & Jordan, 2004). The sense of classroom community turns out to be a positive aspect of students' thinking about each other, leading to a higher level of commitment (Rovai, 2002a).

Rovai (2002a) noted that the sense of classroom community includes two main factors; connectedness and learning. Connectedness factor refers to integrity, vitality, mutual solidarity and trust within the group. The learning factor is related to the use of interactions within the group and the dissemination of satisfying learning objectives in the environment. The interaction within this learning

community connects students to each other and helps each other to solve a common problem (Rovai, 2002b).

### **Interpersonal Sensitivity**

Interpersonal sensitivity is “the ability to correctly perceive and respond appropriately to their individual, interpersonal, and social environment” (Bernieri, 2001, p.1). One of the most prominent features of people who have high interpersonal sensitivity is social avoidance behavior. They tend to avoid interaction with people. They tend to see themselves inadequate and worthless because of their irrational beliefs (Boyce & Parker, 1989). Interpersonal sensitivity includes unreasonable and extreme sensitivity and awareness of other people's way of thinking and behavior (Davidson, Zisook, Giller & Helms, 1989). This concept consists of a general state of sensitivity in the form of fear perceived by others or an apprehension of genuine criticism and an increased fear of other people's thoughts and behaviors (Boyce et al., 1991).

According to Riggio and Riggio (2001), interpersonal sensitivity can be distinguished into two concepts. These concepts are emotional sensitivity and social sensitivity. Emotional sensitivity includes the ability to correctly assess nonverbal cues of emotions (Carney & Harrigan, 2003). Nonverbal messages perform many functions that can carry intercultural and interpersonal communication. Ekman and Friesen (1969) underlined several functions of nonverbal messages. First, the message can be replaced by a verbal message and second, the nonverbal message can complete the sent oral message. Nonverbal messages may emphasize part or multiple variations of the verbal message to enhance or organize the message. According to Swenson and Casmir (1998), as cultural similarities diminish, it is also difficult to decipher nonverbal expressions of emotions. The role of emotional sensitivity is to perceive nonverbal cues and accurately assess them based on the content and to determine the underlying emotions of the communicator (Carney & Harrigan, 2003). Nonverbal expressions vary from culture to culture. Nonverbal messages can be reactive and deliberate. They are important because they function to bring us closer to the things that are safe and away from the dangerous ones (Swenson & Casmir, 1998). Social sensitivity is a concept related to universal social knowledge including emotion, personality, and social roles (Carney & Harrigan, 2003). According to Lopes, Salovey, Cote, and Beers (2005), social sensitivity contains social skills, personality traits, motivation, and individual adaptation. Overall, this concept of interpersonal sensitivity requires the ability to evaluate emotions, thoughts, and personalities of others, as well as the ability to read social events and be sensitive to the social behavior of others (Riggio & Riggio, 2001). Harb, Heimberg, Fresco, Schneier and Liebowitz (2002) separated interpersonal sensitivity into three factors. The first factor is called "interpersonal worry and dependency", the second factor is " low self-esteem" and the third factor is "unassertive interpersonal behavior ".

There are some studies investigated the relationship among the interpersonal sensitivity and other variables. Many studies found that interpersonal sensitivity is positively related to depression and an important predictor of depression (Boyce & Mason, 1996; Davidson, Zisook, Giller & Helms, 1989; Harb et al., 2002; Rizzo, Daley & Gunderson, 2006). In studies investigating the relationship between social phobia and interpersonal sensitivity, it was found that there was a significant positive correlation between these two concepts (Harb et al., 2002; Vidyanidhi & Sudhir, 2009). London, Downey, Bonica and Paltin (2007) explained that rejection sensitivity is an important predictor of social withdrawal and social phobia. As the level of problems in social communication increase, the level of awareness decrease in interpersonal relations.

### **The Present Study**

Despite these findings, no study has investigated the relationship between sense of classroom community and interpersonal sensitivity. Having high interpersonal sensitivity in relationships can lead to various problems as it often involves personal inadequacy and misinterpretation of others' behaviors. People have high interpersonal sensitivity may not clearly express their thoughts when they

are with others, and they have difficulty being social and assertive (Boyce et al., 1991). McCabe, Blankstein, and Mills (1999) found that interpersonal sensitivity levels of high school students are positively correlated with depressive symptoms, low self-esteem and low academic performance. It may lead to low sense of classroom community. On the other hand, the perception of the social environment is an important influence of the sense of community on the learning performance of students (Rovai, 2002b). Students who have high levels of sense of community do not feel isolated, and have high academic achievement in school (Rovai & Jordan, 2004). Group members verify and evaluate their identities within the group and at the same time help to verify the identities of others in the group. This validation and evaluation helps to develop community and cohesion within a group (Kreijns, Kirschner, Jochems & Buuren, 2002).

