

EXPLORING TEACHERS' KNOWLEDGE OF CLASSROOM MANAGEMENT AND CONTROL

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ABSTRACT

Purpose – This paper presents the results of a study that sought to determine teacher conceptions of classroom management and control. The study explored classroom management knowledge of participants, and how the knowledge was gained. It also investigated the extent to which participants held various conceptions, including rule-based, dominance and nurturance conceptions, about how teachers established and maintained classroom control.

Methodology – A mixed method involving a rating scale for the quantitative component, and response to open-ended interview questions for the qualitative component were used. The responses from the subjects were recorded, and notes were also taken. The data were first transcribed and double-checked for grammatical errors. The methods used to identify emerging common themes across respondents were the constant comparison and analytic induction methods.

Findings – The major finding of the study was that rule-based conceptions were predominant. In their responses to open-ended questions, virtually all teachers mentioned rule-based conceptions, especially the consistent setting and monitoring of rules as being important to the teacher's ability to be in control of the class. The alternative conceptions of dominance and nurturance were expressed by a few of the teachers. Even teachers who showed agreement with

either the dominance or nurturance conceptions showed strong support for rule-based conceptions.

Significance – The significance of this study to classroom practice is that knowing how to manage the classroom is one of the most important traits of quality instruction. Therefore it is important that teachers – both new and veteran – find the best way to manage their classroom in order to create a serene atmosphere for quality learning to take place.

Keywords: Classroom management; effective teaching; teacher perceptions; classroom management awareness; classroom control.

INTRODUCTION

Effective teaching is a major determinant of student success in mathematics because mathematics teachers are knowledgeable in both the subject matter they teach and the pedagogy they utilize in class. Teachers are enthusiastic about what they teach and are responsible for their students' learning (Oyedeji, 2000). As a motivator to enhance their teaching, they select classroom activities that have the potential of encouraging children, and providing worthwhile assessment activities that are borne out of their rich experiences and rooted in their own historical background. Effective teachers provide feedback to children and establish the right classroom expectation for students. Effective teachers interact with their students, thereby creating an environment that respects, encourages, and stimulates learning. These effective-teacher expectations can only be materialized through effective classroom management.

Research on teaching has shown that classroom management and discipline are primary concerns to many teachers (Demirdag, 2015; McKee, 2001; O'Niell, & Stephenson, 2012). Classroom management refers to the activities teachers put in place to create a conducive classroom atmosphere to enhance effective teaching and learning (Cerit, & Yüksel, 2015). Within the last 30 years, research on classroom management has largely identified teacher adoption of concepts such as student ownership, student choice, conflict resolution, and restitution as major conduits to enhance

good instructional delivery (Levin, 2000). In a poorly managed classroom, there are several discipline issues (Kaufman & Moss, 2010; Martin & Sugarman, 1993; Rose & Gallup, 2004; Shaukat & Iqbal, 2012), but a classroom that is well-managed provides a composed environment for teaching and learning to flourish (Marzano, Marzano & Pickering, 2003). Greenlee and Ogletree (2003) suggested that lack of proper classroom management among novice teachers is a major contributory factor to teacher failure. Thus, it is not surprising that classroom discipline and management is seen as the number two cause of teacher burnout (Hultell, & Gustavsson, 2013). To curtail this phenomenon, school principals place a great deal of premium on areas of discipline and classroom management (Drummond, 2000).

The need to place emphasis on the importance of teachers possessing effective classroom management skills and deploying these skills as a daily routine practice of their professional life in the 21st century cannot be greater at this point in time. In fact teacher education programs nowadays are making a determined attempt to develop effective methods for maintaining discipline and to prepare teachers in making effective classroom management decisions (King, 2000; Pianta, Hamre, & Allen, 2012; Piwowar, Thiel, & Ophardt, 2013). Teacher induction and in-service programs also focus on training teachers in classroom management and discipline strategies (Bercik & Blair-Larsen, 2000; Larrivee, 2002).

