The mission of JCRE is to disseminate original research, empirical or theoretical in nature, which involves the application of current philosophy, theory, and practice to address issues of social importance. While the journal will focus on research with the intent of improving the human condition, manuscripts addressing all aspects of the field of education, school-based and non school-based alike, will be considered. JCRE is strongly committed to making the research findings of its authors accessible to all constituencies in the field of education.

JCRE is a peer-reviewed publication sponsored by the School of Education at the University of Mississippi. Published 3 times annually, in August, December, and April, JCRE disseminates research which is judged to be clear and purposeful, with significant implications for positive changes in the field of education.

Manuscript Preparation. Manuscripts should be prepared according to the guidelines set forth in the 6th edition of the Publication Manual of the American Psychological Association (APA), should be approximately 15-25 pages in length, and must be accompanied by an abstract no longer than 200 words. A short biography of 2-3 sentences per author is requested. Manuscripts should be formatted for 8 ½” x 11” paper with 1” margins on all sides, and double-spaced using 12-point type. Manuscript files, and any accompanying files, should be in MS Word format: PDFs will not be accepted.

Manuscript Submission. Email an electronic copy of your manuscript and a cover letter to gauthier@olemiss.edu. Please do remove all names and other information from the manuscript which could potentially identify the author(s). The cover letter should contain the name(s) of the author(s), institutional affiliation(s), and contact information (email, phone number, address). The cover letter should also include a statement explicitly indicating that the manuscript has not been published, or is not under consideration, elsewhere.

Manuscript Review. Manuscripts submitted to JCRE for consideration are first reviewed internally by the editor. Those conforming to the initial review criteria and fulfilling the mission of JCRE will be submitted for external peer review. The criteria for judging the manuscripts include: (a) significance of research and/or theoretical contribution, (b) appropriateness of the research methodology, (c) clarity of the writing, (d) adherence to the guidelines set forth in the 6th edition of the Publication Manual of the American Psychological Association (APA). Manuscripts meeting the criteria will be reviewed by at least two peers, a process that lasts from 6-8 weeks.
Changing our Perceptions and Pedagogical Practices with Respect to Language Diversity
Evan Ortlieb
Yusuke Sasaki

Student Insubordination, Discipline and Safety Initiatives in Urban Schools
Seunghee Han

An Investigation of Attitudes and Perceptions Toward Inclusion: Comparing Preservice Teachers to First Year Teachers
Nancy Douglas
Jerilou Moore
Kevin Stoltz

Improving Preservice Teachers’ Knowledge of Response-to-Intervention (RTI): How Online Professional Development Modules Can Help?
Nai-Cheng Kuo

Intrinsic Motivation and Authentic Engagement: A Conceptual Discussion
Steven Bourgeois

The Relationship between Workaholism Tendencies and Stage of Development in a K-12 Teacher Population
Rebekah Reysen
S.Ryan Niemeyer
Amanda Winburn
Ann Monroe

What Kind of Possibilities Do We Have?: Educators’ Complex Images of Latino Immigrant Students and Families
H. James McLaughlin
Stacie Pettit
Ideas and opinions expressed by the authors of the articles which appear in JCRE do not necessarily reflect the ideas and opinions of the Editors, Editorial Advisory Board, School of Education, or the University of Mississippi at-large.

********Call for Manuscripts********

The Journal of Contemporary Research in Education is soliciting manuscripts for future issues. Submissions should be prepared according to the guidelines set forth in the 6th edition of the Publication Manual of the American Psychological Association (APA) and should be submitted electronically to the attention of the Editor at gauthier@olemiss.edu. Manuscripts across all areas of educational inquiry will be considered. Cross-disciplinary collaboration is encouraged. For more information, see the section at the beginning of this issue addressing manuscript preparation, submission, and review.

Subscriptions to JCRE

The Journal of Contemporary Research in Education is published 3 times annually, in August, December, and April. Institutional/Library subscriptions are $75.00, individual subscriptions are $50.00, and individual copies are $40.00. All inquiries regarding subscriptions should be directed to the Editor at gauthier@olemiss.edu or via traditional mail at:

Lane Roy Gauthier, Editor
Journal of Contemporary Research in Education
316 Guyton Hall
University of Mississippi
P.O. Box 1848
University, MS 38677-1848
In the last two decades, there have been significant changes to educational policy regarding English language and literacy as the need for English language proficiency has become increasingly recognized as central to both academic and career achievement. Yet, the mere implementation of a national set of English language standards is not enough to provide equal learning opportunities for all considering the range of cultural backgrounds and linguistic knowledge (Cassidy & Ortlieb, 2013; Rennie & Ortlieb, 2013). What is needed is a set of instructional strategies that can build upon students’ existing proficiencies (Cervetti & Hiebert, 2014) rather than ignoring what they know, who they are, and how they learn.

It is critical that issues around multilingualism be addressed within contemporary educational research, as urban centres are becoming more and more populated by immigrants (Farr, 2011). Understanding and valuing cultural diversity are essential towards strengthening student experience and achievement (Joseph, 2013). All individuals must feel free to explore the uniqueness of their culture and identity while developing English language proficiency; however, current pedagogical pedagogies often inhibit the expression of...
unique perspectives on life and the transmission of knowledge from minorities. Teacher educators must take a leadership role in preparing the next generation for the roles and responsibilities associated with the current climate of schools and in turn, reinvigorate the teaching profession to embrace the idea of using diversity as an advantage in student learning (Miramontes, Nadeau, & Commins, 2011). There is much to be learned regarding how to use diversity in productive ways (Au, 2011) and there seems no one better to learn from than the very students who have experienced these challenges. What follows is a description of some effective teacher practices as recognized by one Japanese student who studies in an English speaking university in the West.

First, teachers should provide extended wait time (Farooq, 2007; McNeil, 2012). Providing students with time to think will help them formulate their ideas (Hao, 2011; Zembyras & Michaelides, 2004) and enhance the accuracy of responding in English. Moreover, it can increase the likelihood of all students contemplating the answer to the question at hand; in turn, this promotes class-wide engagement by refraining from providing the answer and allocating enough think time for cognitive processing (Ollin, 2008).

Japanese students are accustomed to teachers expecting them to answer questions as soon as possible. If they cannot answer immediately, often times, Japanese teachers will nominate other students to answer instead. This quick shift of responsibility from one student to another creates anxiety for some and for others, a compelling reason not to attempt difficult questions because they know the teacher will just call on someone else after a brief moment. Environments like these make it challenging for Japanese students to interact with and acquire various ideas from peers, complicating their transition to English speaking classrooms to an ever greater extent.

Second, teachers should intervene by providing language assistance within discussion (Walsh, 2002). In order to meet learners' needs, timely language intervention is central to language development (van Lier, 2000) while also maintaining sensitivity to students’ struggles in speaking English as a foreign language. Teachers need to listen to students attentively and utilize proper and precise language (Walsh, 2006).

International students who use English as a second or foreign language are often unfamiliar with words or phrases that are not found in their native language (e.g., articles, conjunctions) not to mention the lack of verb tenses and word order. Students need models; they need practice with a caring teacher who can scaffold students to consolidate their understanding to new heights (Applebee, 2002). The development of English language proficiency will in turn boost students' motivation and overall experience in western educational contexts.

As learning English in Japan is predominantly based on rote learning such as memorizing vocabulary and grammar rules rather than speaking English in the classroom, enhancing communicative skills is quite cumbersome. It is virtually impossible for students to know all of the common phrases and expressions they should use when communicating in English. Hence, non-native speakers expect to learn from teacher feedback to improve
English proficiency. Through correction accompanied with explanation, students are ready to make strides within an immersion experience with the English language afforded by pragmatic pedagogues.

Third, teachers should create a comfortable classroom atmosphere (Gregersen, 2003). Teachers should remind students that making errors is a natural process of language acquisition. A student’s motivation can be maintained through a variety of means such as a teacher humanizing oneself by discussing his/her own errors, learning experiences, and goals for personal language improvement (Andrade & Williams, 2009). Working collectively towards English language outcomes can cultivate oral language, reading, and writing improvement. Non-native speakers often purport the importance of an open atmosphere that is conducive to learning, where teachers encourage students to make mistakes. By reducing the level of anxiety, language and content knowledge acquisition can be approached without fear or reservation.

In summary, there are a number of strategies that can promote English language development especially for multilingual students. These revolve around establishing an atmosphere where authentic relationships prevail between teacher and student as well as student to student. Acknowledging progress and providing targeted praise to bolster students with low confidence in speaking, reading, or writing English is salient practice. These conditions promote students’ attention to shift from that of anxiety and timidity to that of opportunism and creativity, alongside the support of a mindful teacher who is well versed in strategies for English language acquisition.

Who are they? What are their interests? How do we provide opportunities for individual growth and development given their multilingualism? How do we build upon their existing knowledge of language and cultural experiences? These questions must remain at the forefront of contemporary research in education. As echoed by Gage (1978) nearly 40 years ago, there is a scientific basis to the art of teaching, and it starts with language.

References


**Evan Ortlieb** is the Course Leader & Senior Lecturer in Literacy Education at Monash University in Frankston, Victoria (Australia). **Dr. Ortlieb** is the corresponding author on this Guest Column and can be contacted at e.ortlieb@gmail.com.

**Yusuke Sasaki** is a doctoral student in TESOL at Monash University in Frankston, Victoria (Australia).
Introduction

Creating a safer and more orderly school is a high priority and a challenge for school administrators. School violence has been a critical issue among policymakers and stakeholders, yet little attention has been paid to students’ insubordination. It is because student insubordination has been considered as minor offenses or nonviolent behaviors (Kaufman, Jaser, Vaughan, Reynolds, Di Donato, 2010; Shupe, 1998) and may not threaten the safety of the entire school. However, adequately dealing with student insubordination should be the first step in promoting school safety.

In the school settings, a considerable number of school administrators and teachers reported student insubordination as a major problem in creating an orderly school (Abebe & Hailemariam, 2007; Alley, 1990; Tidwell, Flannery, & Lewis-Palmer, 2003). A recent national report showed that, during the 2009-2010 school year, about five percent of schools disciplined students for verbal abuse of teachers every day or at least once a week (Robers, Zhang, & Truman, 2012). These problems are more frequent in urban schools; about 12% and nine percent of schools reported incidents of students’ disrespectful acts and verbal abuse of teachers, respectively (Robers et al., 2012). During the 2007-2008 school year, on average, a school disciplined 88 students for insubordination (Tonsager, Neiman, Hryczaniuk, & Guan, 2010) and about 276,700 teachers and 145,100 teachers reported being threatened with injury and attacked by students, respectively (Robers et al., 2010).

Student insubordination should not be underestimated because it negatively affects school climate and order. The current study seeks school factors associated with student insubordination and the findings extend our knowledge about how to prevent student insubordination. To date, little attention has been paid to identifying school factors of student insubordination in the literature. At best, student insubordination has been discussed as part of school violence and/or discipline studies (Blake,
Butler, Lewis, & Daresbourg, 2010; Kaufman et al., 2010; Raffaele Mendez & Knoff, 2003). To better estimate the associations between insubordination and school factors, this study differentiated student insubordination and students’ violent behaviors against their peers. Thus, violent incident was included in the multivariate regression models as a control variable. In addition, in the study, insubordination was assessed in two different ways; actual number of insubordination incident and principals’ perceived student insubordination (e.g., frequency of disrespectful act for teachers and verbal abuse of teachers). The reason for using a different measure of insubordination is that there may be gaps between actual student problem behaviors and school staff’s perception of problem behaviors (Akiba & Han, 2007; Huss, 2007; Johnson, 2010; Wade & Stafford, 2003). Finally, student problem behaviors are more frequent in urban areas (Mcloughlin & Noltemeyer, 2010; Robers, Zhang & Truman, 2012; Smith, 2011), thus the study focused on urban schools.

Literature review

Student Insubordination: Definition and Discipline

Student insubordination was defined as disrespect, disobedience, verbal abuse, intimidation, and even physical attack of teachers or school staff (Neiman & DeVoe, 2009; Robers et al., 2012). Research has shown multiple types of student problem behaviors as insubordination in different categories. In a study on discipline practices (Kaufman et al., 2010), student problem behaviors against school staff were addressed as following: 1) the attendance category - leaving the building without permission and skipping detention, 2) the aggressive category - physically threatening the staff, physical and sexual harassment, and verbally threatening the staff, and 3) the disrespectful category - using profanity towards the staff, general disrespect, and lying. Similarly, defiance of adult authority is defined as displaying obscenities, refusing detentions, assaulting employees, giving false names, being uncooperative, being disrespectful, using profanities, cheating, and disturbing classes (Gregory & Weinstein, 2008).

Research has demonstrated that student insubordination is a frequent problem behavior in the school setting (Alley, 1990; Tidwell et al., 2003), and has explored how schools discipline students for insubordination and which factors are associated with such behaviors.

Gregory and Weinstein (2008), analyzing discipline referral record of one urban high school during the 2002-2003 school year, found that “defiance of adult authority” was the most common disciplinary reason for suspension (67%; n =1,207), and more than half of the defiance referred (57%) were black students. Similarly, Skiba et al. (2002) found different patterns of student insubordination by race. The researchers analyzed data of 4,461 students who were referred to the office for a disciplinary reason at least one time during the 1994-1995 school year and found that black students tended to be referred to the office for being disrespectful, making excessive noise, loitering, and using threats, whereas white students tended to be referred to the office because of smoking, vandalizing, using obscene language, and leaving without permission (Skiba, Michael, Nardo, & Peterson, 2002). Raffaele Mendez and Knoff (2003) analyzed the data of 142 schools during the 1996-1997 school year and found that students’ disobedience/insubordination (20%), noncompliance with
assigned discipline (7%), and disrespect (6%) were the most common reasons for suspension of 15 different reasons. In their study, it was noticeable that black male students were more likely to be suspended because of disobedience/insubordination (28%), being disrespectful (32%), and leaving class or campus without permission (33%) than white male or Hispanic male students. Consistently, Blake et al. (2010) analyzed data of 9,364 female students in 44 schools in a urban school district and found that black female students were more frequent discipline recipients for insubordination, being profane to adults and expressing defiance than their white female counterparts (Blake et al., 2010).

In summary, student insubordination was a common disciplinary reason for office referrals and suspension. In addition, black students were more frequently disciplined because of insubordination than their white counterparts. The study expected that schools with more ethnic minority students would have more student insubordination incidents than schools serving less ethnic minority students.

Student Insubordination and School Safety Initiatives

Schools have implemented comprehensive crime prevention programs for students, parents, and teachers. During the 2009-2010 school year, a majority of public schools (84% to 93%) offered multiple programs to create a safer and orderly school, such as behavior modifications, interventions, mentoring and tutoring opportunities, prevention curriculums, promotion of social integration, and a sense of community programs (Neiman, 2011). Teacher training programs have been emphasized for promoting an orderly school because a teacher is the first link to a student problem behavior in the classroom setting (Lewis-Palmer, 1999; Gregory & Weinstein, 2008). Depending on a teacher’s quality of classroom management and of relationship with the students, student problem behaviors can be dealt with in the classroom and be improved. Research showed that if students perceived their teachers’ care and high expectations for them that those students tended to respect more in the teachers’ authority. Accordingly, those schools minimized the discipline gap by race (Gregory & Weinstein, 2008).