Sense of classroom community and interpersonal sensitivity are important components for adolescents' school life. No study examined the relationship between the sense of classroom community and interpersonal sensitivity on adolescents was carried out. Thus, studies to be performed in this field have importance. It is thought that this study can help school teachers and psychological counselors to get knowledge about the relationship between sense of classroom community and interpersonal sensitivity in school environment. This information may have a key component for the professionals to make studies or interventions on students. Accordingly, this study examined the relationship between sense of classroom community and interpersonal sensitivity.

## METHOD

### Participants

The research population was composed of 409 students, grades 10 to 11, from an Anatolian high school located in Istanbul. The sample consisted of 208 females and 201 male students and the average age was 15.37. The convenience sampling method was used which enables the sample to be selected from easily accessible and practical units (Bryman, 2004).

### Procedure

Permission for students to take part in the application is taken from school administration and voluntary participation of students is provided. Informed Consent Form, Classroom Community Index and Interpersonal Sensitivity Scale were administered to 10 and 11. grade students who were volunteer to participate. All questionnaires were administered face to face during the course hours as groups.

### Measures

**Classroom community index (CCI).** In this study, "Class Community Scale" developed by Rovai (2002a) to measure the feelings of class community in online learning environments. The two subdimensions (learning and commitment) consist of a 13-item scale with a five-point Likert scale. The scale items are scored between "1-strongly disagree" and "5-strongly agree". The high scores obtained from the scale reflect a strong sense of classroom community (Rovai, 2002a). The scale was adapted to Turkish by Öztürk (2009; e.g., 'Bu dersteği grubu bir aile gibi hissediyorum'). In the adaptation of the CCI to Turkish culture, the form was initially examined by seven experts. In order to test the equivalence of the forms, necessary corrections were made in accordance with the opinions of the experts and a group of 29 people was applied for two weeks. The correlation between the two forms proved the equivalence of the forms ( $r = .86, p = .000$ ). The translated form was implemented with 185 students with online learning experience. Explanatory and confirmatory factor analysis was applied on the obtained data. Based on the results from the factor analysis, the result is that the scale is valid (Öztürk, 2009). The Cronbach alpha reliability for the learning subscale was .84 and the Cronbach alpha reliability for the commitment subscale was .77. The Cronbach alpha reliability for the entire scale was calculated as .85. In the analysis made within the scope of this research, the Cronbach alpha reliability of the scale was found to be .80.

**Interpersonal sensitivity scale (ISS).** ISS developed by Boyce and Parker (1989). The scale is a 5-point likert type self-report scale with 30 items. As the results of the factor analysis, a five-factor structure was obtained called "interpersonal awareness, need for approval, separation anxiety, shyness and fragile inner self". The internal consistency of the scale was found to be .86 in the patient group and .85 in the healthy group. The Cronbach alpha reliability coefficients for the subscales ranged from .55 to .80. Test-retest reliability coefficient was .70 for the whole scale, while values range from .55 to .70. The scale was adapted to Turkish by Doğan and Sapmaz (2012). In view of the findings of these researchers, they have obtained a structure which is quite similar to the three-factor structure found by Harb et al. (2002). In this direction, the first factor is called "interpersonal worry and dependency" (e.g. 'Eğer birisi yaptığım bir şeyi eleştirirse kendimi kötü hissederim'), the second factor is " low self-esteem" (e.g. 'Eğer insanlar beni gerçekten tanırsalar sevmeyizlerdi') and the third factor is " unassertive interpersonal behavior" (e.g. 'İnsanlara kızmakta zorlanırım'). The Cronbach alpha internal consistency coefficient for the scale was found to be .81. In terms of sub-dimensions, the internal consistency coefficient was found to be .84 for the interpersonal worry and dependency, .64 for the low self-esteem, and .73 for the unassertive interpersonal behavior. In the analysis made within the scope of this research, the Cronbach alpha reliability of the scale was found to be .81.

### Data Analysis

Mean, standard deviation, number representation were used for descriptive statistics. The normal distribution of the sample data was tested with the skewness and kurtosis values and it was determined that the sample showed normal distribution (Tabachnick, & Fidell, 2001). Since the sample is normally distributed, parametric tests were performed. Pearson moment product correlation was used to investigate the relationship between sense of classroom community and interpersonal sensitivity. In the analysis of the data, SPSS 13.0 program was used and significance level was taken as .05 and .01. Additionally, path analysis was performed by using AMOS 24 to indicate the predictive role of interpersonal sensitivity on sense of classroom community.