It is important to understand teacher classroom management in the context of teachers' knowledge. Schemp (2003) pointed out that to understand how to teach and manage a class, one has to understand teachers' knowledge bases. Calderhead (2006) summarized the concept of teacher knowledge and described a three-stage evolution focus: the first stage, which occurred in the 1970s, focused on teachers' decision making, the second stage included teachers' perceptions, attributions, thinking, judgment, reflections, evaluations and routines, and the third stage, which placed emphasis on teachers' knowledge and beliefs, has driven much of the current educational research on teacher knowledge. To explore teacher knowledge even further, the use of concept maps is recommended (Shaukat, & Iqbal, 2012; Winitsky, & Kauchak, 2005). In their study of physical education teachers' management knowledge base, Garrahy, Cothran and Kulinna (2005) noted that in physical education settings, primary

factors in classroom management could include establishing class routines, developing class expectations, teacher consistency, and maintaining student engagement.

Evertson, Emmer, Clemments, Sanford and Worsham (1999) pointed out that good classroom management can only begin with proper arrangement of the physical setting. The study further revealed that an environment that was orderly and well thought out with purpose provided the foundation on which a teacher could build the teaching process (Evertson et al., 1999). While discussions of classroom management frequently focus on student behavior and control (Johnson, 2004; Rink, 2002), it is not the only component. Classroom management ought to be viewed as a broad range of activities that teachers take to ensure quality learning environment prevails at all times (Garrahy, Cothran, & Kulinna, 2005; Shook, 2012).

Brophy (1998) suggested that teachers might choose to adhere to one of the two particular schools of thought about managing classrooms. On the one hand, some teachers might believe that the key to effective classroom management was getting students to respect and obey their commands through either intimidation or punishment. On the other hand, a second school of thought believes that teachers' own love of children leads to a warm and friendly student-teacher interaction without the need for for them to act as authority figures (Brophy, 1998). Building upon Brophy's (1998) research and upon Evertson et al.'s (1999) study on effective management, Johnson (2004) has provided the following conceptions that will be used in this study:

- a) *Rule-based conceptions*: In Rule-based conceptions, emphasis is placed on the importance of establishing and consistently enforcing class rules, well-planned and well-paced lessons, and monitoring student behavior to prevent misbehavior from occurring. The holding of such conceptions does not prevent a teacher from being warm and caring. However, the primary emphasis is on rules, monitoring, and lesson involvement.
- b) *Dominance conceptions*: Dominance conceptions emphasize the personal power and authority of teachers through their display of power, demanding students to listen, starting out strict, and the use of punishments to keep students from misbehaving. Such conceptions place much emphasis on

rules and less emphasis on lessons and instruction. Instead, teachers try to command respect through forceful directions and fear.

- c) *Nurturance conceptions*: Nurturance conceptions emphasize the importance of warm, friendly, personal relationships between teachers and students. Such conceptions focus on fun lessons and letting students decide, at the expense of classroom order. They give less emphasis on obeying classroom rules or policies, but more emphasis on gaining students' approval as a means of eliminating misbehavior.

This study was an attempt to add to the available research on classroom management knowledge from teachers' perspectives. More specifically, we explored classroom management knowledge of participants, and examined how that knowledge was gained. We also investigated the extent to which participants held various conceptions, including rule-based, dominance, and nurturance conceptions, and about how teachers established and maintained classroom control.

METHODOLOGY

Design

A mixed methods approach (Creswell, 2013) was used in this study, which is a technique for integrating both quantitative and qualitative data. A mixed methods approach was used because neither method (qualitative or quantitative) is individually sufficient to thoroughly capture the details of the study. When used together, both methods complement each other to provide a more complete picture of the situation being studied (Tashakkori & Teddlie, 2008).