Regarding student-oriented crime prevention programs, the School-Wide Positive Behavioral Supports (SWPBS) is one of the nationally-known programs. It has been effectively implemented in schools with fairly consistent expectations and behavioral indicators across states (Lynass, Tsai, Richman, & Cheney, 2012). In New Hampshire, after implementing the Positive Behavioral Interventions and Supports–New Hampshire, more than 6,000 office discipline referrals and more than 1,000 suspensions decreased during the 2003-2004 year and the 2004-2005 school year. The researchers found that the program helped considerably with saving time for more learning, teaching and leadership (Muscott, Mann, & LeBrun, 2008). In Iowa, positive effects of SWPBS (e.g., reduction office discipline referrals) were also observed in the survey results of 72 schools from 2003 to 2006 (Mass-Galloway, Panyan, Smith, & Wessendorf, 2008). In Texas, a school wide positive behavior initiative resulted in reduction of discipline referrals in middle schools; three-year data from 2005 to 2008 showed more than 22% of reduction in discipline referrals (Ruiz, Ruiz, & Sherman, 2012).
Finally, parental involvement in schools has been well-documented as a strong predictor of school success for students, both academically and behaviorally (Jeynes, 2012; LeFevre & Shaw, 2011; Sheldon & Epstein, 2002; Stylianides & Stylianides, 2011). A meta-analyses with 51 studies demonstrated that parental involvement, such as communication between parents and teachers, checking of homework and sharing of reading at home, is positively associated with student academic achievement across elementary and secondary school levels (Jeynes, 2012). Frequent parent-child interactions have a positive effect on academic achievement in urban children (Stylianides & Stylianides, 2011) and family and community involvement in school activities decreased discipline outcomes, such as office referrals, detention and in-school suspensions, after controlling for previous rates of discipline (Sheldon & Epstein, 2002).

These comprehensive safety initiatives are expected to decrease violence and to maintain school order. The present study expected that student insubordination may be decreased by trained teachers with classroom management skills, discipline practices, and greater knowledge over positive behavior interventions. In addition, student insubordination is expected to decrease by promoting parental involvement in schools and by providing student-oriented crime prevention programs, such as mentoring, counseling, or prevention curriculums.

The Current Study

The current study attempted to estimate the relationships between student insubordination and school characteristics in urban schools. Using the school-level data set, descriptive statistics and multiple multivariate regression analyses were performed to address following research questions. First, to what extent do urban schools have student insubordination incidents? Second, how are the different discipline practices for student insubordination implemented by school level? And third, how is student insubordination associated with school factors, after controlling for violent incidents and school characteristics?

Method

Participants

The current study is a secondary analysis of the School Survey on Crime and Safety (SSOCS) 2007-2008. The SSOCS data set has been collected every two years since 1999 on behalf of the U.S. Department of Education. The National Center for Education Statistics (NCES) and the U.S. Census Bureau developed and conducted the survey which contained information about school safety: crime prevention programs for teachers, parents, students and community, school security practices, number and types of student problem behaviors, disciplinary actions and school backgrounds. Based on nationally representative samples, a total of 3,367 questionnaire packets were sent to public schools between February 25 and June 17 in 2008. With a 77.2% response rate, the SSOCS 2007-2008 data was collected from 2,560 usable questionnaires (Ruddy, Neiman, Hryczaniuk, Thomas, & Parmer, 2010).

In the current study, the SSOCS 2007-2008 data was used as it was the most recent data available to the public as of the beginning of 2014. Finally, a total of 1,493 schools in urban and urban fringe were selected for the study (see appendix A & B).
Measures

Insubordination was assessed in three different ways. First, school discipline records of insubordination were used. In the SSOCS questionnaire, insubordination was defined as “a deliberate and inexcusable defiance of or refusal to obey a school rule, authority, or a reasonable order.” Specifically, failure to respond to a call slip, failure to attend assigned detention or on-campus supervision, and physical or verbal intimidation/abuse to school staff were included in the questionnaire. Based on the definition of insubordination, principals were asked “During the 2007–08 school year, how many students were involved in committing the following offenses, and how many of the following disciplinary actions were taken in response?” and principals responded with a number of each discipline for insubordination: 1) expulsion, 2) transfers to specialized schools, 3) out-of-school suspensions lasting 5 or more days and 4) other disciplinary actions (e.g., suspension for less than 5 days or detention). Second and third measures of insubordination (e.g., Disrespectful act and verbal abuse of teachers) relied on principals’ perception. Principals were asked, “To the best of your knowledge, how often did the following types of problems occur at your school?” and principals responded with a number of each discipline for insubordination: 1) expulsion, 2) transfers to specialized schools, 3) out-of-school suspensions lasting 5 or more days and 4) other disciplinary actions (e.g., suspension for less than 5 days or detention).

Violent incident was measured as the actual number of violent incidents based on principals’ report and it included physical attacks/fights, robbery, gang, weapon and sex-related offenses.

Teacher training programs were measured whether the school or district provided training programs for classroom teachers or aides during the 2007–2008 school year. Six items (e.g., classroom management, discipline policies and practices, safety procedures, and positive behavioral intervention strategies) were given. Principals responded yes = 1 or no = 2 to each item and it was recoded as yes = 1 and no = 0. Student-oriented prevention program was measured as principals’ responses. Principals were asked whether their school formally implemented violence prevention programs (e.g., resolving student behavior problems, behavior modification, and counseling) to students. Given eight types of programs, principals answered as yes = 1 or no = 2 to each program, and those were recoded as yes = 1 and no = 0. Teacher training programs and student-oriented prevention programs were used as the sum of those responses, respectively.

Parental involvement was measured using four items (e.g., open house, volunteer and parent-teacher conferences). Principals were asked “What is your best estimate of the percentage of students who had at least one parent or guardian participating in the following events during the 2007–2008 school year?” Given four items, principals responded as 1 = 0 to 25 percent, 2 = 26 to 50 percent, 3 = 51 to 75 percent, 4 = 76 to 100 percent, and 5 = school does not offer. For the analyses, response 5 (school does not offer) was excluded and the mean was computed with a composite of parental involvement in school events (Cronbach’s alpha = .80).

School values, aspirations, underachievers, limited English proficient
(LEP) students, and special education students were measured based on principals’ report as of October 1, 2007. Principals were asked to estimate the percentage of current students who met the following criteria. School value was assessed as a percentage of students who valued academic achievement. Aspiration was measured as a percentage of students who were likely to go to college after graduating high school. Underachiever was estimated as a percentage of present students who were below the 15th percentile on standardized tests. The percent of LEP students and special education students were measured by the principals’ report. Special education students were defined based on the Individuals with Disabilities Education Act.

Three variables of school characteristics were also included in the analyses: ethnic minority students, school level, and school size. A proportion of ethnic minority students have been well demonstrated as a strong predictor of problem behaviors (Skiba, Horner, Chung, Rausch, May, & Tobin, 2011), and students’ insubordination more frequently occurs at secondary schools than elementary schools (Kaufman et al., 2010). In addition, school size does matter; larger schools have more insubordination cases when insubordination is measured as a count. In the study, ethnic minority students were defined as black/African American, Hispanic/Latino, Asian, Native Hawaiian/Other Pacific Islander, and American Indian/Alaska Native students and assessed as a categorical variable indicating 1 = less than 5%, 2 = 5% to 20%, 3 = 20% to 50%, and 4 = more than 50%. School level was created as a dummy variable indicating 1 = middle and high schools and 0 = elementary schools. Finally, school size was measured as a number of enrolled students and included as a categorical variable: 1 = less than 300, 2 = 300 to 499, 3 = 500 to 999, and 4 = more than 1,000. Originally, those variables were derived from the Common Core of Data (CCD) that is an annual data set of the U.S. Department of Education’s National Center for Education Statistics. It contains comprehensive information (both fiscal and non-fiscal) of all public schools in the U.S.

Data Analysis

Descriptive statistics were used to answer the first and second research questions. Multivariate regression analyses were performed to investigate the relationships between student insubordination and school characteristics. In the multiple multivariate regression models, three types of insubordination were included as dependent variables: number of actual insubordination cases, principals’ perceived disrespectful act/verbal abuse of teachers. Two variables (i.e., insubordination and violent incidents) were measured as a count and each variable had a positively skewed distribution. That is, most schools have few insubordination/violent incidents and a small number of certain schools have many incidents. To increase accuracy to estimating the associations in multivariate regression models, these variables were transformed using a base 10 logarithm.

Results

Results of descriptive statistics for the first research question “To what extent do urban schools have student insubordination incidents?” are presented in Table 1 (see appendix). A total 146,157 discipline records for student insubordination is reported by urban schools in the 2007-2008 school year. On average, a school has 97.89 discipline records for student insubordination. Approximately, a quarter of urban schools (n = 369; 24.72%)
has at least one discipline record for student insubordination.

Figure 1 displays the results of the second research question “How are the different discipline practices for student insubordination implemented by school level?” Out of the total number of insubordination incidents, high schools have the most frequent insubordination incidents (63.17%), followed by middle schools (30.44%), elementary schools (5.08%) and combined schools (1.31%). Mostly, discipline outcomes for insubordination are detentions or suspensions for less than five days, yet more than nine percent of insubordination incidents results in severe disciplinary actions, such as expulsion (0.17%), transfer to a specialized school (1.40%) and suspension more than five days (7.53%). See Appendix A and B for details.

Table 2 (see appendix) presents results of multivariate regression analyses to address the third research question “How is student insubordination associated with school factors, after controlling for violent incidents and school characteristics?” Multiple models display the associations between each of three dependent variables (e.g., actual number of insubordination incident, perceived disrespectful act to teachers and perceived verbal abuse of teachers) and school factors.

The first two columns of Table 2 present the estimated associations between insubordination cases and school factors, after controlling for school characteristics. Schools serving more ethnic minority students ($p < .001$), more underachievers ($p < .001$) and more special education students ($p < .01$) tend to have more insubordination cases, whereas schools with more LEP students are less likely to have such incidents ($p < .001$). In addition, schools serving more students who value academic achievement are less likely to have insubordination ($p < .001$). The model 1 shows that school characteristics can account for approximately 36% of the variance of students insubordination measured by school discipline record. When we include three types of school safety initiatives in the model, statistically significant relationships between insubordination and student-oriented prevention programs, and parent involvement reveal.

The second column of Table 2 shows the relationships between different school factors and students’ disrespectful acts to teachers as measured by the principals’ perception. The results appear partly consistent with the results of the first column. Schools with more ethnic minority students and underachievers tend to have disrespectful acts from students to teachers more frequently ($p < .001$) and schools with more LEP students are less likely to have such incidents ($p < .001$). In addition, schools with more students who tend to go
to college and value academic achievement are less likely to have incidents of disrespectful acts towards teachers ($p < .001$). Regarding safety initiatives, only student-oriented prevention programs and parent involvement are observed as statistically significant and negative predictors of students’ disrespectfulness to teachers, after controlling for all other school characteristics ($p < .001$). Both of the two models in the second columns show that school characteristics and having safety initiatives can account for about 20% of the variation of students’ disrespectful acts toward teachers.

The third column of Table 2 shows the associations between school factors and students’ verbal abuse of teacher measured by principals’ perception. Consistently, schools serving more ethnic minority students, underachievers, and special education students seem more likely to have incidents of students verbally abusing teachers ($p < .001$), and schools with more LEP students tend not to ($p < .001$). Again, if schools have more students who tend to go to college and value academic achievement, those schools are less likely to have incidents of students verbally abusing teachers. However, mixed results are observed in this model; while parental involvement appears as a negative predictor of verbal abuse of teachers ($p < .001$), yet schools having multiple student-oriented prevention programs tend to have more frequent students’ verbal abuse of teachers ($p < .05$). Both of the two models in the third column show that school characteristics and having safety initiatives can account for about 28% of the variation of incidents where students verbally abuse their teachers.

**Conclusion**

This study was conducted to investigate to what extent urban schools have student insubordination incidents and which school factors are associated with student insubordination. The following conclusions can be drawn from the results of the study.

First, the findings of the study showed that more than 9% of insubordination cases resulted in severe disciplinary actions including more than five-day suspensions, transferring students to specialized schools, and even expulsion. School administrators and teachers should consider if these discipline methods are effective for student insubordination issues. The methods require students to leave and/or change their learning environments, which have negative effects on students’ academic achievements (Anderson, Howard, & Graham, 2007; Arcia, 2006; Brown, 2007), they are also labeled by staff and peers (Fenning & Rose, 2007; Mellard & Seybert, 1996), and many even drop out of school (Jimerson, Egeland, Sroufe, & Carlson, 2000). Research has shown that students’ defiance and inattention problems can be more effectively disciplined in a humanistic manner rather than in an authoritative manner (Tulley & Chiu, 1995). Further, severe punishments may cause more frequent student insubordination (Way, 2011). Thus, having clearly established school rules and expectations for students would be helpful in preventing students’ insubordination and severe disciplinary actions (Shupe, 1998).

Second, students’ values of school appeared as an important predictor of all three types of insubordination (i.e., actual insubordination incidents, perceived disrespectfulness toward teachers, and
verbal abuse of teachers). School administrators and teachers should make an effort to promote students’ perception of importance in academic achievement. Schools may develop more academic events and encourage students to be involved in them. Schools may emphasize recognition of students’ academic accomplishment at the school, district, state, and national levels covering various subjects and activities (e.g., literature, mathematics, social studies, and music, etc.). Based on the results, it can be concluded that improving students’ perceived value of academic achievement at school level may help decrease insubordination from them.

Finally, parent involvement in school events appeared as a significantly negative predictor of all three types of student insubordination across all multivariate regression models. Parental involvement has demonstrated its positive effects on school success in numerous studies (Jeynes, 2012; LeFevre & Shaw, 2011; Sheldon & Epstein, 2002; Stylianides & Stylianides, 2011) and the current study supports the positive effects in decreasing student insubordination. It is possible that frequent communication between schools and parents improve students’ behaviors. That is, parents clarify school rules and remind their children or those rules and also encourage them to respect school authority. Because the results indicated that more than 60% of student insubordination occurred at high schools, high school administrators especially should consider emphasizing parents’ roles to decrease insubordination incidents.

Study Limitations

Although the findings of the study help understand student insubordination issues better, several limitations should be cautioned. First of all, findings from a cross-sectional data set do not determine causes and effects among the associations. Second, the study solely relied on data from principals’ reports. Future studies should examine this issue from teachers’ and students’ views as well. Third, the study attempted to take into account all potential factors (e.g., number of violent incidents and school background) that may influence the associations between student insubordination and school factors. Yet, SSOCS public-use data do not contain poverty as a variable. Although there is little evidence ensuring the associations between student insubordination and poverty, future studies may include student socio-economic statuses, such as lunch status, parent education level, and/or family income.

References


Seunghee Han received her doctoral degree in Educational Leadership and Policy Analysis from the University of Missouri-Columbia. Her research focuses on school safety, student problem behavior, discipline policies, corporal punishment, and international comparative studies. Dr. Han can be contacted at shhanedu2013@hotmail.com.
## Appendix

### Table 1

*Number of Insubordination Incidents in Urban Schools*

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Min.</th>
<th>Max.</th>
<th>Sum</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schools with at least</td>
<td>1493</td>
<td>0.00</td>
<td>8,687</td>
<td>146,15</td>
<td>97.8</td>
<td>380.7</td>
</tr>
<tr>
<td>one discipline for</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>insubordination (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 2

*Associated School Factors of Student Insubordination in Urban Schools*

<table>
<thead>
<tr>
<th></th>
<th>Number of Insubordination Incident</th>
<th>Perceived Disrespectful Act to Teacher</th>
<th>Perceived Verbal Abuse of Teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1 B (SE)</td>
<td>Model 2 B (SE)</td>
<td>Model 1 B (SE)</td>
</tr>
<tr>
<td>Minority student (%)</td>
<td>.088*** (.005)</td>
<td>.077***</td>
<td>.042*** (.007)</td>
</tr>
<tr>
<td>Underachiever (%)</td>
<td>.008*** (.000)</td>
<td>.007***</td>
<td>.001 (.000)</td>
</tr>
<tr>
<td>Special education (%)</td>
<td>.001** (.000)</td>
<td>.002***</td>
<td>.001 (.001)</td>
</tr>
<tr>
<td>LEP (%)</td>
<td>.003*** (.000)</td>
<td>.002***</td>
<td>-.003*** (.000)</td>
</tr>
<tr>
<td>Aspiration (%)</td>
<td>0.00 (.000)</td>
<td>0.00 (.000)</td>
<td>-.004*** (.000)</td>
</tr>
<tr>
<td>School value (%)</td>
<td>.002*** (.000)</td>
<td>-.002***</td>
<td>-.003*** (.000)</td>
</tr>
<tr>
<td>School level (%)</td>
<td>.396*** (.008)</td>
<td>.360** (.009)</td>
<td>.210*** (.012)</td>
</tr>
<tr>
<td>School size (%)</td>
<td>.077*** (.005)</td>
<td>.073***</td>
<td>.008 (.007)</td>
</tr>
<tr>
<td>Violent incident TT</td>
<td>.389*** (.008)</td>
<td>.387***</td>
<td>.558 (.011)</td>
</tr>
<tr>
<td>SCP</td>
<td>-.012*** (.003)</td>
<td>-.012***</td>
<td>-.012*** (.003)</td>
</tr>
<tr>
<td>PI</td>
<td>-.088*** (.006)</td>
<td>-.088***</td>
<td>-.088*** (.006)</td>
</tr>
</tbody>
</table>

*Note: B (SE) represents the coefficient and standard error.*
Adjusted $R^2$ | .36 | .36 | .20 | .20 | .28 | .28

*Note. A total of 1,493 samples were used for analyses. SE = standard error; LEP = Limited English Proficient students; TT = teacher training programs; SCP = student crime prevention; PI = parental involvement; School level refers to secondary school.