### Results

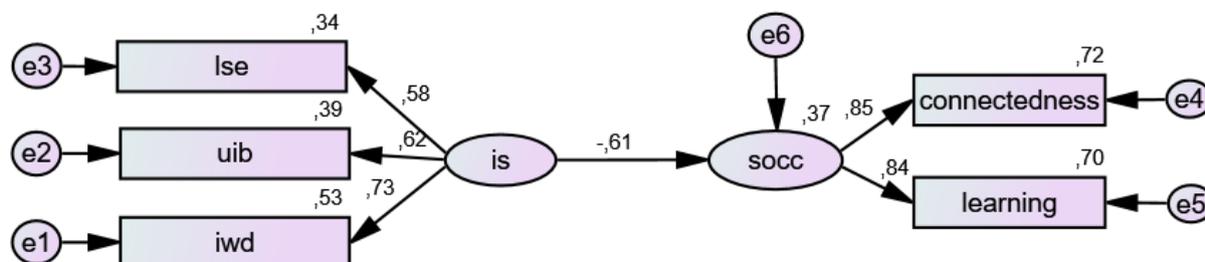
Firstly, descriptive statistics and correlations between sense of classroom community and subscales of the interpersonal sensitivity were calculated and the results have been shown in Table 1.

**Table 1. Descriptive Statistics and Intercorrelations of the Variables**

Variables	1	2	3	4
1- Sense of classroom community	1.00			
2- Interpersonal worry and dependency	-.40**	1.00		
3- Unassertive interpersonal behavior	-.38**	.44**	1.00	
4- Low self-esteem	-.30**	.44**	.35**	1.00
M	25.98	44.75	22.35	13.96
SD	9.89	9.37	5.02	5.94
Skewness	-.35	.02	-.09	1.13
Kurtosis	-.48	.28	.13	.53
Minimum	3	18	9	7
Maximum	48	71	36	32

As seen in Table 1, sense of classroom community had a moderate, significant, negative correlation to interpersonal worry and dependency ( $r = -.40, p < .01$ ), a moderate, significant, negative correlation to unassertive interpersonal behavior ( $r = -.38, p < .01$ ), and a moderate, significant, negative correlation to low self-esteem ( $r = -.30, p < .01$ ). It appears that the low self-esteem had the lowest means whereas the interpersonal worry and dependency had the highest means. The mean of sense of classroom community can be accepted as moderate.

Path analysis was employed to indicate the predictive role of interpersonal sensitivity on sense of classroom community. Results of this analysis stated that the fit indices for the proposed structural model were good  $\chi^2/df = 1.61$ , SRMR = 0.01, GFI = 0.99, RMSEA = 0.039, CFI = 0.99, TLI = 0.98 (Bentler & Bonett, 1980; Browne & Cudeck, 1993; Byrne & Campbell, 1999; Schermelleh-Engel & Moosbrugger, 2003). The results were shown in Fig 1.



**Fig 1.** Path Analysis of the Model (lse=low self-esteem, uib= unassertive interpersonal behavior, iwd= interpersonal worry and dependency, is= interpersonal sensitivity and socc= sense of classroom community)

As seen in Fig 1, interpersonal sensitivity has a significant, negative predictive role on sense of classroom community ( $\beta = -.61$ ,  $p < 0.01$ ). It was also stated that this model explained 37% of the variance.

## DISCUSSION

Results show that sense of classroom community is negatively correlated with interpersonal worry and dependency, unassertive interpersonal behavior and low self-esteem which are the subscales of interpersonal sensitivity. The path analysis stated that interpersonal sensitivity predicts the sense of classroom community negatively. The present research provides information that interpersonal worry and dependency, unassertive interpersonal behavior, and low self-esteem are negative components for students and it's thought that they may negatively affect sense of community of the students. The sense of community turns out to be a positive aspect of students' thinking about each other, leading to a higher level of commitment (Rovai, 2002b). Students with high sense of community have positive attitudes about other students whereas the students who have high interpersonal sensitivity do not.

The findings obtained from this study are important in terms of showing that the sense of classroom community may change depending on the students' interaction with each other. It is clear that students' interpersonal anxiety and addiction, passive interpersonal behavior and low self-esteem patterns can positively affect their feelings of belonging to the class, feeling secure in there, and being united with the class. This may also affect concepts such as communication with the teacher, learning, and academical achievement. Students who have high interpersonal sensitivity in the classroom environment may not have sense of belonging to the class. Thus, course failures, incompatible and antisocial behaviors or communication problems can be occur in these environments.