In this study, a sequential explanatory mixed method design was involved which consisted of two stages (Ivankova, Creswell & Stick, 2006). The first stage involved the collection and analysis of the quantitative data, while the second stage focused on the collection and analysis of qualitative data to shed more light on the quantitative results. The survey questionnaires were distributed to students at the end of a class meeting. Students were given 10 to 15 minutes to

complete the survey. The survey was administered only once. As for the qualitative component of the study, we first set up appointments with four students who were willing to participate in an interview which was to be conducted either by phone or in person. Each interview lasted for 40 minutes. The responses from the subjects were recorded and in addition, notes were also taken. The data were first transcribed and then double-checked for grammatical errors. Constant comparison and analytic induction methods (LeCompte & Preissle, 2003) were used to identify emerging common themes across the four respondents interviewed.

Participants and Setting

The participants were 72 undergraduate pre-service teachers enrolled in specific majors at the College of Education in a mid-sized university in the United States. They were chosen using a convenience sampling method. Their majors included social studies education, mathematics education, and science education. Their years of teaching in their respective disciplines ranged between 1 and 7 years. Additional information on the participant characteristics is as shown in Table 1.

Instruments

The instruments used in this study were paper-and-pencil questionnaires consisting of a 21-item Likert-type Managing Students Scale, with three subscales (rule-based, dominance and nurturance), and a survey questionnaire with eleven questions on teacher control and authority. The Managing Student Scale questionnaire was adopted from Johnson (2004) as it was reordered by the researchers according to the three subscales discussed earlier. Specific items on the questionnaire with standard deviations and means are as shown in Table 4.

Reliability and Validity

Reliability is the extent to which an experiment, test, or any measuring procedure yields the same result on repeated trials (Gay & Airasian, 2003). Reliability is usually calculated using a statistic called the Cronbach's alpha, a coefficient (a number between 0 and

1) that is used to rate the internal consistency (homogeneity) or the correlation of the items in a test. Cronbach's, alpha is calculated using the formula $\alpha = nc / [v+(n-1)c]$, where n = number of test items; c = average inter-item covariance among items; and v = average variance. If a test has a strong internal consistency, most measurement experts agree that it should show only moderate correlation among items (.70 to 0.90). If correlations between items are too low, it is likely that they are measuring different traits and therefore, not all items should be included in a test that is supposed to measure only one trait. If item correlations are too high, it is likely that some of the items included are redundant, and should be removed from the test. In this study, Cronbach's alpha coefficient for test items was .8, indicating that the internal consistency and reliability of the survey instrument was very good.

Validity refers to the degree to which an assessment measures what it is supposed to measure (Kaplan & Saccuzzo, 2012). According to Creswell (2003), one form of validity is content validity which asks, "Do the items measure the content they were intended to measure?" (p. 157). To address this, the instrument was sent to two teachers with extensive experience in classroom management. The reviewers' feedback was considered in constructing a final version of the survey and interview questions. The feedback mainly addressed the wording and clarity of the questions.

RESULTS

Demographics

The demographics of the subjects are as shown in Tables 1, 2 and 3 below. The response rate was 100%, due to the fact that the questionnaires were given at the end of class and collected right away. One person probably forgot to turn over the page and answered only the questions that pertained to the dominance and nurturance conceptions, and another person did not indicate his/her grade level. Of the 72 participants in the study, about a third of them had only one year of K-12 teaching experience. Participants were fairly evenly distributed in terms of grade level (elementary, middle and high school) and content area (social studies education, mathematics education, and science education).

Table 1

Descriptive Statistics on K-12 Teaching Experience

Number of years of K-12 teaching experience	Frequency	%
1 year	25	34.7
2 year	21	29.2
3 year	8	11.1
4 year	12	16.7
6 year	2	2.8
7 or more years	4	5.4

Table 2

Descriptive Statistics on Discipline Area

Discipline area	Frequency	%
Social Studies Education	22	30.6
Mathematics Education	29	40.3
Science Education	21	29.1

Table 3

Descriptive Statistics on Grade Level

Grade level	Frequency	%
Elementary	24	33.3
Middle School	31	43.1
High School	17	23.6

Managing Students Scale

The results on the quantitative part of the study are presented in relation to the research question “To what extent do teachers hold various conceptions, namely rule-based, dominance and nurturance conceptions, about how teachers establish and maintain classroom control?”