$p < .05$, $**p < .01$, $***p < .001$.

### Appendix A

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Min.</th>
<th>Max.</th>
<th>Sum</th>
<th>Mean</th>
<th>S. D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of students</td>
<td>1,493.00</td>
<td>0.00</td>
<td>9,608.00</td>
<td>166,071.00*</td>
<td>111.23</td>
<td>406.41</td>
</tr>
<tr>
<td>Number of removals for insubordination</td>
<td>1,493.00</td>
<td>0.00</td>
<td>112.00</td>
<td>277.00</td>
<td>0.19</td>
<td>3.06</td>
</tr>
<tr>
<td>Number of transfers for insubordination</td>
<td>1,493.00</td>
<td>0.00</td>
<td>346.00</td>
<td>2,324.00</td>
<td>1.56</td>
<td>11.97</td>
</tr>
<tr>
<td>Number of suspensions for insubordination</td>
<td>1,493.00</td>
<td>0.00</td>
<td>909.00</td>
<td>12,511.00</td>
<td>8.38</td>
<td>45.21</td>
</tr>
<tr>
<td>Number other actions for insubordination</td>
<td>1,493.00</td>
<td>0.00</td>
<td>7,772.00</td>
<td>131,045.00</td>
<td>87.77</td>
<td>357.42</td>
</tr>
</tbody>
</table>

*Note. SSOCS questionnaire assessed total number of students who were involved in insubordination regardless of discipline outcomes. According to the data, 19,914 students (166,071-146,157) might not receive any disciplinary actions for insubordination or received more severe disciplinary actions because SSOCS record the most severe disciplinary action when a student was involved in multiple incidents.
## Appendix B

<table>
<thead>
<tr>
<th>School level</th>
<th>Discipline outcomes for insubordination</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary</td>
<td>Expulsion</td>
<td>115</td>
<td>0.07%</td>
</tr>
<tr>
<td></td>
<td>Transfer</td>
<td>55</td>
<td>0.03%</td>
</tr>
<tr>
<td></td>
<td>Suspension</td>
<td>289</td>
<td>0.17%</td>
</tr>
<tr>
<td></td>
<td>Other disciplinary actions*</td>
<td>6,558</td>
<td>3.95%</td>
</tr>
<tr>
<td></td>
<td>No disciplinary action</td>
<td>1,414</td>
<td>0.85%</td>
</tr>
<tr>
<td>Middle</td>
<td>Expulsion</td>
<td>49</td>
<td>0.03%</td>
</tr>
<tr>
<td></td>
<td>Transfer</td>
<td>1,156</td>
<td>0.70%</td>
</tr>
<tr>
<td></td>
<td>Suspension</td>
<td>5,280</td>
<td>3.18%</td>
</tr>
<tr>
<td></td>
<td>Other disciplinary actions</td>
<td>39,428</td>
<td>23.74%</td>
</tr>
<tr>
<td></td>
<td>No disciplinary action</td>
<td>4,641</td>
<td>2.79%</td>
</tr>
<tr>
<td>High</td>
<td>Expulsion</td>
<td>93</td>
<td>0.06%</td>
</tr>
<tr>
<td></td>
<td>Transfer</td>
<td>1,085</td>
<td>0.65%</td>
</tr>
<tr>
<td></td>
<td>Suspension</td>
<td>6,839</td>
<td>4.12%</td>
</tr>
<tr>
<td></td>
<td>Other disciplinary actions</td>
<td>83,594</td>
<td>50.34%</td>
</tr>
<tr>
<td></td>
<td>No disciplinary action</td>
<td>13,303</td>
<td>8.01%</td>
</tr>
<tr>
<td>Combined</td>
<td>Expulsion</td>
<td>20</td>
<td>0.01%</td>
</tr>
<tr>
<td></td>
<td>Transfer</td>
<td>28</td>
<td>0.02%</td>
</tr>
<tr>
<td></td>
<td>Suspension</td>
<td>103</td>
<td>0.06%</td>
</tr>
<tr>
<td></td>
<td>Other disciplinary actions</td>
<td>1,465</td>
<td>0.88%</td>
</tr>
<tr>
<td></td>
<td>No disciplinary action</td>
<td>556</td>
<td>0.33%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>166,071</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

*Other disciplinary action included suspension with less than five days or detention.*
An Investigation of Attitudes and Perceptions
Toward Inclusion: Comparing Preservice Teachers

to First Year Teachers

Nancy E. Douglas
University of Mississippi

Jerilou J. Moore
University of Mississippi

Kevin B. Stoltz
University of Central Arkansas

Abstract
Over the last decade, the federally mandated “push” for full inclusion has changed the dynamics of general education classrooms to the extent that teachers no longer feel adequately prepared to teach. Teacher preparation programs are vested with the responsibility to prepare preservice teachers so they can provide a learning environment that meets the federal mandate of Least Restrictive Environment (LRE). A lack of preparation may affect the pre-service teachers’ attitude and perception of students with disabilities in a general education classroom. The purpose of this quantitative cross-sectional study was to explore preservice and first year teacher beliefs about preparation concerning inclusion classrooms. The results indicate that attitudes toward inclusion are moderately correlated with candidates or teachers efficacy beliefs about teaching in an inclusion classroom. Additionally, results include a drop in efficacy of teaching in an inclusion classroom with first year teachers. Implications are presented for consideration in training teachers for inclusion classrooms.

Until recently, general and special education services were provided in two separate and distinct settings with different teachers and instructional strategies. As part of the 2004 reauthorization of Individuals with Disability Education Act (IDEA, 2004), the first educational placement for all students, including those with disabilities when appropriate, is mandated as the general education classroom. The federally mandated change requires that students with disabilities (diverse students) be educated in the general education classroom and exposed to the same curriculum as general education students. Thus, general education teachers are now required to provide educational experiences to all students, including those with disabilities, within the framework of the new federal mandates.

According to Stodden, Galloway, and Stodden (2003) with the directive for the Least Restrictive Environment (LRE), teachers are vested with the responsibility of teaching students with disabilities, even though they may have little or no preparation in addressing those students’ individual needs or assisting them with standards-based criteria. In addition, school districts that implement full inclusion in district schools expose preservice teacher candidates to the diversity of the general education classroom even though they may have little preparation to work with students with disabilities (Sze, 2009). These practices, along with the federal mandate, suggest that teachers may need additional training to prepare for full inclusion. Additionally, teacher education programs may need to develop curricular experiences that prepare preservice teachers to meet the needs of
all students. According to Burke and Sutherland (2004) this will require much more knowledge, experience, and expertise to provide appropriate accommodations and related services to help students with disabilities reach their full potential in a general education classroom.

Along with classroom changes for inclusion (e.g., configuring the room to improve the learning environment, and actualizing positive behavior planning and support in the classroom; Obiakor, Harris, Mutua, Rotatori, & Algozzine, 2012) there are expanded responsibilities for general education teachers (e.g., making time for special education training, adapting and modifying programs, and collaborating with special education teachers; Doorn, 2003). Studies (Burke & Sutherland, 2004; Doorn, 2003; Jobling & Moni, 2004; Jung, 2007) indicate that general education teachers may not possess the attitudes, or professional preparation needed to meet the expanded responsibilities of teaching in an inclusive classroom. Although professional development for in-service teachers remains a prominent approach in preparing for inclusion, increased emphasis is being placed on the roles and responsibilities of teacher preparation programs to prepare new educators for teaching in inclusive settings (Van Laarhoven, Munk, Lynch, Bosma, & Rouse, 2007).

Current research (Boling, 2009; Bradshaw & Mundia, 2006; Fajet, Bello, Leftwich, & Mesier, Shaver, 2005) suggests that preservice teacher candidates and teachers report they are not prepared professionally with the knowledge and skill for an inclusion classroom. Several issues have been identified that may add to this view of a lack in professional preparation [e.g. lack of field experience with students that have disabilities (Campbell, Gillmore & Cuskelley, 2003; Richards & Clough, 2004); the need for specialized skills and knowledge of teaching in an inclusion classroom (dual certification) (Ford, Pugach, & Othis-Wilborn, 2001; Hadadian & Chiang, 2007; Jenkins, Pateman, & Black, 2002; Shippen, Crites, Houchins, Ramsey, & Simon, 2005); preservice teachers’ preconceived attitudes and perceptions toward inclusion (Jobling & Moni, 2004; Jung, 2007; Palmer, 2006); and confidence and teaching self-efficacy levels of in-service teachers and preservice teacher candidates (Berry, 2010; Campbell et al., 2003; Palmer, 2006; Sari, Ceiloz & Seer, 2009)]. Better understanding of these issues is imperative to helping change teacher education programs and produce teachers who are more equipped to provide effective educational experiences in an inclusion environment. The purpose of this study was to measure preservice teacher candidates’ and first year teachers’ attitudes toward inclusion and teacher self-efficacy for inclusion practices.. Additionally, we sought to investigate relationships between these constructs and to explore teaching self-efficacy of inclusion practices in candidates and first year teachers.

**Teacher Preparation**

Teacher preparation institutions have the opportunity to influence the way preservice teacher candidates are prepared for 21st century classrooms (Campbell, et al, 2003; Forlin, Loreman, Sharma, & Earle, 2009; Jenkins, Pateman, & Black, 2002; Richards & Clough, 2004; Strayton & McCollum, 2002). Inclusion mandates are causing teacher education programs to examine the way curriculum is designed to assist teacher candidates in meeting the needs of all learners in the classroom. In many teacher education programs, the preservice teacher candidates choose between elementary education, special education, and secondary education with very little integration or overlapping of classes between the program areas, especially, in the program field experience. Many universities are struggling with the need to revise their curricula and
pedagogy to better prepare teacher candidates for inclusion requirements (Forlin, Loreman, Sharma, & Earle, 2009). A study by Sze (2009) measuring preservice teachers’ attitudes toward inclusion exposed a possible connection between attitudes and teaching performance. She determined that a preservice teacher with a positive attitude toward inclusion, and who has been trained in the appropriate skills and knowledge needed for an inclusive classroom, should have successful academic outcomes for all students.

Preservice Teachers Attitudes, Perceptions, and Self-Efficacy of Inclusion.

Preservice teacher candidates’ attitudes and perceptions toward inclusion can influence the success of an inclusion classroom (Berry, 2010). These candidates come into the field of education with a variety of values and attitudes based on their own k-12 experiences and other social influences. With the changing requirements concerning inclusion, these previous experiences and social influences may have a negative effect on preservice teacher candidates’ perception of teaching students with disabilities. Outcomes in inclusion classrooms are more positive when the teachers possess attitudes toward working with students that have disabilities (Burke & Sutherland, 2004). Burke and Sutherland credit the positive attitude with contributing to the overall success of an inclusion program. Jobling and Moni (2004) found that research on preservice teacher candidates’ perception of inclusion was inconclusive, but stated that measuring the perceptions and attitudes of preservice teacher candidates toward inclusion is a starting point for redesigning teacher education curricula to enhance effective instruction in an inclusive general education setting.

Jung (2007) stated that along with changed attitudes and perceptions of inclusion, preservice teacher candidates need to increase their confidence levels and self-efficacy when dealing with special needs students. Hoy (2000) found that preservice teachers’ self-efficacy was strong during their student teaching experience, but when they transitioned into their own classroom, these first year teachers experienced a drop in teaching self-efficacy. Hoy’s results indicated that this drop was accompanied by a feeling of inadequacy toward teaching students with special needs. A study by Richards and Clough (2004) found that preservice teacher candidates reported feeling prepared for an inclusion classroom until they actually started teaching; when they recounted a lack of skills needed to meet the needs of all the learners. This literature indicates that teacher candidates may benefit from additional exposure to skill building experiences focused on knowledge, skills, and dispositions concerning inclusion classrooms. In addition, according to Berry, teacher candidates’ attitudes toward inclusion may influence the self-efficacy of the teacher leading to increased or decreased overall teaching efficacy.

The challenges associated with the implementation of the mandate for inclusion in public schools led us to conduct a study using preservice teacher candidates and first year teachers measuring inclusion self-efficacy and teacher efficacy. The purpose of this study is to explore the relationship between attitudes and self-efficacy, and compare preservice teacher candidates’ to first year teachers’ on these two variables.

Method

Participants

The sample participants used for this quantitative cross-sectional study were senior preservice teacher candidates in the areas of elementary and secondary education that graduated in May 2013, and first year teachers that graduated in May 2012, from a four-year
public research institution in the southeastern United States. We used a convenience sampling method for choosing participants for this study. The participants consisted of women (n= 76) and men (n=15), with an average age (26 years-old).

**Instruments**

The Sentiments, Attitudes, and Concerns about Inclusion Education - Revised (SACIE-R; Forlin, Earle, Loreman, & Sharma, 2011) measures preservice teachers’ perceptions on three constructs of inclusive education. The SACIE-R includes a demographic section which is comprised of six questions: gender, age, highest qualification obtained, prior contact with individuals with a disability, previous training in the area of students with disabilities, and amount of experience teaching students with disabilities (Forlin, Loreman, Sharma, & Earle, 2009). The second portion of the instrument directs respondents to indicate answers to questions (e.g., I am concerned that students with disabilities will not be accepted by the rest of the class; I am concerned that it will be difficult to give appropriate attention to all students in an inclusion classroom) on a 4-point Likert scale (i.e., Strongly Disagree, Disagree, Agree, Strongly Agree).

There are three psychometric constructs measured by the SACIE-R that are relevant to aspects underlying a teacher’s beliefs and support of inclusive education (Forlin et al., 2011). The first construct is the sentiments scale (S), which is the sentiment or comfort level when engaging with people who have a disability. The attitudes scale (A) represents teacher’s outlook or willingness toward having students with disabilities included in a general classroom setting. The final scale, concerns (C), represents the implementation or adaptation of teaching strategies to meet the educational needs of students with disabilities.

The original Sentiments, Attitudes, and Concerns about Inclusive Education scale (SACIE; Loreman, Earle, Sharma, & Forlin, 2007) was tested using factor analysis with (n = 996) preservice teachers from five institutions. A revised version, SACIE-R, was developed by Forlin, Earle, Loreman, and Sharma (2011). The revised version was tested using a four-stage process: Stage 1 was the initial review and consisted of a sample of (n = 297) preservice teachers from four institutions in three countries (Canada, Australia, & Singapore) and the province of Hong Kong; Stage 2 consisted of testing the revised scale which included the removal of 4 items followed by testing with a different sample of (n = 227) preservice teachers from three institutions in Hong Kong, Australia, and Singapore; Stage 3 included another minor revision and further testing with (n=186) preservice teachers from Canada and Hong Kong; and Stage 4 was the final validation study using the 15-item, three-factor scale with (n = 542) preservice teachers from 9 institutions and four countries. These studies demonstrated consistent loadings on the specified factors indicating empirical support for the construct validity of the scale.