There are some limitations of this study. Since the sample is only from the group of the high school, different age groups and school groups may be preferred in future studies. The study was carried out in Istanbul because there are various sociocultural communities live together in this metropolis. The study may be conducted in other cities in Turkey. The relationship between sense of community and interpersonal sensitivity can be examined with other concepts such as rejection sensitivity, attachment to school, depression, loneliness, and the mediating roles of these concepts. Since this study is correlational, there is no definite causality. Therefore, experimental studies can be applied to reduce interpersonal sensitivity or raise sense community levels in face-to-face, remote, or

online educational environments. Parental education may be conducted with these experimental studies.

### **Compliance with Ethical Standards**

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

### **Informed Consent**

Informed consent was obtained from all individual participants included in the study.

### **Conflict of Interest**

The authors have no conflict of interest to report in relation to the research in this report.

## **REFERENCES**

- Bernieri, F. (2001). Toward a taxonomy of interpersonal sensitivity. In J. A. Hall ve F. J. Banieri (Eds.), *Interpersonal Sensitivity* (pp.3-20). Mahway, NJ: Lawrence Erlbaum Associates Publishers.
- Boyce, P. & Mason, C. (1996). An overview of depression-prone personality traits and the role of interpersonal sensitivity. *Australian and New Zealand Journal of Psychiatry*, 30, 90-103. DOI: 10.3109/00048679609076076
- Boyce, P. & Parker, G. (1989). Development of a scale to measure interpersonal sensitivity. *Australian and New Zealand Journal of Psychiatry*, 23(3), 341-351. DOI: 10.3109/00048678909068291
- Boyce, P., Parker, G., Barnett, B., Cooney, M. & Smith, F. (1991). Personality as a vulnerability factor to depression. *British Journal of Psychiatry*, 159, 106-114. DOI: 10.1192/bjp.159.1.106.
- Bryman, A. (2004). *Social research methods*. Oxford: Oxford University Press.
- Buckner, J. (1988). The development of an instrument to measure neighborhood cohesion. *American Journal of Community Psychology*, 16(6), 771-791.
- Campbell, K. E., & Lee B. A. (1992). Sources of personal neighborhood networks: Social integration, need or time. *Social Forces*, 70, 1077-100.
- Carney, D. R. & Harrigan, J. (2003). It takes one to know one: Interpersonal sensitivity is related to accurate assessments of others' interpersonal sensitivity. *Emotion*, 3(2),194-200.
- Chavis, D. M., Hogge J. H., McMillan D. W., & Wandersman A. (1986). Sense of community through Brunswik's lens: A first look. *Journal of Community Psychology*, 14, 24-40.
- Chavis, D. M., & Pretty, G. M. H. (1999). Sense of community: Advances in measurement and application. *Journal of Community Psychology*, 27(6), 635-642.
- Davidson, W., & Cotter P. (1986). Measurement of sense of community within the sphere of city. *Journal of Applied Social Psychology*, 16, 608-619.