The responses from the total sample of subjects to each item on the Managing Students Scale are as summarized in Table 4. The item with the highest mean for the entire group was the *rule-based* conception that “teachers need to be consistent with rules and consequences”. The item with the least mean was “there is much truth in the saying, ‘Don’t smile until Christmas’”. The means of the Subscale items for *rule-based* conceptions ranged from 3.6 to 4.5. This finding indicated the generally strong agreement among the subjects on items reflecting conceptions taught in class. The responses on the conceptions of *dominance* and *nurturance* ranged from means of 2.2 to 4.1.

Among the *nurturance* conception responses, the subjects most strongly agreed with the item, “Treating students in a warm personal manner makes them want to behave well” (mean = 4.1) and “Students will listen to teachers they like” (mean = 3.8). They disagreed with the statement that, “Student misbehavior may indicate a lack of teacher friendliness toward students” (mean = 2.6).

Scores on the *dominance* conception responses showed that the subjects highly favored the statement, “Teachers must exert their authority from the beginning” (mean = 4.0), but they did not like the statement that “There is much truth to the saying, ‘Don’t smile until Christmas’” (mean = 2.2).

Overall, the least variance among the responses was on the *rule-based* item about establishing rules and consequences (.56), the *nurturance* items on lack of teacher friendliness (.70), and the *dominance* item about teachers exerting their authority from the beginning (.91). The highest variance among the responses occurred on the two subscale items on *dominance*, namely “students testing teachers” (1.38) and “teachers punishing students who misbehave as an example of the class” (1.37).

Table 4

Means and Standard Deviations on Subscale Item Responses in the Managing Students Scale

Subscale Item	N	Mean	SD
Rule-Based			
1) Teachers need to be consistent with rules and consequences to get students to listen.	72	4.53	.81
2) Talking about rules at the beginning of year sets a positive tone for students.	72	4.65	.56
3) Teachers should not ignore students who are inattentive but not misbehaving.	72	3.76	1.33
4) Setting positive expectations helps teachers limit student misbehavior.	72	4.53	.58
5) Holding students to one set of rules still allows for their individual differences.	72	3.69	1.12
6) Teachers do not intimidate students by telling them the consequences for misbehavior.	72	4.03	.95
7) Teachers should be expected to watch over students' learning and behavior during class.	72	4.03	1.03
Dominance			
1) Teachers must establish their authority by laying down the law at beginning of year.	72	3.80	1.08
2) Most students will test teachers to see what they can get away with.	72	3.56	1.38
3) Teachers must exert their authority from the beginning.	72	4.00	.91
4) Students do not take teachers seriously if they are not stern or strict at times.	72	2.68	1.24
5) Students who misbehave must be punished.	72	3.12	1.23
6) Teachers should punish the first student who misbehaves as an example of the class.	72	3.16	1.37
7) There is much truth to the saying, "Don't smile until Christmas".	72	2.20	1.35
Nurturance			
1) Teachers who do not get to know their students well often have misbehavior problems.	72	1.29	1.29
2) Treating students in a warm personal manner makes them want to behave well.	72	.90	.90
3) Students like teachers who let them have fun.	72	1.09	1.09
4) Students will listen to teachers they like.	72	.92	.92
5) If students feel that their ideas are listened to, they do not misbehave.	72	.91	.91
6) Teachers who are well liked by their students do a good job of teaching.	72	.99	.99

Qualitative Data

Participants' responses to interview questions, which constituted the qualitative data of the study, were first grouped into author-constructed categories or themes. After participants' comments were categorized, titles were then provided to each group and representative responses were listed for each theme. The themes were read again, and similar themes were merged (Glesne, 2006). The themes that emerged were: *teachers' knowledge origin and influences*, *knowledge origin and evolution*, and *knowledge content*. These themes are discussed next. In sections of the results in which a specific teacher is quoted, a pseudonym is used rather than the teacher's actual name.