In SACIE-R validation study (Forlin, Earle, Loreman, & Sharma, 2011), the reliability coefficients (Cronbach’s alpha) resulted in the subscales of Sentiments (.75), attitudes (.67), and concerns (.65) with a combined scale (.74) indicating acceptable internal consistency reliably of the instrument. Results from the present study revealed internal consistency reliability coefficients (Cronbach’s alpha) of Sentiments (.65), Attitudes (.63), Concerns (.68), and a total scale coefficient of (.78) again indicating marginally acceptable internal consistency.

The Teacher Efficacy for Inclusive Practice Scale (TEIP; Sharma, Loreman, & Forlin, 2012) measures perceived teacher
efficacy to teach in an inclusive classroom. The TEIP consists of 18 items representing three factors. The factors are: Efficacy in Using Inclusive Instruction (EUII), Efficacy in Collaboration (EC), and Efficacy in Managing Behavior (EMB) (Sharma et al., 2012). The first scale, EUII, measures individual perceptions for the ability to use inclusion instruction in classrooms. The second scale, EC measures the individual’s perceptions of abilities to consult with parents and other professionals. Factor three; EMB measures self-perceptions of skills and abilities to respond to disruptive behaviors in the classroom. Participants respond to questions (e.g., I can make my expectations clear about student behavior; I can accurately gauge student comprehension of what I have taught) using a six-point Likert scale (1 = strongly disagree; 2 = disagree; 3 = disagree somewhat; 4 = agree somewhat; 5 = agree; 6 = strongly agree).

This instrument was created using an exploratory factor analysis on 26 items to establish the factors (Sharma et al., 2012). Of the original 26 items, 18 met criteria for inclusion in the scale. The 18-item scale was developed from a sample of (n = 609) preservice teachers selected from three countries (Australia, Canada, and India) and the province of Hong Kong. Inter-correlations used to identify items that were highly correlated (>.80). Also, items that loaded on more than one factor were deleted. Three factors accounted for 64.5% of the variance. Alpha coefficients were; total scale (.89), EUII (.93), EC (.85), and EMB (.85) (Sharma et al., 2012). Internal reliability analysis indicated good internal consistency reliability for the scale. Internal consistency reliability results from the present study were: total scale (.92), EUII (.83), EC (.75), and EMB (.84).

Procedures

Forty-six survey packets were given to University Supervisors to distribute to the student teacher candidates that included elementary (n=37) and secondary (n=9) education majors. Forty survey packets were returned (n=31 elementary; n=9 secondary) with a response rate of 86.9%. According to the Instructional Assessment Resources (2011) an acceptable response rate for this type of survey administration is anything greater than 50%. The response rate of 86.9% is well above the acceptable range.

To collect first year teacher data, 132 surveys were emailed using the online software program, Qualtrics (Qualtrics, Provo, UT). Of these, 56 surveys were attempted, with 51 surveys completed. This is a 37.5% response rate. The acceptable response rate for on-line surveys is 30% per the Instructional Assessment Resources (2011). Therefore the response rate of 37.5% exceeds this minimum threshold.

Results

Data Analyses

To explore the use of the SACIE-R and the TEIP with this sample we first tested the means of our samples to the population parameters. Next we explored relationships between these two constructs. Finally, we tested for differences between the two groups (preservice teacher candidates, first year teachers) using scores from each set of scales.

A one-sample t-test was used to compare the mean population parameter to the combined sample of preservice teacher candidates and first year teachers for the Sentiments Scale of the SACIE-R (µ=10.584). A significant difference was found, (t(90) = 4.681, p = .000 with the sample mean (X = 16.088) being significantly higher than the population mean. The same test was conducted
to compare the sample mean for the Attitudes Scale to the population parameter ($\mu = 14.317$). There was a significant difference found, $t(90) = -3.778$, $p = .000$ with the sample mean ($\bar{x} = 13.40$) being significantly less than the population mean. For the Concerns Scale one-sample $t$-test, the population value ($\mu = 13.0805$) was used. There was a significant difference found, $t(90) = -1.694$, $p = .094$ again, showing the sample mean ($\bar{x} = 12.83$) significantly less than the population mean.

Population parameters for the Teacher Efficacy for Inclusive Practice (TEIP) Scale was compared to a study done by Peebles (2012) using a one sample $t$-test on the sample of student teacher candidate ($n=141$) for the EUII ($\mu = 25.87$). A significant difference was found, $t(39) = 12.149$, $p = .000$ with the sample mean ($\bar{x} = 31.65$) being significantly higher than the population mean. The same test was conducted to compare the sample mean for the EC to the population parameter ($\mu = 25.94$). There was a significant difference found, $t(39) = 9.52$, $p = .000$ with the sample mean ($\bar{x} = 30.48$) being significantly higher than the population mean. For the EMB one sample $t$-test, the population value ($N = 24.54$) was used. There was a significant difference found, $t(39) = 8.57$, $p = .000$ again, showing the sample mean ($\bar{x} = 30.06$) significantly higher than the population mean.

For analyzing the relationships among the variables we used bivariate correlations. The results indicated that all variables related significantly except for the correlation between attitudes (SACIE-R) and efficacy towards inclusion (TEIP) (Table 1). The only correlation not showing a significant relationship was the Attitudes Scale and Efficacy in Managing Behavior Scale.

The final analysis consisted of an ANOVA to compare groups (level of teacher) by mean scores of the SACIE-R and the TEIP. The results (Table 2) indicated no differences between teacher groups on the SACIE-R. However, there were significant differences between groups on the scores of the TEIP.

**Effect Size**

The results of the between groups effect size includes; Sentiments Scale, .0022; Attitudes Scale, .0031; and Concerns Scale, .0039; EUII, .1542; EC, .1428; and EMB, .0897. Based on Cohen’s (1988) interpretation, there is small to little effect noted in the results.

**Discussion**

The purpose of this study was to explore relationships among the variables to demonstrate that attitudes toward inclusion and teacher self-efficacy concerning inclusion practice are related. Additionally, we investigated changes in teacher self-efficacy reported in previous research (Freytag, 2001; Hoy, 2000; Palmer, 2006).

The results of the correlation analysis demonstrated that scores on the SACIE-R and TEIP were related in this sample. These significant relationships underscore that when teacher candidates or first year teachers believe that children with disabilities should be included in regular classrooms (Attitudes), their perceptions of self-efficacy for inclusion practices are higher. There were also two positive relationships with the Sentiments scale. Those teacher candidates or first year teachers that indicated comfort with being around individuals with a disability (Sentiments) also scored higher on the EUII and EC scales for inclusion practices. There was not a significant correlation with the EMB scale indicating that managing behavior in the classroom is not related to a teacher’s sentiments about being around students with a disability. In essence, a teacher may not need to have positive sentiments to feel comfortable managing a classroom that
includes students with a disability. Additionally, the Concerns scale was significantly related to all the scales on the TEIP. Again, this indicates that those teacher candidates and first year teachers with higher concerns about students with disabilities being accepted by the class, or concerns about the teacher’s own abilities to meet the added workload and provide appropriate attention to all students, also demonstrate higher amounts of self-efficacy for inclusion practices. This result indicates that an overall consciousness toward students with a disability may promote confidence in working with students that have a disability.

In the second analysis, we compared the teacher candidate’s scores of self-efficacy for inclusion practices to those of the first year teachers. The results showed a decline in self-efficacy for inclusion practice in the first year teachers. This is consistent with previous studies (Campbell, et al., 2003; Hoy, 2000; Palmer, 2006) and demonstrates that when teachers begin working in a full inclusion classroom without a dual certification (special education accompanied with specific grade level training) these teachers may experience a drop in self-efficacy. According to the National Commission on Teaching and America’s Future (2007), up to 50% of teachers leave the profession within the first five years. Richards and Clough’s (2004) study found that most preservice teacher candidates believe they are prepared for an inclusive classroom until they actually start teaching and then they experience self-doubt toward their ability to help all students succeed. Additionally, Johnson (2006) states that we lose teachers due to poor working conditions and lack of proper instruction for the large achievement gap found in today’s classrooms.

The findings of this study do provide specific insights, yet these are limited by specific constraints. The sample was small and limited to one university. Additionally, the sample was selected based on convenience. These sample characteristics limit the generalizability of the study. Additionally, the use of a cross-sectional design does not account for possible differences in self-efficacy of the two samples (teacher candidates and first year teachers). Future researchers may focus on longitudinal designs to test for developmental differences with teachers concerning self-efficacy for inclusion practices.

Finally, inclusion is a reality for general classroom teachers. Teacher candidates come to the profession with attitudes, sentiments, and concerns that may influence their overall self-efficacy toward teaching in an inclusion classroom environment. The results of this study suggests that teacher preparation program may need to address teacher candidate dispositions toward inclusion practices to better prepare teacher candidates for the reality of the general classroom environment.

References


experience. Education, 125(2), 163-172.


Qualtrics software, Version (2013) of the Qualtrics Research Suite. Copyright © (2005) Qualtrics. Qualtrics and all other Qualtrics product or service names are registered trademarks or trademarks of Qualtrics, Provo, UT, USA. http://www.qualtrics.com


Nancy E. Douglas is an Assistant Professor of Education in the Teacher Education Department at the University of Mississippi. She teaches Special Education, Reading, and Mathematics. Her research focuses on teacher beliefs, efficacy, and dispositions concerning inclusion of students with disabilities in a general education classroom. Dr. Douglas is the corresponding author on this article and can be contacted at douglasn@olemiss.edu.

Jerilou J. Moore is an Associate Professor of Education in the Teacher Education Department at the University of Mississippi. She teaches Reading, Technology, Language Arts, Differentiated Instruction, and the Arts. Her research interests are focused on methodology and modeling theory to practice.
Kevin B. Stoltz is an Associate Professor in the Department of Leadership Studies at the University of Central Arkansas. His areas of research interest include, career development and counseling, teacher career development, and quantitative research methods. Kevin has published in national and international journals regarding, career development and counseling. He also serves on the editorial board of several journals and is chair of the research committee for the National Career Development Association.
Appendix

Table 1: Correlation Between SACIE-R and TEIP Scales

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sentiments</th>
<th>Attitudes</th>
<th>Concerns</th>
<th>EUII</th>
<th>EC</th>
<th>EMB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sentiments</td>
<td>1</td>
<td></td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Attitudes</td>
<td>.210*</td>
<td>1</td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Concerns</td>
<td>.581**</td>
<td>.302**</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>EUII</td>
<td>.326**</td>
<td>.243*</td>
<td>.441**</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>EC</td>
<td>.394**</td>
<td>.213*</td>
<td>.371**</td>
<td>.800**</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>EMB</td>
<td>.307**</td>
<td>.096</td>
<td>.277**</td>
<td>.732**</td>
<td>.702**</td>
<td>1</td>
</tr>
</tbody>
</table>

Note. Sentiments = Sentiments Scale, Attitudes = Attitudes, Concerns = Concerns Scale, EUI = Efficacy in using inclusion, EC = EMB = Efficacy in managing behavior. *Correlation is significant at the .05 level. **Correlation is significant at the .01 level.

Table 2 – ANOVA Table

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>95% Confidence Interval for Mean</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower Bound</td>
<td>Upper Bound</td>
<td></td>
</tr>
<tr>
<td>Attitudes Scale</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FYT</td>
<td>51</td>
<td>13.6225</td>
<td>2.00772</td>
<td>13.0579</td>
<td>14.1872</td>
<td></td>
</tr>
<tr>
<td>Sentiments Scale</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FYT</td>
<td>51</td>
<td>16.0000</td>
<td>1.91833</td>
<td>15.4605</td>
<td>16.5395</td>
<td></td>
</tr>
<tr>
<td>Concerns Scale</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ST</td>
<td>40</td>
<td>12.8250</td>
<td>2.74458</td>
<td>11.9472</td>
<td>13.7028</td>
<td>.346</td>
</tr>
<tr>
<td>FYT</td>
<td>51</td>
<td>12.5294</td>
<td>2.05283</td>
<td>11.9520</td>
<td>13.1068</td>
<td></td>
</tr>
<tr>
<td>Efficacy in</td>
<td>ST</td>
<td>FYT</td>
<td>ST</td>
<td>FYT</td>
<td>ST</td>
<td>FYT</td>
</tr>
<tr>
<td>--------------</td>
<td>-----</td>
<td>------</td>
<td>-----</td>
<td>------</td>
<td>-----</td>
<td>------</td>
</tr>
<tr>
<td>Inclusion</td>
<td>40</td>
<td>31.6500</td>
<td>3.00896</td>
<td>30.6877</td>
<td>32.6123</td>
<td>16.220</td>
</tr>
<tr>
<td></td>
<td>51</td>
<td>28.7333</td>
<td>3.72380</td>
<td>27.6860</td>
<td>29.7807</td>
<td></td>
</tr>
<tr>
<td>Collaboration</td>
<td>40</td>
<td>30.4750</td>
<td>3.01269</td>
<td>29.5115</td>
<td>31.4385</td>
<td>14.822</td>
</tr>
<tr>
<td></td>
<td>51</td>
<td>27.9216</td>
<td>3.23631</td>
<td>27.0113</td>
<td>28.8318</td>
<td></td>
</tr>
<tr>
<td>Behavior</td>
<td>40</td>
<td>30.0250</td>
<td>4.04771</td>
<td>28.7305</td>
<td>31.3195</td>
<td>8.774</td>
</tr>
<tr>
<td></td>
<td>51</td>
<td>27.4706</td>
<td>4.11025</td>
<td>26.3146</td>
<td>28.6266</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* * = statistically significant difference
Improving Preservice Teachers’ Knowledge of Response-to-Intervention (RTI): How Online Professional Development Modules Can Help?

Nai-Cheng Kuo
Georgia Regents University

Abstract
Response-to-intervention (RTI) is “a multi-tier approach to the early identification and support of students with learning and behavior needs” (RTI Action Network, 2014). RTI began to be recognized around 2004, when the Individuals with Disabilities Education Act (IDEA) was reauthorized. In the midst of a national movement toward increasing uses of RTI, the development of knowledge of RTI for preservice teachers who will be engaged in its implementation is of high importance. This study examined the impact of a set of online professional development modules—IRIS modules—on preservice teachers’ knowledge of RTI. Many federal dollars have been invested in the IRIS Center and these modules have been widely used. Yet, little is known about the learning outcomes for preservice teachers in response to these modules. A total of 55 preservice teachers enrolled in a special education teacher preparation program at a large Midwest public university participated in the study. Each participant spent approximately 20 hours on completing eight assigned modules. The results indicate that the experimental group performed significantly better than the control group on the RTI-Reading Knowledge Assessment, providing evidence that the intervention was beneficial. Implications and limitations of using online professional development modules are discussed.

Response-to-intervention (RTI) is known as a multi-level prevention and intervention approach (National Center on Response to Intervention, 2013). With the support of the federal laws—the No Child Left Behind Act (NCLB, 2002) and the Individuals with Disabilities Education Act (IDEA, 2004)—more than 60% of K-12 public schools nationwide are currently implementing RTI.

To prepare teachers for implementing RTI, there are several government-sponsored online professional development programs available for public use. For example, the IDEA ’04 and Research for Inclusive Settings (IRIS) Center, sponsored by the U.S. Department of Education, Office of Special Education Programs (OSEP), has developed several modules about RTI. Although over 470,000 teachers and teacher educators have participated in online learning through IRIS, there is little empirical research to support its impact on preservice teachers. To fill the gap in this literature, this study examined how effective IRIS modules are for improving preservice teachers’ knowledge of RTI.