- Davidson, J. R., Zisook, S., Giller, E. & Helms, M. (1989). Symptoms of interpersonal sensitivity in depression. *Comprehensive Psychiatry*, 30, 357-368. [https://doi.org/10.1016/0010-440X\(89\)90001-1](https://doi.org/10.1016/0010-440X(89)90001-1)
- Doğan, T. & Sapmaz, S. (2012). Kişilerarası duyarlılık ölçeğinin türk üniversite öğrencilerinde psikometrik analizi [Psychometric analysis of the interpersonal sensitivity measure among Turkish undergraduate students]. *The Journal of Theoretical Educational Science*, 5(2), 143-155.
- Ekman, P. & Friesen, W. (1969). The repertoire of nonverbal behavior: Categories, origins, usage, and coding. *Semiotica*, 1, 49-94.
- Glynn, T. (1981). Psychological sense of community: Measurement and application. *Human Relations*, 34, 789-818.
- Harb, G. C., Heimberg, R. G., Fresco, D. M., Schneier, F. R. & Liebowitz, M. R. (2002). The psychometric properties of the interpersonal sensitivity measure in social anxiety disorder. *Behaviour Research and Therapy*, 40, 961-979. [https://doi.org/10.1016/S0005-7967\(01\)00125-5](https://doi.org/10.1016/S0005-7967(01)00125-5)
- Kreijns, K., Kirschner, P. A., & Jochems, W. (2002). The sociability of computer-supported collaborative learning environments. *Journal of Educational Technology & Society*, 5(1), 8-22.
- London, B., Downey, G., Bonica, C. & Paltin, I. (2007). Social causes and consequences of rejection sensitivity. *Journal of Research on Adolescence*, 17(3), 481-506.
- Lopes, P. N., Salovey, P., Cote, S. & Beers, M. (2005). Emotion regulation abilities and the quality of social interaction. *Emotion*, 5(1), 113-118.
- McCabe, R. E., Blankstein, K. R., & Mills, J. S. (1999). Interpersonal sensitivity and social problem-solving: Relations with academic and social self-esteem, depressive symptoms, and academic performance. *Cognitive Therapy and Research*. 23(6). 587-604.
- McMillan, D. W., & Chavis, D. M. (1986). Sense of community: A definition and theory. *Journal of Community Psychology*, 14(1), 6-23.
- MacNeil, T. (1997). Assessing the gap between community development practice and regional development policy. B. Wharf, ve M. Clague (Ed.), in *Community organizing: Canadian experiences* (p. 149-163). Toronto: Oxford University Press.
- Nasar, J., & Julian, D. A. (1995). The psychological sense of community in the neighborhood. *Journal of American Planning Association*, 61(2), 178-184.
- Öztürk, Ö. (2009). Adaptation of the Classroom Community Index: The Validity and Reliability Study. *Hacettepe University Journal Of Education*, 36, 193-202.
- Peterson, N. A., Speer, P. W., & McMillan, D. W. (2008). Validation of a brief sense of community scale: Confirmation of the principal theory of sense of community. *Journal of Community Psychology*, 36(1), 61-73.
- Prezza, M., Amici, M., Roberti, T., & Tedeschi, G. (2001). Sense of community referred to the whole town: Its relations with neighboring, loneliness, life satisfaction, and area of residence. *Journal of Community Psychology*, 29(1), 29-52.

- Riger, S., & Lavrakas P. J. (1981). Community ties: Patterns of attachment and social interaction in urban neighborhoods. *American Journal of Community Psychology*, 9, 55–66.
- Riggio, R. E. & Riggio, H. R. (2001). Self-report measurement of interpersonal sensitivity. In J.A. Hall ve F. J. Banieri (Eds.), *Interpersonal Sensitivity* (pp. 127- 142). Mahway, NJ: Lawrence Erlbaum Associates Publishers.
- Rizzo, C. J., Daley, S. E. & Gunderson, B. H. (2006). Interpersonal sensitivity, romantic stress, and the prediction of depression: A study of inner-city, minority adolescent girls. *Journal of Youth and Adolescence*, 35(3), 469–478.
- Rovai, A. P. (2002a). Development of an instrument to measure classroom community. *The Internet and Higher Education*, 5(3), 197-211.
- Rovai, A. P. (2002b). Sense of community, perceived cognitive learning, and persistence in asynchronous learning networks. *Internet and Higher Education*, 5, 319-332.
- Rovai, A., P. & Jordan, H., M. (2004). Blended learning and sense of community: A comparative analysis with traditional and fully online graduate courses. *International Review of Research in Open and Distance Learning*, 5(2).
- Sarason, S. B. (1974). *The psychological sense of community: Perspectives for community psychology*. San Francisco: Jossey-Bass.
- Sergiovanni, T. J. (1994). *Building community in schools*. San Francisco: JosseyBass.
- Skjaeveland, O., Garling T., & Maeland J. G. (1996). A multidimensional measure of neighboring. *American Journal of Community Psychology*, 24 (3), 413-35.
- Swenson, J. & Casmir, F. L. (1998). The Impact of culture-sameness, gender, foreign travel, and academic background on the ability to interpret facial expression of emotion in others. *Communication Quarterly*, 46(2), 214-230.
- Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics*. Boston: Allyn and Bacon.
- Vidyanidhi, K. & Sudhir, P. M. (2009). Interpersonal sensitivity and dysfunctional cognitions in social anxiety and depression. *Asian Journal of Psychiatry*, 2, 25-28.
- Wandersman, A., & Giamartino G. A. (1980). Community and individual difference characteristics as influences of an initial participation. *American Journal of Community Psychology*, 8, 217–228.
- Wang, S. (2008). The effects of a synchronous communication tool (yahoo messenger) on online learners' sense of community and their multimedia authoring skills. *Journal of Interactive Online Learning*, 7(1), 59-74.
- Wilson, G., & Baldassare M. (1996). Overall sense of community in a suburban region: The effects of localism, privacy, and urbanization. *Environment and Behavior*, 28(1), 27-42.