Origin of Knowledge and Influences

Participants in this study attributed their knowledge development about classroom management to a variety of sources, namely their students, colleagues and professional development. Several participants gave credit to their teacher education program. The participants cited trials and errors as the most common sources of knowledge. For instance, Francisca, a second year social studies teacher, said: "I learn by experience...every experience is unique, and I keep learning new things each day."

The teachers also stressed the need for continuous professional development. This meant attending conferences and workshops, and reading professional journals and books. Speaking of how his teaching had changed, Sebastian, a fourth year mathematics teacher noted that: "What helped me most were seminars, in-service training, and colleagues as well as retired teachers from the same teaching field." Sebastian also shared that he had a lot of stuff to teach when he had completed the seminars and interacted with the experienced teachers. In short, his classroom management skills had greatly improved.

Knowledge Origin and Evolution

The teachers discussed how they had acquired their knowledge of classroom management and how that knowledge changed

with time. The majority of them stated that they learned about classroom management in a previous class taken in education, with a few participants attributing the origin of knowledge to in-service training. Contextual influences were cited as the main source of their knowledge evolution. When asked about his classroom management evolution, James, a third year English teacher explained that “Because the children I was teaching were always changing, I also had to change.” He cited out-of-school changes as well as in-school changes. He noted that out-of-school changes included issues such as single-parent homes, dysfunctional families, and lack of parental behavioral expectations. As for in-school changes, he pointed out that corporal punishment was a common practice when she was in school, and as corporal punishment was removed as part of a schools’ disciplinary measures, teachers found new techniques to handle student misbehavior.

Knowledge Content

The teachers mentioned the need for consistency in their interactions with students when establishing routines. In particular, Ashley, a first year mathematics teacher, said “Kids feel comfortable in the classroom when they know where you are coming from and know exactly what to expect.” She advised that teachers should not take for granted that their pupils were just kids, since some of the pupils were very intelligent and could easily find out things for themselves. She stressed the need for teachers to be very prepared, knowledgeable, and confident whenever they entered the classroom.

Kevin, a second year English teacher, talked about the importance of rewards and consequences (such as verbal praise and letters to parents) to help improve the behavior of students. He stressed the importance of having students help to establish the desired classroom and making the students responsible for their behaviors as these would aid them in assuming responsibility for their learning experiences.

DISCUSSION

Classroom management continues to be the main concern for educators, whether one is a novice or an experienced teacher (Cerit,

& Yüksel, 2015; Goyette, Dore, & Dion, 2010). This study's results have revealed that learning to manage one's classroom is a developmental work in process, influenced by forces that are both personal and contextual in nature. Similar to the findings of Schemp (2003), teachers in this study most valued classroom management knowledge that comes from personal practice. Most of the teachers gave much credit to knowledge gained from their teacher education programs. It is clear that their undergraduate programs did a great job of addressing classroom management techniques. Contrary to the two assertions made by Borko and Putnam (2006), namely that prospective teachers might not see the relevance of their courses to the process of learning to teach and that they might not attend closely to the information or the experiences offered by the course, the teachers in this study seemed to value the importance of what they learned in the classroom and to translate it into practice.

Teacher's professional development and the role of hands-on experiences were also mentioned as factors that could help with enhancing teacher knowledge about classroom management. By combining these factors and early teaching experiences with college coursework, it would help the student teachers to interpret their practical knowledge in relation to the programmatic message of the teacher education program (O'Sullivan, 2006; Pagano & Langley, 2011).

The major finding of the study for the quantitative component was that *rule-based* conceptions were predominant. In their responses to the open-ended questions of the study, virtually all the teachers indicated that *rule-based* conceptions, especially the consistent setting and monitoring of rules, as being important to their ability to be in control of the class.

The alternative conceptions of *dominance* and *nurturance* were expressed by a few of the teachers. Even those who showed agreement with either the *dominance* or *nurturance* conceptions showed strong support for the *rule-based* conceptions.