Response-to-Intervention (RTI)
Typically, RTI is represented by a three-tiered triangle model with Tier 1 represented as green, Tier 2 as yellow, and Tier 3 as red (See Figure 1). According to leading RTI scholars (e.g., Fuchs and Fuchs, 2006), all students receive differentiated instruction and evidence-based instruction provided by general education teachers in Tier 1. It is expected that Tier 1 can meet 80 to 85 percent of students’ needs in general classes [the percent is slightly different in different RTI models]. Students who do not appropriately respond to Tier 1 instruction will be provided with more intensive, strategic and evidence-based interventions within small groups in Tier 2. Depending on school budgets and resources, Tier 2 can be conducted by general education teachers who have been trained in RTI or conducted by intervention specialists (e.g., subject specialists, paraprofessionals, Title I teachers, or special education teachers) within or outside the general classroom. It is expected that approximately 10 to 15 percent of students who do not adequately
respond to Tier 1 instruction should make appropriate progress in Tier 2. Those who still fall significantly behind their peers will be provided with the most intensive interventions in Tier 3, which are tailored to meet the specific needs of students (Fuchs & Fuchs, 2006).

The IDEA ’04 and Research for Inclusive Settings (IRIS) modules

As of 2013, the IRIS Center has developed a total of 53 modules for public use. These modules are categorized into different topics by the IRIS Center, including accommodations, assessment, assistive technology, behavior and classroom management, collaboration, content instruction, differentiated instruction, disability, diversity, learning strategies, math, leadership, response-to-intervention (RTI), and so on. Some modules are overlapped across topics. Each IRIS module consists of five components which are designed based on the evidence-based cycle of a learning theory created by Dr. Bransford and his colleagues (Bransford, Brown, & Cocking, 1999).

- **Challenge** – a realistic scenario relevant to education professionals
- **Initial Thoughts** – questions that allow students to explore and consider what they currently know about the scenario presented in the Challenge
- **Perspectives and Resources** – nuggets of information (e.g., text, movies, audio interviews, activities) that allow students to actively engage in learning the module's main content
- **Assessment** – an evaluation tool that offers students the opportunity to apply what they know and to evaluate what topics they need to study further
- **Wrap Up** – a summary of the information presented in the previous components

According the IRIS Center, a field test data was collected from a total of 1,744 preservice teachers. The majority of the preservice teachers were in general education (71.7%); the others were in special education (9.5%), counseling (2.5%), psychology (0.9%), and other areas of study. The results show that “the majority of students responding to the survey felt they had learned something from the module,” and “most respondents rated the module as being of high quality and relevant” (IRIS Center, 2013b).

Furthermore, another two IRIS module studies were conducted during the 2004-2005 and 2005-2006 academic years. In the first study, a total of 620 students were assigned to a module group and a non-module group, respectively. The study was to examine the participants’ performance on the Initial Thoughts questions (as a pretest instrument) and on the Final Thoughts questions (as a posttest instrument). The responses were scored. “To perform well, students would need to apply content that was covered by the text and/or the module” (IRIS Center, 2013b). The results indicated that “the average posttest score for students who viewed the module was significantly higher than for students who did not” (IRIS Center, 2013b). In the second study, a total of 480 students were assigned to an Independently Viewed group and the Instructor-Enhanced group. Both groups received multiple-choice and open-ended questions. The results show that “although students did gain in their factual knowledge about self-regulation [in both conditions], more involvement by the instructor did not result in enhanced performance” (IRIS Center, 2013b).
While some of the other modules continue to be embedded in coursework in different universities, and instructors and students consider the modules to be practical and helpful (e.g., Rodriguez, Gentilucci, & Sims, 2006; Smith et al., 2005), there are limited experimental or quasi-experimental studies that used a set of IRIS-RTI modules. Therefore, this study attempted to provide information about what the participants’ actual performance was after using eight assigned IRIS modules.

Preservice Teacher Online Learning

Online approaches to teacher preparation have become an important issue in two- and four-year institutions. University professors in general education often integrate or infuse special education issues through online learning modules or web-based distance education (Smith, Smith, & Boone, 2000). Smith and his colleagues’ (2000) quasi-experimental study showed that although preservice teachers performed equally well in traditional and online instructional settings, online learning provided “ongoing access to instruction in a flexible accessible environment,” which offers “potential advantages to student comprehension and ongoing application across teacher preparation curricula” (Smith, Smith, & Boone, 2000, pp. 28-29).

Another benefit of online learning is that it can help teacher educators understand preservice teachers’ reflective thinking through embedded media, such as videodisc cases (Abell, Bryan, & Anderson, 1998). Smith and his colleagues (2000) pointed out that because online learning provides more comfortable space for preservice teachers to express their thoughts, teacher educators can observe their students’ reflections through online learning.

A similar technique was also found in the IRIS modules’ Initial-and-Final Thoughts questions. Because there is little research addressing preservice teacher learning related to online learning through a set of IRIS modules, there is a need to continue studies in this area.

Methods

Participants

The participants of the present study included juniors, seniors, and interns who were enrolled in a special education teacher preparation program at a large Midwest public university. Of 140 enrolled students, 81 students (58%) voluntarily participated in this study. All participants completed the written consent forms prior to participating in the study, and they all completed a pre-assessment before the intervention of the modules. The majority of the participants were white (90%) and female (93%).

Grouping

Based on the results of the RTI-Reading Knowledge Assessment (the instrument will be introduced later), the 81 participants were grouped into a control group and an experimental group. The participants were stratified into three subgroups: juniors, seniors, and interns. The reason for the stratification was to ensure that both the control group and the experimental group had an equal (or close to equal) number of juniors, seniors, and interns, so the impact from the coursework should have been similar. The participants were then randomly assignment into a control (comparison) group and an experimental group. In the end, 40 participants were assigned to the control group (including 13 juniors, 21 seniors, and 6 interns) and 41 participants were assigned to the experimental group (including 13 juniors, 22 seniors, and 6 interns).

Data Collection Procedures

Each participant was asked to spend two to three uninterrupted hours on each module; eight modules were assigned. All participants were provided a navigation video clip developed by the IRIS Center. After completing all the modules, the participants were given a post-assessment. This study adopted ANGEL, an online management system that assisted the researcher in collecting, monitoring, and analyzing the data. One sample of the ANGEL web pages used in this study is shown in Figure
2 (following reference pages). Because all modules were provided online, there was no risk related to the differences of interventions across conditions.

**Instruments**

**Pre- and post-assessment instruments.**
The *RTI-Reading Knowledge Assessment*, consisting of 66 Teacher Knowledge Survey (TKS) test items, 29 IRIS test items, and 25 Literature test items, was used for the pre- and post-assessment instruments. The TKS, developed by Dr. Louise Spear-Swerling and her colleagues, has been tested multiple times and the results have been published in peer-review journals (Spear-Swerling and Cheesman, 2012). The TKS includes questions in three areas: RTI, assessment, and the five components of reading. The Cronbach’s alpha indicated that the test items of TKS were internally consistent and had high reliability (Spear-Swerling and Cheesman, 2012). With the permission of Dr. Spear-Swerling, the 66 TKS test items were used in the present study.

In addition to the TKS test items, the IRIS module open-ended questions were turned into multiple-choice questions as part of the pre-assessment instrument to investigate the participants’ knowledge of RTI prior to the intervention. When turning the IRIS module’s open-ended questions into multiple-choice questions, it was more likely that the participants would complete the pre-assessment within two to three hours. These multiple-choice questions may not test exactly what each initial IRIS module open-ended question intended to test. However, these questions could still provide an initial understanding of the participants’ knowledge of RTI before they received the intervention of the study.

Furthermore, 25 questions, involving essential knowledge related to RTI, such as cultural diversity (Donovan & Cross, 2002; Klingner & Edwards, 2006; Orosco and Klingner, 2010; Rinaldi & Samson, 2008; RTI Action Network, 2014) and teacher quality (Cochran-Smith, 2003; Brownell, Sindelar, Kiely, & Danielson, 2010; Fenstermacher & Richardson, 2005; Fuchs, Fuchs, & Compton, 2012; Murawski & Hughes, 2009) were developed. By including the TKS and Literature questions, the *RTI-Reading Knowledge Assessment* assessed participants’ knowledge of RTI more comprehensively.

The 54 multiple-choice questions (29 IRIS test items and 25 Literature test items) were reviewed by three writing consultants at a university writing center, using Wollack’s (2003) criteria to examine each of these multiple-choice questions. The criteria include:

- Each item should be concise and uncomplicated.
- The answer to each question should be really correct and not just the best answer among all options.
- Each item should be independent from other items, so the examinee cannot get the answer from the alternatives of another item or from the clues.
- Each item should have only one objective to avoid being misunderstood by the examinee.
- Questions should use positive statements and avoid trickery.

Two university faculty members who were knowledgeable about RTI also critically reviewed these questions. Changes and adjustments were made based on discussions. For the pre-assessment (*n* = 81), Cronbach’s Alpha indicated that the internal consistency of the pre-assessment items within each sub-area (TKS, IRIS, and Literature) was adequate. The internal consistency was .828 for TKS, .762 for IRIS, and .710 for Literature. The *RTI-Reading Knowledge Assessment* is available upon request.

**Pre- and post-survey questionnaires.**
The pre-survey questionnaire collected information about the participants’ demographic characteristics. The post-survey questionnaire used a Likert scale with sixteen questions to
obtain descriptive data related to social validity for the intervention. The sixteen questions are presented in the result section where participants’ acceptability and satisfaction with the intervention are reported.

**Data Analysis**

**Pre- and post-assessment instruments.** The paired t-test, independent t-test, and multivariate analysis of variance (MANOVA) were conducted for the within-group comparison and the between-group comparison regarding the pre- and post-assessment outcomes.

**Pre- and post-survey questionnaires.** A hierarchical multiple regression analysis was conducted to examine the relationships between the participants’ demographic characteristics and their assessment scores.

Table 1 (see Appendix) summarizes how data was collected and analyzed to address the research questions of this study.

**Intervention and Comparison Conditions**

After taking the online pre-assessment, the participants in the experimental group completed eight IRIS modules related to RTI-Reading assigned in a designated order. The modules used in the experimental group were under the topic of RTI as grouped by the IRIS Center. The control group completed another eight IRIS modules assigned by the researcher. The modules used in the control group met two selection criteria. First, they were not under the topic of RTI grouped by the IRIS Center. Second, they did not have a focus on RTI in the academic domain of reading interventions. Except for using different modules, the comparison conditions were exactly the same as the intervention conditions. Because the control group also received a treatment just like the experimental group did, they could still improve their knowledge through the modules, but that was not attributable to the actual intervention. The modules used for the experimental group and for the control group were shown in Table 2 (see Appendix).

**Results**

**Equivalence Examination Before the Intervention**

An independent t-test was run to examine whether the control and experimental groups were equivalent in terms of their mean scores on the pre-assessment. A t value of .549 ($p = .584$) indicated that there was no significant difference between the control group and the experimental group. That is to say, the two groups were equivalent for the purpose of this study. Furthermore, a t value of .294 ($p = .772$) indicated that there was no significant difference between the juniors’ mean scores in the control group ($n = 13$) and in the experimental group ($n = 13$). A t value of .272 ($p = .787$) indicated that there was no significant difference between the seniors’ mean scores in the control group ($n = 21$) and in the experimental group ($n = 22$); and a t value of .792 ($p = .448$) indicated that there was no significant difference between the interns’ mean scores in the control group ($n = 6$) and in the experimental group ($n = 6$). In short, the control group and the experimental group, including the subgroups, were equivalent.

**Attrition**

Attrition refers to the dropout of participants from a study. In this study, there were 55 participants who completed the study (completion rate: 68%). A review of the email messages from the participants who decided to withdraw from the study indicated that the dropouts were not due to factors that were directly related to the study. These participants explained that because of other obligations that had come up, they could not complete the study as they had planned. Although the dropouts seemed not to cause any validity issues for the study, it is still important to know whether the dropouts had any significant impact on the initial equivalence status. Therefore, an independent t-test was used to evaluate the equivalence.

A t value of 1.469 ($p = .150$) with an effect size of .70 indicated that there was no significant difference between the remaining
participants’ \((n = 29)\) and the dropout participants’ means \((n = 11)\) in the control group; and a \(t\) value of 1.857 \((p = .071)\) indicated that there was no significant difference between the remaining participants’ \((n = 26)\) and the dropout participants’ means \((n = 15)\) in the experimental group. In addition, a \(t\) value of .726 \((p = .471)\) indicated that there was no significant difference between the remaining participants in the control group \((n = 29)\) and in the experimental group \((n = 26)\). The results showed that the control group and experimental group remained equivalent after attrition.

**Research Question 1: Participants’ Performance on the RTI-Reading Knowledge Assessment**

According to the ANGEL user matrix records, more than 90% of the participants spent approximately 20 hours on completing eight assigned modules in three weeks. Approximately 10% of the participants spent a month on completing the eight modules. On average, each participant spent 2.5 hours on each module.

Cronbach’s Alpha indicated that the internal consistency of the post-assessment items within each sub-area were adequate. For the post-assessment \((n = 55)\), the internal consistency was .885 for TKS, .820 for IRIS, and .733 for Literature.

The paired \(t\)-test was conducted to examine if there were statistically significant differences between the participants’ performance on the pre- and post-assessment in the experimental group \((n = 26)\). The \(t\) value of 5.155 \((p = .000)\) with an effect size of .82 revealed that the experimental group’s post-assessment outcomes were significantly higher than their pre-assessment outcomes. An independent \(t\)-test was conducted to examine if there was any significant difference existing between the two independent groups’ post-assessment outcomes. The \(t\) value of 2.032 \((p = .047)\) with an effect size 1.19 revealed that the experimental group’ post-assessment outcomes were significantly higher than the control group’ post-assessment outcomes, providing evidence that the intervention was beneficial.

To avoid the accumulation of Type I errors from using a \(t\)-test, a repeated measures MANOVA test was conducted to test the intervention effect on the experimental group’s and control group’s knowledge of RTI. The results showed that there was a significant intervention effect on the experimental group’s knowledge of RTI, \(F(3, 51) = 8.147, p = .000, \eta^2 = .324, \text{ observed power} = .987\). Univariate tests further indicated that there was a significant intervention effect on the IRIS test items, \(F(3, 51) = 18.948, p = .000, \eta^2 = .263\), observed power = .990. However, there was no significant intervention effect on the TKS test items \(F(3, 51) = .251, p = .619, \eta^2 = .005\), observed power = .078 and on the Literature test items \(F(3, 51) = .162, p = .689, \eta^2 = .003\), observed power= .068. The results, as seen in Table 3 (see Appendix) showed that the experimental group outperformed the control group, particularly on the IRIS questions, after the intervention.

**Research Question 2: Predictors and Participants’ Post-Assessment Outcomes**

The results of the hierarchical multiple regression revealed that the variable “group (experimental vs. control)” contributed significantly to the regression model, \(F(1, 32) = 4.050, p < .05\) and accounted for 7.2% of the variance in the post-assessment outcomes. Introducing the variable “prior knowledge (pre-assessment score)” explained an additional 42.6% of the variance in the post-assessment outcomes, and this change was significant, \(F(1, 51) = 23.324, p < .001\). Adding the variable “GPA” to the regression model explained an additional 6.1% of the variance in the post-assessment outcomes, and this change was significant, \(F(1, 50) = 21.128, p < .001\). Adding the variable “GPA” to the regression model explained an additional 6.1% of the variance in the post-assessment outcomes, and this change was significant, \(F(1, 50) = 21.128, p < .001\). In short, the three independent variables (i.e., group, GPA, and prior knowledge) were significant predictors of the post-assessment outcomes, and all together they accounted for 55.9% of the variance in the post-assessment outcomes. The results of the regression statistics are reported in Table 4 (see Appendix).
Research Question 3: Fidelity of Implementation

Social validity questionnaires provided information about the participants’ acceptability and satisfaction with the intervention that they had received. Table 5 (see Appendix) shows the participants’ satisfaction with the modules.

The participants in the experimental group rated the questions that were related to the RTI-Reading modules as more relevant. This might be due to the fact that they were assigned to work on the modules related to RTI-Reading intervention. They rated the questions that were related to the behavioral intervention modules as less relevant. It is likely this has resulted from the fact that they were not assigned to work on any modules that were related to the behavioral intervention. In contrast, the participants in the control group rated the questions that were related to the behavioral intervention modules as more relevant. It is likely that such responses emerged due to the fact that they were assigned to work on the modules that were related to the behavioral intervention. Consistent with the results found in the experimental group, the participants in the control group rated the questions that were not related to the modules assigned to them as less relevant. In sum, the participants were satisfied with the modules they received regarding the improvement of their knowledge.

Although there were statistically significant differences between the responses of the participants in the two groups related to RTI-Reading and behavioral intervention questions, there were no statistically significant differences in the questions related to teacher quality, high-quality reading instruction, and participants’ confidence in using RTI.

Summary and Discussion

Previous research on IRIS modules mainly used self-report data, learning outcomes from one single module, or one single-group with a pretest-and-posttest designed to address the impact of IRIS module (Montrosse, 2012; Rodriguez, Gentilucci, & Sims, 2006; Smith, et. al, 2005). While such research methods are meaningful and important in the educational field, there is a need to have empirical data to compare and contrast with the existing literature. Additionally, unlike self-report data, in which participants tend to report positively on their beliefs, knowledge, and abilities (Cook & Campbell, 1979), this quasi-empirical study provided information about what the participants’ actual improvement was after the intervention. It is important to note that although the participants significantly improved their knowledge of RTI after the intervention, whether they can actually implement RTI is an empirical question in future studies.

In addition, there are external factors that can contribute to a person’s progress after an intervention. Without a control (comparison) group, previous research on IRIS modules may not be able to determine whether a user’s progress results from the intervention itself or results from other factors. This study included both within-group comparison data and between-group comparison data, thereby adding a more robust design to explore whether the IRIS-RTI modules could serve as an intervention tool to improve preservice teachers’ knowledge of RTI.

The average mean score for the experimental group on the post-assessment showed that the experimental students got 56% of the questions correct on the post-assessment, and the greatest growth in knowledge about RTI was in those questions developed based on the content from the IRIS modules. While it is not surprising that participants showed little improvement on questions that were indirectly or absent in the assigned IRIS modules, there is ample room for the improvement of teacher preparation programs regarding preservice teachers’ knowledge of RTI, given the fact that their mean scores on the post-assessment of the TKS test items and Literatures test items were still low. Moreover, the results implied that one-time exposure to the assigned modules might not be sufficient to help the participants get familiar with the topic. Thus, allowing time to re-revisit these modules is needed.
Suggestions for teacher preparation programs using IRIS modules are addressed in the following. First, regarding the learning objectives of the classes, when teacher educators identify preservice teachers’ strengths and weaknesses based on the results of pre-assessment(s), they can assign appropriate modules to assist individual students’ learning. Second, teacher educators can provide sub-assessments, including both pre- and post-assessments, for each module. These sub-assessment questions can be developed based on the assessment questions or Initial-and-Final Thought questions embedded in each module. Next, teacher educators can debrief individual students’ progress before and after taking the modules to inform their instruction. These procedures will help preservice teachers build solid knowledge of RTI through the assistance of IRIS modules.

In conclusion, the IRIS modules have been widely used in teacher preparation programs in the United States and around the world. Recent publications in the field of special education recommend IRIS modules as a high-quality online resource for teacher preparation programs (Billingsley, Israel, & Smith, 2011). While these modules provide important resources in helping preservice teachers understand RTI, examining the impact of IRIS modules through a comprehensive assessment measure is highly recommended because it can help teacher educators understand if the modules selected are sufficient to help preservice teachers build solid knowledge of a specific area. In the midst of a national movement toward increasing uses of RTI, the development of knowledge of RTI for preservice teachers who will be engaged in its implementation is of high importance. This study could inform teacher preparation programs using IRIS modules. Future studies could additionally examine the impact of IRIS modules on teaching practice and use mixed models of IRIS modules, including stand alone, IRIS + lecture, and IRIS tied to field-based practicum.

Limitations of the Study

There were several areas in the research design that could have been strengthened. First, internalized knowledge could have been assessed through a follow-up assessment using all or a portion of the RTI-Reading Knowledge Assessment one to two months after the conclusion of the study. The time demands of the intervention made this impractical for this group of participants. Second, the sample size of the present study was still considered to be small (n = 55). Thus, examining the RTI-Reading Knowledge Assessment with a larger sample size in future studies is recommended. Finally, because it was difficult for the participants of the study to complete all 53 IRIS modules, only eight IRIS modules related to RTI in the domain of reading interventions were used for the present study. It is possible that the participants would have performed better on the RTI-Reading Knowledge Assessment if they also completed all other IRIS modules. However, due to the fact that each module takes users approximately 2.5 hours to complete and some overlapping modules across topics, it was meaningful to examine if the eight IRIS modules related to RTI in the domain of reading interventions could help preservice teachers understand RTI and reading interventions. If not, the other modules may be spread out throughout their teacher preparation programs in different courses, such as literacy methods and cultural diversity.

References


**Nai-Cheng Kuo** is an Assistant Professor of Special Education at Georgia Regents University. Her research interests include response-to-intervention (RTI), literacy, autism, and teacher preparation. **Dr. Kuo** can be contacted at nkuo@gru.edu.
Figure 2. The ANGEL web pages – Module 1 (as an example). Note. The text is meant for visual reference only. This figure helps readers see how the ANGEL web pages look like in the present study. Each web page has seven icons to represent different components of the module.
Table 1: Profile of ID people who received CBR services

<table>
<thead>
<tr>
<th>Variable/ ID</th>
<th>Borderline ID (IQ&gt;70)</th>
<th>Mild ID (IQ 69-50)</th>
<th>Moderate ID (IQ 49-35)</th>
<th>Severe ID (IQ 34-20)</th>
<th>Profound ID (IQ&lt;20)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tribal</td>
<td>1(0.38%)</td>
<td>42(16.0%)</td>
<td>57(21.7%)</td>
<td>5(13.3%)</td>
<td>5(1.9%)</td>
</tr>
<tr>
<td>Non-Tribal</td>
<td>4(1.5%)</td>
<td>37(14.1%)</td>
<td>43(16.4%)</td>
<td>28(10.7%)</td>
<td>10(3.8%)</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>3(1.1%)</td>
<td>39(14.9%)</td>
<td>46(17.5%)</td>
<td>31(11.8%)</td>
<td>5(1.9%)</td>
</tr>
<tr>
<td>Male</td>
<td>2(0.8%)</td>
<td>40(15.3%)</td>
<td>54(20.6%)</td>
<td>32(12.2%)</td>
<td>10(3.8%)</td>
</tr>
<tr>
<td>Socio Economic Status*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very Poor</td>
<td>0(0.0%)</td>
<td>30(11.5%)</td>
<td>36(13.7%)</td>
<td>28(10.7%)</td>
<td>3(1.1%)</td>
</tr>
<tr>
<td>Poor</td>
<td>2(0.8%)</td>
<td>35(13.3%)</td>
<td>43(16.4%)</td>
<td>20(7.6%)</td>
<td>5(1.9%)</td>
</tr>
<tr>
<td>Middle</td>
<td>3(1.1%)</td>
<td>12(4.6%)</td>
<td>19(7.2%)</td>
<td>14(5.3%)</td>
<td>6(2.3%)</td>
</tr>
<tr>
<td>Upper</td>
<td>0(0.0%)</td>
<td>2(0.8%)</td>
<td>2(0.8%)</td>
<td>1(0.38%)</td>
<td>1(0.38%)</td>
</tr>
<tr>
<td>Parent Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>1(0.38%)</td>
<td>58(22.1%)</td>
<td>80(30.5%)</td>
<td>52(19.8%)</td>
<td>9(3.4%)</td>
</tr>
<tr>
<td>Primary</td>
<td>0(0.0%)</td>
<td>12(4.6%)</td>
<td>4(1.5%)</td>
<td>1(0.38%)</td>
<td>0(0.0%)</td>
</tr>
<tr>
<td>Middle school</td>
<td>3(1.1%)</td>
<td>6(2.3%)</td>
<td>8(3.0%)</td>
<td>4(1.5%)</td>
<td>0(0.0%)</td>
</tr>
<tr>
<td>High School</td>
<td>1(0.38%)</td>
<td>1(0.38%)</td>
<td>0(0.0%)</td>
<td>5(1.9%)</td>
<td>3(1.1%)</td>
</tr>
<tr>
<td>Bachelor</td>
<td>0(0.0%)</td>
<td>2(0.8%)</td>
<td>8(3.0%)</td>
<td>(0.38%)</td>
<td>3(1.1%)</td>
</tr>
</tbody>
</table>

Table 2: Major outcome of the CBR at the 9th year of the program

<table>
<thead>
<tr>
<th>Variable/ ID</th>
<th>Borderline ID (IQ&gt;70)</th>
<th>Mild ID (IQ 69-50)</th>
<th>Moderate ID (IQ 49-35)</th>
<th>Severe ID (IQ 34-20)</th>
<th>Profound ID (IQ&lt;20)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inclusion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>1(0.38%)</td>
<td>25(9.5%)</td>
<td>81(30.9%)</td>
<td>63(24.0%)</td>
<td>15(5.7%)</td>
</tr>
<tr>
<td>Yes</td>
<td>2(0.8%)</td>
<td>54(20.6%)</td>
<td>18(6.9%)</td>
<td>0(0%)</td>
<td>0(0%)</td>
</tr>
<tr>
<td>Disability Certificate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>0(0%)</td>
<td>14(5.3%)</td>
<td>17(6.4%)</td>
<td>6(2.3%)</td>
<td>0(0%)</td>
</tr>
<tr>
<td>Yes</td>
<td>5(1.9%)</td>
<td>65(24.8%)</td>
<td>83(31.6%)</td>
<td>57(21.7%)</td>
<td>15(5.7%)</td>
</tr>
<tr>
<td>Parent Training</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>2(0.8%)</td>
<td>13(4.9%)</td>
<td>24(9.1%)</td>
<td>15(5.7%)</td>
<td>4(1.5%)</td>
</tr>
<tr>
<td>Yes</td>
<td>3(1.1%)</td>
<td>66(25.1%)</td>
<td>76(29.0%)</td>
<td>48(18.3%)</td>
<td>11(4.1%)</td>
</tr>
</tbody>
</table>
Table 3

*The Independent Samples Statistics of the Pre- and Post-Assessments*

<table>
<thead>
<tr>
<th></th>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Std.</th>
<th>t</th>
<th>Sig.</th>
<th>Cohen's d</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre-Assessment (TKS)</strong></td>
<td>Experimental</td>
<td>26</td>
<td>31.539</td>
<td>9.140</td>
<td>.668</td>
<td>.507</td>
<td>0.18</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>29</td>
<td>30.000</td>
<td>7.937</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Post-Assessment (TKS)</strong></td>
<td>Experimental</td>
<td>26</td>
<td>36.346</td>
<td>10.763</td>
<td>.961</td>
<td>.341</td>
<td>0.26</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>29</td>
<td>33.655</td>
<td>9.993</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Pre-Assessment (IRIS)</strong></td>
<td>Experimental</td>
<td>26</td>
<td>10.731</td>
<td>5.008</td>
<td>.482</td>
<td>.632</td>
<td>0.13</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>29</td>
<td>10.103</td>
<td>4.639</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Post-Assessment (IRIS)</strong></td>
<td>Experimental</td>
<td>26</td>
<td>18.307</td>
<td>5.097</td>
<td>4.427</td>
<td>.000***</td>
<td>1.19</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>29</td>
<td>12.345</td>
<td>4.886</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Pre-Assessment</strong></td>
<td>Experimental</td>
<td>26</td>
<td>10.039</td>
<td>3.862</td>
<td>.830</td>
<td>.410</td>
<td>0.22</td>
</tr>
<tr>
<td>(Literature)</td>
<td>Control</td>
<td>29</td>
<td>9.172</td>
<td>3.864</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Post-Assessment</strong></td>
<td>Experimental</td>
<td>26</td>
<td>12.192</td>
<td>3.919</td>
<td>1.083</td>
<td>.284</td>
<td>0.29</td>
</tr>
<tr>
<td>(Literature)</td>
<td>Control</td>
<td>29</td>
<td>10.931</td>
<td>4.636</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: Some missing values were found in the control group. One participant in the control group only completed 62 questions; the other participants in the control group all completed the *RTI-Reading Knowledge Assessment*. These missing values were coded as “exclude cases analysis by analysis.” No missing value was found in the experimental group. The significant levels were at .05 (*) and .001 (***), respectively.*
Table 4

Summary of Hierarchical Regression Analysis for Variables Predicting Post-Assessment Outcomes

<table>
<thead>
<tr>
<th>Step</th>
<th>Variable</th>
<th>Beta</th>
<th>t</th>
<th>R</th>
<th>R²</th>
<th>R² Change</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>.269</td>
<td>.072</td>
<td>.072</td>
<td>4.050*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 1</td>
<td>Group (exp. vs. control)</td>
<td>.269</td>
<td>2.012*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 2</td>
<td>Group (exp. vs. control)</td>
<td>.204</td>
<td>2.044*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pre-assessment score</td>
<td>.656</td>
<td>6.581***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 3</td>
<td>Group (exp. vs. control)</td>
<td>.235</td>
<td>2.472*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pre-assessment score</td>
<td>.613</td>
<td>6.393***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>GPA</td>
<td>.252</td>
<td>2.624*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Intrinsic Motivation and Authentic Engagement: A Conceptual Discussion

Steven J. Bourgeois
Responsive Education Solutions

Abstract
This conceptual discussion problematizes the present view of student engagement and motivation, as exemplified in the current culture of assessment and extrinsic orientation toward learning. Nietzsche’s metaphor of the Three Metamorphoses of the Spirit serves as a philosophical frame through which I trace the origins of the psychological concepts of intrinsic and extrinsic motivation. Taking an historical approach within the field of cognitive psychology, I present the foundational research upon which self-determination theory (Deci & Ryan, 1985) was built. Through this lens, I consider the implications of current educational practice, with emphasis upon high-stakes assessment and the potential for autonomy-supportive teaching and authentic student engagement. Throughout the discussion, I call attention to the disparity between current educational practice and the stated goal of creating life-long learners.

Introduction
In a review of 420 mission statements from a random sample of 50 high schools in 10 states, Stemler, Bebell, and Sonnabend (2011) identified eleven thematic commonalities based upon quantitative analysis. Among the 11 themes, the three most frequent aspects were civic, emotional, and cognitive development (Stemler, et al, 2011). Within the major themes of emotional and cognitive development were phrases relating to critical thinking, problem solving, and becoming life-long learners (Stemler, et al, 2011). Scanning a series of school district mission statements, I also found mention of 21st century skills and becoming productive global citizens to be ubiquitous. Common to most school mission statements is the idea that students need to be prepared to make a meaningful contribution to their community and the greater world, through foundational knowledge, independent thinking, and the ability to continue to learn in a variety of contexts.

In a memorable application of this concept, former U.S. Secretary of Education Riley predicted that “The top 10 in-demand jobs in the future don’t exist today. We are currently preparing students for jobs that don’t yet exist, using technologies that haven't been invented, in order to solve problems we don’t even know are problems yet” (Gunderson, Roberts, & Scanland, p. 59, 2004). Claiming that students need to solve problems and build capacity for continuous learning in the professional environment is more than a platitude. However, the mission statements beg a question: Do current educational practices foster this goal of long-term learning, beyond the confines of the schoolhouse?