Future Research

This study was situated in a student teaching environment. Therefore at least some of the conceptions could have been those perceived to

be the “correct” ones found in their textbooks or taught in class. It would help if future studies were conducted in a different setting and/or with different participant characteristics and with a larger sample size.

REFERENCES

- Bercik, J. T., & Blair-Larsen, S. (2000). New/reurning eachers: A perspective of their induction year needs. Paper presented at the Annual Conference of the National Council of Stats on Inservice Education. San Antonio, TX.
- Borko, H., & Putnam, R. T. (2006). Learning to teach. In D. C. Berliner., & R. C. Calfee (Eds.), *Handbook of educational psychology* (pp. 673-708). New York: Macmillan.
- Brophy, J. (1998). Educating teachers about managing classrooms and students. *Teaching and Teacher Education*, 4(1), 1-8.
- Calderhead, J. (2006). Teachers: Beliefs and knowledge. In D. C. Berliner & R. C. Calfee (Eds.), *Handbook of educational psychology* (pp. 709-725). New York: Macmillan.
- Cerit, Y., & Yüksel, S. (2015). Teachers’ perceptions of classroom management orientations in Turkish and Latvia contexts: A comparative study. *Journal of Educational & Instructional Studies in the World*, 5(3).
- Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage Publications.
- Demirdag, S. (2015). Classroom management and students’ self-esteem: Creating positive classrooms. *Educational Research and Reviews*, 10(2), 191-197.
- Drummond, R. J. (2000). *How principals rate beginning teachers*. (ERIC Document Reproduction Service No. ED 317540).
- Evertson, C. M., Emmer, E. T., Clemments, B. S., Sanford, J. P., & Worsham, M. E. (1999). *Classroom management for elementary teachers*. Englewood Cliffs, NJ: Prentice Hall.
- Greenlee, A. R., & Ogletree, E. J. (2003). *Teachers’ attitudes toward student discipline problems and classroom management strategies*. (ERIC Document Reproduction Service No. ED 364330).

- Garrahy, D. A., Cothran, D. J., & Kulinna, P. H. (2005). Voices from the trenches: An exploration of teachers' management knowledge. *Journal of Educational Research*, 99 (1), 56-63.
- Gay, L. R., & Airasian, P. (2003). Education research. *Competencies for Analysis and Applications*. New Jersey.
- Glesne, C. (2015). *Becoming qualitative researchers: An introduction*. Pearson.
- Goyette, R., Dore, R. & Dion, E. (2010). Pupils's misbehaviors and the reactions and causal attribution of physical education student teachers: A sequential analysis. *Journal of Teaching in Physical Education*, 20, 3 -14.
- Hultell, D., Melin, B., & Gustavsson, J. P. (2013). Getting personal with teacher burnout: A longitudinal study on the development of burnout using a person-based approach. *Teaching and Teacher Education*, 32, 75-86.
- Ivankova, N. V., Creswell, J. W., & Stick, S. L. (2006). Using mixed-methods sequential explanatory design: From theory to practice. *Field methods*, 18(1), 3-20.
- Johnson, V. G. (2004). Student Teachers' Conceptions of Classroom Management. *Journal of Educational Research*, 88 (2), 109-117.
- Kaplan, R. M., & Saccuzzo, D. P. (2012). *Psychological testing: Principles, applications, and issues*. Cengage Learning.
- Kaufman, D., & Moss, D. M. (2010). A new look at preservice teachers 'conceptions of classroom management and organization: Uncovering complexity and dissonance. *The Teacher Educator*, 45(2), 118-136.
- King-Sears, M. (1999). Teacher and researcher co-design self management content for an inclusive setting: Research, training, interventions, and generation effects on student performance. *Education and Training Method in Mental Retardation and Development Dissabilities*, 34 (2), 134-156.
- Kulinna, P. H., Martin, J. J., Zhu, W., & Reed, B. (2002). Development and calibration of an instrument measuring barriers to physically active physical education classes. *The Journal of Human Movement*, 43, 1-16.
- Larrivee, B. (2002). *Strategies for effective classroom management: Creating a collaborative climate*. (ERIC Document Reproduction Service No. ED 355678).