To address this question, we must consider the contemporary educational environment in the United States with respect to engagement and motivation—factors that have profound effect upon future learning (Deci & Ryan, 1985). Although the United States has historically instituted mandatory school attendance laws, there is no judicial authority over internal
attendance. That is, the child is required to attend physically, but not mentally. Even an experienced teacher may find it difficult to evaluate the extent to which a student is authentically engaged; that is, mentally enveloped by the learning task and driven to persist out of inherent enjoyment (Schlechty, 2011). While highly-successful students may exhibit external signs of engagement, they may, in fact, be completing school activities from a drive to compete with their peers, to attain a contingent reward, or to avoid an unpleasant consequence. While short-term rewards may include teacher praise, gold stars, or other token reinforcements, long-term rewards often relate to report cards, class ranking, or college acceptance. On the negative side, students may act to avoid having the teacher sign their folder, call their parents, or assign Saturday School or detention.

With that in mind, assessing student engagement becomes a quest to ascertain what motivates students to take part in learning activities. Deci and Ryan (1985) defined motivation as “the energization and direction of behavior” (p. 3). This implies a momentum, moving from thought and sustaining itself through a culminating action. While motivation can be characterized as a metaphor of inner processes, it can also be viewed as an attempt to simplify an aspect of the human mind that is fundamentally mysterious. Put in academic terms, a student may experience profound pleasure in a learning task, while also exhibiting a drive to outperform his/her classmates and receive the adulation of the teacher. This represents an activity that is simultaneously intrinsically and extrinsically motivated. Because motivation is in constant flux, from task to task and minute to minute, it may represent an instance where that which is measured is influenced by the act of measurement (Wheatley, 2006).

**Purpose of the Discussion**

The purpose of this conceptual discussion is to problematize the present view of academic engagement and student motivation, as exemplified in the culture of assessment and extrinsic orientation toward education. To clarify the enigmatic nature of motivation, I first interpret a metaphor supplied by Nietzsche in the latter part of the 19th century. Nietzsche serves as a philosophical frame through which I then trace the origins of the psychological concepts of intrinsic and extrinsic motivation. Taking an historical approach within the field of cognitive psychology, I present the foundational research upon which self-determination theory (Deci & Ryan, 1985) was built. Through this lens, I consider the implications of current educational practice, with emphasis upon high-stakes assessment and the potential for autonomy-supportive teaching and authentic student engagement. Throughout the discussion, I call attention to the disparity between current educational practice and the stated goal of creating life-long learners.

**A Metaphor of Motivation**

In his book titled *Thus Spoke Zarathustra*, Nietzsche (1961) put forth an enigmatic view of heroic purpose and spiritual transformation in what he termed the three “metamorphoses of the spirit” (p. 54, original work published 1885). He observed how the spirit initially became a camel to bear a heavy burden, joyfully testing the limits of its strength. With respect to education, this would represent the humble labor of a scholar, who takes pains to learn the formative skills upon which future learning is constructed. The
image of a load-bearing creature encapsulates the academic toil that is all too familiar in the educational setting. However, this comparison certainly falls short of Nietzsche’s description of intense self-denial, proclaiming the need to “humiliate oneself in order to mortify one’s pride” (1961, p. 54).

After listing a series of renunciations common to the first metamorphosis, Nietzsche described a second transformation into the form of a lion, whose purpose was to resist traditional morality, epitomized by the command: “Thou shalt” (1961, p. 55). While Nietzsche envisioned a radical and complete challenge to contemporary values, the educational context of this metamorphosis may be represented by the ability think critically in a variety of contexts. Though much tamer than Nietzsche’s “animal of prey” (1961, p. 55) whose purpose is the destruction of old values, critical thinking represents a circumspect view toward traditional truth, paving the way for unique solutions to problems.

After the initial two metamorphoses, Nietzsche unexpectedly described a third where the lion transformed into a child. Through the words of his mouthpiece, Zarathustra, he explained:

The child is innocence and forgetfulness, a new beginning, a sport, a self-propelling wheel, a first motion, a sacred Yes.

Yes, a sacred Yes is needed, my brothers, for the sport of creation: the spirit now wills its own will, the spirit sundered from the world now wins its own world. (1961, p. 55)

The idea of intrinsic motivation was crystalized by Nietzsche’s (1961) image of a child as a “self-propelling wheel” (p. 264). The German version [“ein aus sich rollendes Rad”] (Nietzsche, 1885, p. 27), reads: a from-itself rolling wheel. This implies the possibility of an inner causation at the cognitive level where thought leads to action. In a later passage, Zarathustra rejoiced in his own development, articulating a heightened feeling of intrinsic motivation and a love of learning:

I have learned to walk: since then I have run. I have learned to fly: since then I do not have to be pushed in order to move.

Now I am nimble, now I fly, now I see myself under myself, now a god dances within me. (Nietzsche, 1961, p. 55)

Cognitive Psychology and Motivation

While Nietzsche’s ecstatic image of learning provides a stark contrast to contemporary educational environments, it also exemplifies the psychological concept of motivation. For cognitive psychologists, motivation represents an inner process that explains why individuals act in certain ways (Deci, 1975). Cognitive theories focus upon the process of thinking and carry the assumption that thoughts provide a causal influence upon actions (Deci, 1975).

In the mid-20th century, psychologists began to examine the complexity of human motivation, suggesting models to explain inner processes. Hull (1943) proposed four basic drives, including hunger, thirst, sex, and avoiding pain. Maslow (1943) asserted that once the basic needs have been satisfied, individuals aspire to reach their potential through self-actualization. According to Deci (1975), traditional drive theory “involves a deficit or
need in body tissues outside the nervous system which (1) energizes behavior that results in a consummatory response which reduces the need or deficit and (2) produces learning” (pp. 28-29). This assertion aligns with Skinner’s (1953) approach, where human motivation is strictly determined by external causes. By assuming an absence of inner motivation, Skinner characterized behavior as a response to stimuli, asserting “A person is not an originating agent; he is a locus, a point at which many genetic and environmental conditions come together in a joint effect” (1974, p. 172). Skinner’s behavioral psychology continues to have profound impact upon the discipline and represents a justification for the token economy of rewards and sanctions that characterizes modern education (Kohn, 1993).

While Skinner (1953) conducted research on how to modify behavior through operant conditioning, Hartmann (1958) and White (1959) considered the phenomena of how humans and animals explore their surroundings, exhibit a motivation to play, and attempt to assert mastery and autonomy over their environment. According to White (1959), the desire to explore one’s environment does not fit the traditional definition of a drive. Strictly speaking, the need to explore and manipulate one’s surroundings is not the result of a deficit within the nervous system; nor does this exploration result in a satiation of the need. In fact, upon completion of the exploration, one is likely to experience boredom, which may have been the cause of the exploration in the first place (Deci, 1975).

Moving beyond a strict drive theory, DeCharms (1968) introduced the concept of personal causation, where “man’s primary motivational propensity is to be effective in producing changes in his environment” (p. 269). DeCharms (1968) introduced the terms “Origin and Pawn” (p. 315) to characterize qualitative differences in motivational orientation. He defined an individual who perceives himself/herself to be an Origin of behavior as intrinsically motivated, while someone who considers himself/herself to be a Pawn is extrinsically motivated (DeCharms, 1968). The term Origin would describe individuals who seem to “attack problems in the environment with zest, apparently seeking uncertainty and change, and reveling in risky situations” (p. 327). Conversely, a Pawn would be someone who depends upon external direction or some type of incentive to instigate action.

This aligns with Deci’s (1975) working definition of intrinsic motivation, which represents an inner drive to take part in an activity for its inherent enjoyment. Conversely, extrinsic motivation represents reliance on some external cause, often in the form of a reward or sanction (Deci, 1975). While both forms of motivation are central to human development, reliance on extrinsic factors can have unintended consequences within the school setting (Deci & Ryan, 1985; Kohn, 1993). Central to our discussion on school engagement is the suggestion by Deci and Ryan (1985) that social factors, including education and parenting style, can either support or undermine the intrinsic motivation to learn about one’s environment.

Self-Determination Theory

Building on the work of DeCharms (1968), self-determination theory (Deci & Ryan, 1985) provides empirical basis for understanding both student engagement and the unintended consequences of extrinsic motivators in our schools. Self-determination theory puts forth three basic
human needs, including autonomy, competence, and relatedness (Deci & Ryan, 1985). According to Deci and Ryan, *autonomy* represents a manifestation of a perceived internal locus of control for actions (Deci & Ryan, 1985). *Competence* relates to one’s expectation of performing activities at a proscribed level (Deci, Vallerand, Pelletier, & Ryan, 1991). *Relatedness* concerns how individuals develop emotional connections with significant others such as peers, mentors, and caregivers (Deci et al., 1991). Deci et al. described self-determined acts as being “fully endorsed” (p. 328) at the cognitive level, fostering both psychological well-being and happiness. The extent to which these needs are met either supports or undermines individuals’ intrinsic motivation to learn about and influence their surroundings (Deci & Ryan, 1985).

Extensive research through the lens of self-determination theory (Deci & Ryan, 1985) has demonstrated how extrinsic motivators, such as high-stakes testing and incentivized learning, undermine intrinsic motivation. These undermining effects have been demonstrated with respect to praise and rewards (Deci, Koestner, & Ryan, 1999), imposed deadlines (Amabile, DeJong, & Lepper, 1976; Burgess, Enzle, & Schmaltz, 2004), surveillance (Lepper, & Greene, 1975), and competition (Deci, Betley, Kahle, Abrams, & Porac, 1981; Harter, 1982; Vallerand, Gauvin, & Halliwell, 1986).

While researchers agree that extrinsic approaches to learning can produce short-term gains, proponents of self-determination theory have shown that they also have hidden costs (Deci, Koestner, & Ryan, 1999; Deci & Ryan, 1985; Ryan & Weinstein, 2009). Research has shown that extrinsically motivated students display less complex learning (Deci, Koestner, & Ryan, 1999), less creativity (Grošnick, Deci, & Ryan, 1997), less risk-taking behavior (Hennessey, 2000), less ability to sustain attention in academic tasks (Deci & Ryan, 2000), and less desire for academic challenges (Reeve, 2006). Extrinsically motivated students are more likely to demonstrate academic procrastination, which has a detrimental impact upon performance (Senecal, Koestner, & Vallerand, 1995). Perhaps most crucial in this body of research is the finding that extrinsic motivators, such as praise and rewards, have an undermining effect on long-term intrinsic motivation to learn (Deci, Koestner, & Ryan, 1999).

Repeated exposure to extrinsic motivators has profound psychological consequences for students who grow to value the reward more than the joy of learning itself (Ryan & Deci, 2000). By presenting school as work and learning as a commodity, educators have systematically severed learning from the self-determined intentions of students. While exhibiting external signs of attention, students develop a form of “psychic entropy” (Csikszentmihalyi, 1997, p. 66), where cognitive intentionality and action conflict. From a motivational perspective, external forces (i.e. extrinsic motivators) create imbalances in the psyche, manifesting “tension, conflict, stress, and strain” (Hall & Nordby, 1973, p. 69). Transforming the concept of psychic entropy to human development Csikszentmihalyi (1990) cautioned that “whenever information disrupts consciousness by threatening its goals we have a condition of inner disorder” (p. 37). He suggested that this inner disorder can have profound consequences for effective functioning, noting “prolonged experiences of this kind can weaken the self to the point that it is no longer able to invest
attention and pursue its goals (Csikszentmihalyi, 1990, p. 37).

Deci and Ryan (1985) articulated the mechanism by which this inner conflict arises for extrinsically oriented students, noting that “they will, postbehaviorally, assess the situation, noting that there was a strong external cause. They will then attribute causality for their behavior to the external cause and discount any plausible internal cause, namely intrinsic motivation” (Deci & Ryan, 1985, p. 201). In the absence of intrinsic motivation, the learning moment becomes instrumental to something that is valued more by the student. The cumulative effect of this extrinsic orientation manifests itself in a crucial finding from a body of research, whereby academic intrinsic motivation decreases from ages 9-18 (Eccles, Wigfield, Harold, & Blumenfeld, 1993; Gottfried & Gottfried, 1996, 2006; Harter, 1981; Lepper, Iyengar, & Corpus, 2005).

Motivation and Assessment

Common to the extrinsic approach to education mentioned above is a focus upon moving students to attain measurable levels of academic achievement. While this practice calls needed attention to underserved populations, it has been shown to undermine more meaningful and authentic student engagement (Popham, 2001). For McNeil (1996), “measurable outcomes may be the least significant results of learning” (p. xviii). This provocative statement questions the value and validity of standardized achievement measures. Since the discrete multiple choice item represents the primary mechanism in the technology of testing (Madau, Russell, & Higgins, 2009), deeper knowledge at the analytical and evaluative levels remains largely untested. To reformulate McLuhan’s (1964) maxim, the medium of standardized testing promotes the message of non-contextual and standardized knowledge. From a motivational perspective, a test-driven approach places boundaries around knowledge and represents a cumulative assault on intrinsic motivation to learn (Deci & Ryan, 1985; Kohn, 1993).

While educational theory explains students’ response to controlling teaching practices and high-stakes testing, research from the broader field of social science provides the mechanism by which these processes depart from their original purpose. According to Campbell’s Law, “The more any quantitative indicator is used for social decision-making, the more subject it will be to corruption pressures and the more apt it will be to distort and corrupt the social processes it is intended to monitor” (Campbell, 1976, p. 49). This corruption process manifests itself in a narrowing of the curriculum, teaching to the test, a school culture of mistrust, and pressure to cheat (Kohn, 1993; Popham, 2001). Fundamental to a test-driven, outcomes-based approach to education is reliance on extrinsic justifications for learning.

According to Deci and Ryan (1985), the corruption pressure mentioned above becomes operationalized through controlling teaching practices. As the primary influence on student engagement in the classroom, teachers often experience pressure from school administrators, parents, and students themselves to focus upon measurable outcomes. It seems surprising that students would contribute to the assessment-centric approach to learning. However, as they grow up within the current system, they feel the press toward maximizing instruction that will ultimately appear on summative assessments. Since school administrators are typically evaluated based upon student
achievement measures for their campus, it is not surprising that they would encourage this extrinsic approach.

Deci and Ryan (1985) clarified the dilemma, noting “When teachers are pressured by administrators, when their own autonomy in the classroom is not supported, it is hypothesized that they will become more controlling with the children” (p. 266). By limiting students’ control over their learning, teachers compromise the relationship of collaboration, establishing an approach where groups of students are pressed to meet accountability standards, despite individual learning differences. Because state assessments are typically administered according to a firmly-established testing calendar, individual learning needs become washed away as teachers prepare to meet a fixed learning deadline.

**Autonomy-Supportive Teaching and Authentic Engagement**

While Popham (2001) and Madau et al. (2009) articulated the implications of high-stakes assessments within the educational context, others have described how autonomy-supportive teaching can foster intrinsic motivation and authentic engagement. In a summary of research, Reeve (2006) put forth an array of teaching approaches that align with the basic human needs of autonomy, competence, and relatedness, as articulated by Deci and Ryan (1985). These teaching practices foster authentic engagement and an intrinsic orientation that may encourage long-term learning. To foster autonomy, he recommended leveraging students’ “preferences, interests, sense of enjoyment, sense of challenge, competencies, and choice-making” (Reeve, 2006, p. 229). With respect to competence, he recommended that the teacher use informational (rather than controlling) language, encourage hard work, praise signs of improvement, offer informational feedback, respond to student questions, and articulate the value of academic activities for students (Reeve, 2006). Regarding relatedness, he suggested that teachers arrange materials and seating to encourage student conversations, allow them to work independently, and listen carefully to their perspective (Reeve, 2006).