- LeCompte, M. D., & Preissle, J. (2003). *Ethnography and qualitative design in educational research*. San Diego, CA: Academic Press.
- Levin, J. , & J. Nolan, J. (2000). *Principles of classroom management, third edition*. Needham Heights, Massachusetts: Allyn and Bacon.
- Martin, J., & Kulinna, P. H.(2005). A social cognitive perspective of physical-activity related behavior in physical education. *Journal Of Teaching In Physical Education*, 24, 265-281.
- Marzano, R., Marzano, J., & Pickering, D. (2003). *Classroom management that works. Research-based strategies for every teacher*, Association for Supervision and Curriculum Development, Alexandria, VA.
- Mckee, J. G. (2001). *Toward an agenda for induction: Perceptions of beginning teachers and student teachers*. Paper presented at the Annual Conference of the Eastern Educational Research Association, Boston, MA.
- O’Niell, S., & Stephenson, J. (2012). Does classroom management coursework influence preservice teachers’ perceived preparedness or confidence? *Teaching and Teacher Education*, 28, 1131–1143.
- O’ Sullivan, M. (2006). What do we know about the professional preparation of teachers? In S. Silverman & C. Ennis (Eds.), *Student learning in physical education: Applying research to enhance instruction* (pp. 315-337). Champaign, IL: Human Kinetics.
- Oyedeji, O. A. (2000). Effective teaching of mathematics. In Erinosh, S. Y. Adesanya, A., & Ogunyemi, A. (Eds), *Teaching effectiveness in Nigerian schools* (pp. 147-165). Ibadan Sam Bookman Publishers.
- Padgett, D. K. (2016). *Qualitative methods in social work research* (Vol. 36). Sage Publications.
- Pagano, K., & Langley, D. J. (2011). Teacher perspectives on the role of exercise as a management tool in physical education. *Journal of Teaching in Physical Education*, 21, 57-74.
- Pianta, R. C., Hamre, B. K., & Allen, J. P. (2012). Teacher-student relationships and engagement: Conceptualizing, measuring, and improving the capacity of classroom interactions. In *Handbook of research on student engagement* (pp. 365-386). New York, NY: Springer-Verlag.

- Piwowar, V., Thiel, F., & Ophardt, D. (2013). Training inservice teachers' competencies in classroom management: A quasi-experimental study with teachers of secondary schools. *Teaching and Teacher Education*, 30, 1–12.
- Rink, J. (2003). Effective instruction in physical education. In S. Silverman & C. Ennis (Eds.), *Student learning in physical education applying research to enhance instruction* (pp. 165–186). Champaign, IL: Human Kinetics.
- Rose, L.C., & Gallup, A. M. (August, 2004). *The 36th Annual Phi Delta Kappa/Gallup Poll of the public's attitudes toward public schools*. Retrieved November 15, 2008 from www.pdkintl.org/kappan/k0409pol.htm#exec.
- Schemp, P. G. (2003). Constructing professional knowledge: A case study of an experienced high school teacher. *Journal of Teaching in Physical Education*, 13, 2-23.
- Shaukat, S., & Iqbal, H. M. (2012). Teacher self-efficacy as a function of student engagement, instructional strategies and classroom management. *Pakistan Journal of Social and Clinical Psychology*, 9(3), 82-85.
- Shook, A. C. (2012). A study of preservice educators' dispositions to change behavior management strategies. *Preventing School Failure*, 56, 129–136.
- Tashakkori, A., & Teddlie, C. (2008). Quality of inferences in mixed methods research: Calling for an integrative framework. *Advances in mixed methods research*, 101-119.
- Winitsky, N., & Kauchak, D. (2005). Learning to teach: Knowledge development in classroom management. *Teaching and Teacher Education*, 11(3), 215-227.