In his recent work on student engagement, Schlechty (2011) put forth a range of recommendations in alignment with Reeve (2006). He focused upon the role of teachers to design “engaging work” (p. 116) for students, offering an array of choices and novel activities, and supporting an environment of collaboration and formative feedback. Schlechty recently revised his framework to include five levels of engagement, including “engagement [authentic engagement], strategic compliance, ritual compliance, retreatism, and rebellion” (p. 15). For Schlechty, a student displaying engagement is attentive, committed, persistent, and “finds meaning and value in the tasks that make up the work” (2011, p. 14). This aligns with Deci’s (1975) definition of intrinsic motivation, where an individual engages in an activity for its inherent enjoyment. According to Schlechty, a student is strategically compliant if she or he engages in academic tasks to attain a contingent reward, such as a grade. This type of student is typically the most successful academically, having successfully negotiated institutional expectations, while displaying only superficial interest. The ritually compliant student also works for the instrumental value of an activity; however, he or she is less resilient when confronted with challenges.
Schlechty characterizes *retreatism* as when a student makes a deal with teachers, minimizing the expectation of active involvement, while agreeing to not become an active disruption. The final category of *rebellion* represents the student who displays an active and overt attempt to thwart classroom goals (Schlechty, 2011).

In the present discussion, Schlechty’s (2011) approach to engagement reveals a profound challenge for researchers. Specifically, it is difficult to determine the extent to which an individual or class of students is deeply engaged at the cognitive level. In fact, high-achieving students may possess a refined ability to show visible engagement, while focusing themselves on other mental priorities. This would necessitate phenomenological investigations, aligning with Husserl’s (2001) adage recommending a return “to the things themselves” (p. 4, original work published 1900). If we accept Schlechty’s definition of engagement, which includes attention, commitment, persistence, and meaning, the individuals possessing direct insight would be teachers and the students themselves. From this perspective, motivation and engagement represent moving targets which may vary according to the course, teacher, time of day, and a myriad of factors. By their very nature, these concepts resist categorization and measurement.

**Conclusion**

As the introduction to this conceptual discussion showed, many school districts tout mission statements with language supporting the development of life-long learners, problem solvers, and critical thinkers who are ready to display their 21st century skills. Despite the elevated rhetoric, school districts are correct in their assertion that high school graduates must continue to learn, in college, in their careers, and for new jobs that do not yet exist. This would make it even more important to consider the long-term motivational effects of methods of instruction and assessment. We may, in fact, be creating students who can pass a summative reading test but no longer want to read. Similarly, we may be producing a generation of algebra students who successfully *passed* the course, never to return to its concepts again.

When students depart the schoolyard gates and take on the challenges of the ever-changing job market, we would hope that they possess the capacity for continuous learning. However, if schools continue to promote short-term learning at the expense of intrinsic interest, students will find themselves underprepared. Mindful of the pressures upon teachers and administrators to produce measurable student growth, a discussion of motivation and engagement may represent a distraction from more pressing concerns. However, by reclaiming the question of deep engagement, we consider the needs of students in front of us today, along with those of the 30-year-old adult that he or she will become.

If motivation is viewed as a purely human construct, uncovering its essence is inferential and primarily a linguistic process. Nietzsche’s (1961) image of the “self-propelling wheel” (p. 264) forces us to view current educational practice with a critical eye, particularly when external pressures threaten to undermine engagement and the love of learning. While we still struggle to distinguish between Schelchty’s (2010) “authentic” and “strategic or ritual compliance” (p. 15), problematizing current practices in instruction and assessment constitutes a shift in priorities. Specifically, it calls attention to the purpose of schooling.
within the broader, unceasing education of the individual.

References


Prior to completing a Doctor of Philosophy in Educational Leadership and Policy Studies at the University of Texas at Arlington, Steven J. Bourgeois completed a Master of Arts in German, a Bachelor of Arts in German, and a Bachelor of Arts in Music—all from the University of Oregon. He has worked as a high school German and music teacher for 25 years in public schools in Oregon, Michigan, Ohio, and Texas. He is currently serving as Director of Research for Responsive Education Solutions, the largest charter school provider in the state of Texas. Dr. Bourgeois can be contacted at SBourgeois@responsiveed.com.
Workaholism has been defined as a compulsive devotion to work that significantly impairs other areas of an individual’s life (Selinger, 2007). Since this disorder was first conceptualized by Oates in 1971, few articles have been published on the nature of workaholism tendencies for workers employed in specific occupations. A Mississippi sample was utilized for this study, for the purpose of exploring workaholism tendencies in a kindergarten through 12th grade (K-12) teacher population. Results indicate that elementary school teachers in particular may exhibit workaholism tendencies. Additionally, beginning teachers, those with more than 10 years of teaching experience, and those who teach in struggling school districts, may be the most likely to struggle with work addiction. We recommend future research be conducted on interventions that can be used within the school system itself to help work-addicted teachers develop a greater work-life balance.
example, the recent death of a young intern, Moritz Erhardt, received international attention for what some consider to have been caused by strenuous 110-hour work weeks (Bland, 2013). Tragic cases such as Erhardt’s, who has been referred to as a “workaholic,” in the media (Bland, 2013), may cause both workers and organizations to question the importance of working so hard to the detriment of other areas of life including one’s health.

Although not all workaholics ‘die at the desk,’ workaholism has been linked to problematic physical and mental health concerns, including heart disease (Booth-Kewley & Friedman, 1987), self-esteem issues (Chamberlin & Zhang, 2009), and coping strategies used to hide depression and/or anxiety (Robinson, 1998). Such major issues stemming from an over-engagement in work are the reason why Shifron and Reysen (2011) proposed that workaholism be conceptualized as an addiction. In fact, an organization called Workaholics Anonymous, similar to Alcoholics Anonymous, was developed for the purpose of helping workaholics develop a healthier orientation towards work (Workaholics Anonymous, 2015).

It is also interesting to note that workaholics are not necessarily more effective workers. For example, while conducting a study on medical students, Schaufeli et al. (2008) found that those with excessive work habits had: greater difficulty recuperating after a long work day, less compassion for patients, a greater tendency toward working even when sick, and reduced levels of work performance. Other researchers have discovered similar results. Liang and Chu (2009) empirically linked workaholism to reduced job productivity. And Salmela-Aro and Nurmi (2004) found that those with an excessive devotion to work were at a greater risk of job burnout. Thus, even though workaholics are committed to their jobs, their overcommitment may have very negative consequences.

Those who do not have an over-reliance on working may not understand why workaholics are so overly committed to their jobs. Considering that between a quarter and almost a third of American workers are reported to be workaholics (Robinson, 2007), workaholism as a disorder appears to have influenced a significant proportion of Americans. Furthermore, since many of these individuals are at-risk of developing mental and physical health concerns as a result of their extreme work ethic, developing a greater understanding of the specific factors that are related to workaholism is crucial.

Minimal research has been conducted on the relationship between workaholism and demographic variables such as gender, ethnicity, marriage, and parental status in a teacher population. Previous research that has been conducted on these variables in general, however, reveal that women are just as likely as men to be workaholics (Taris et al., 2012), there is an equal distribution of workaholism tendencies among varying ethnic groups (Aziz et al., 2010); dissatisfaction with marriage (Robinson, Carroll, & Flowers, 2001), and that children can develop physical and mental health-related concerns when one or more parents are workaholics (Chamberlin & Zhang, 2009). These variables will be explored in the current study.

In addition to the variables discussed above, another factor that has not yet been explored in-depth in either the education or counseling literature is the relationship between workaholism and one’s specific occupation, such as teaching. Taris et al. (2012) emphasize this point when they say that “the demographic and occupational profile of the ‘typical’ workaholic has not yet been characterized” (p. 547). Scant research has been conducted on the relationship between workaholism tendencies and stage of development for K-12 teachers. The results of the current study may shed light on which relationships exist between workaholic behaviors and specific demographic variables for K-12 teachers in Mississippi.

Contributing Factors to Workaholism Tendencies

Although being a workaholic has major disadvantages, including those related to poor
mental and physical health, it is important to note that many workaholics are rewarded for their addictive behaviors. These rewards may come from either the workaholics themselves or from their work environment. Uchitelle (2006), for example, argued that hard working individuals were often rewarded by organizations with bonuses or awards based on commitment to their work. However, as these job-related “perks” have decreased over time in the American workforce, George (1997) emphasized that a scarcity of tenure options for many organizations may cause workers to soothe their own anxiety by being excessively devoted to work.

The Strenuous Tasks of Teaching

One might argue that teaching, in particular, is one field where workers are at a great risk of becoming excessively devoted to work, due to number of hours spent working each week. For example, while the official work hours of teachers are set by the districts and schools in which they teach, many teachers come well before the school day begins and stay well after the last child has gone home. The extended work hours of teachers can also be seen in the lesson planning and grading that are essential components of the job. Most teachers do not have ample time built into the school day to complete such tasks, so, traditionally, most of the planning and grading tasks are done on the teacher’s own time. It is estimated that on average, teachers spend 8 hours a day in the classroom, one hour a day either before or after school at the school site preparing for the day or next day’s instruction, and another 2-3 hours on their own time grading, planning, and attending required meetings, or conferencing with parents (Forgasz & Leder, 2006).

Tracking teacher work hours has been a difficult endeavor because of the number of hours teachers spend working outside the school building and due to the structure of the school year with most schools employing teachers for nine months a year. Only 10 percent of public schools in the United States employ teachers year-round (Deshoff, 2011). Therefore, the majority of teachers do not have defined working hours in the summer. Even without the defined hours, many teachers do work over the summer. It is estimated that teachers spend on average two to four weeks during the summer in workshops and other continuing education settings and another four weeks leading up to the start of the school-year planning and preparing (Philipp & Kunter, 2013).

Data from the American Time Use Survey shows that teachers are more likely to do some work from home than individuals employed in other professions. Thirty percent of teachers reported working at home most days of the week compared to twenty percent of professionals in other fields. Teachers were also more likely to work on Sunday than other professionals. The survey also showed that teachers were more likely to have a second job than other professionals (Krantz-Kent, 2008). Thus, with 60 hour work weeks, summer work commitments, spending numerous working on weekends, as well as needing to work additional jobs, it seems safe to assume that developing a healthy work-life balance for many teachers is not easy.

Purpose

The purpose of this study was to assess the relationship between workaholism tendencies and stage of development in a Mississippi K-12 teacher population. Specifically, the relationship between workaholism tendencies and: number of years of teaching experience, occupation type (e.g., elementary vs. high school teacher), school setting where employed (e.g., public vs. private school), and school district rating (star vs. low performing) were assessed. Specific demographic variables were also evaluated in their relationship to workaholism, including gender, ethnicity, marital, and parental status.

The results of this research may help both administrators and teachers develop a greater understanding of which type(s) of Mississippi educators have the greatest likelihood of exhibiting workaholism tendencies. Furthermore, knowing which particular types of individuals have the greatest likelihood of becoming workaholics may help administrators pursue an active role in assisting their
workaholic employees in developing a healthier work-life balance.

Methods

Participants

Two hundred and fifteen K-12 school teachers (n = 215) from the State of Mississippi participated in this study. Demographic characteristics of the population included 85% female and 15% male. Eighty-eight percent of respondents identified their race as white, while 9% identified as black, 2% Hispanic, and 1% other. Teaching experience for these participants ranged from pre-service teachers to 10+ years. Thirty-nine percent of the respondents identified as having 10 or more years of experience, 21% stated they had 5-10 years, 10% stated 3-5 years, 11% identified as 2 years, 11% stated 1 year, and lastly 8% identified as pre-service teachers.

When respondents were questioned about their current relationship status, 64% identified themselves as married, 28% as single, 7% as divorced, and 1 participant identified as a widow. Sixty-two percent of respondents stated that ‘Yes’ they had children, while 38% stated that ‘No’ they did not have children. Respondents were questioned as to what grade level they were currently employed. Thirty-seven percent stated they taught at the elementary level, 29% stated they taught at the middle/junior high school level, and 27% stated they taught at a high school.

Specific questions were also asked to describe the respondents’ current place of employment. When participants were asked to identify their school as public or private, 100% of respondents stated that they identified as working for a public school. Respondents were also asked to identify how their school was labeled in regards to academic performance using the following categories: Star, High Performing, Successful, Academic Watch, Low Performing, At Risk of Failing, or Failing. The Star category was chosen by 8% of respondents, High Performing 42%, Successful 28%, Academic Watch 8%, Low Performing 8%, At Risk of Failing 3%, and Failing 3%.

Instrument

For this study, the Bergen Work Addiction Scale (BWAS) was utilized to determine the level of work addiction specified by currently employed school teachers in the State of Mississippi. The instrument focuses on 7 components of addiction. These 7 core elements (salience, tolerance, mood modification, relapse, withdrawal, conflict, and problems) help to support the use of the BWAS and lends to its relatively high content validity in terms of addiction (Andreassen, Griffiths, Hetland, & Pallesen, 2012). Ng, Sorensen, and Feldman (2007) stated that work addiction encompasses three main dimensions: affects, cognitions, and behavior. The BWAS reflects these domains and has been determined by Andreassen et al. (2012) to have adequate convergent and discriminative validity.

Research Hypotheses

Hypotheses 1.0: There is no significant difference between years of experience and work addiction tendencies.

Hypothesis 1.a: There is a significant difference between years of experience and work addiction tendencies.

Hypothesis 2.0: There is no significant difference between elementary, middle, and high school teachers and work addiction tendencies.

Hypothesis 2.a: There is a significant difference between elementary, middle, and high school teachers and work addiction tendencies.

Hypothesis 3.0: There is no significant difference between school status label and work addiction tendencies.

Hypothesis 3.a: There is a significant difference between school status label and work addiction tendencies.
Findings

The researchers created a mean work addiction score from the BWAS. The dependent variable ranges from 1 (least likely to exhibit work addiction behavior) to 5 (most likely to exhibit work addiction behavior). In the survey sample of 215 teachers, the mean work addiction score was 3.17 with a range of 1.14 to 5.

Analysis

To test the hypotheses 1-3, we present means comparisons between the work addiction mean index and the independent variables of interest. We conducted a One-way Analysis of Variance (ANOVA) to determine statistical significance between different groups within the independent variables of interest.

Hypothesis 1. The researchers examined years of teaching experience across six categories, ranging from pre-service student teachers to those teachers with more than 10 years of experience. Table 1 shows the mean work addiction scores by years of teaching experience. First year teachers showed the highest score at 3.41, although the score decreased with more years of teaching throughout the first decade in the classroom. However, for those with more than 10 years in the classroom the work addiction score increased to the highest level except for first year teachers. Using ANOVA, we found a significant F-Test (2.72, p<.05), which showed that the means were not all equal. To determine the significant mean differences, we conducted a Bonferroni multiple comparison test and found significant differences between first year teachers and those with 5-10 years of experience (p<.05), along with those who had 5-10 years of experience and more than 10 years of experience (p<.05).

Table 1
Mean Work Addiction Scores by Years of Teaching Experience

<table>
<thead>
<tr>
<th>Years of Experience</th>
<th>Mean Work Score</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Teachers</td>
<td>2.86</td>
<td>2</td>
</tr>
<tr>
<td>1st year</td>
<td>3.41</td>
<td>27</td>
</tr>
<tr>
<td>2nd year</td>
<td>3.21</td>
<td>27</td>
</tr>
<tr>
<td>3-5 years</td>
<td>3.15</td>
<td>24</td>
</tr>
<tr>
<td>6-10 years</td>
<td>2.83</td>
<td>46</td>
</tr>
<tr>
<td>More than 10</td>
<td>3.26</td>
<td>89</td>
</tr>
<tr>
<td>Average</td>
<td>3.17</td>
<td>215</td>
</tr>
<tr>
<td>F-Test</td>
<td>2.72*</td>
<td></td>
</tr>
</tbody>
</table>

Hypothesis 2. Examines school grade level and work addiction tendencies. Table 2 shows that elementary school teachers have the highest scores at 3.32 followed by high school teachers at 3.15 and middle school teachers having below average scores right at 3. The ANOVA F-Test shows a significant difference between group means with the Bonferroni comparison finding a significant difference between elementary and middle school teachers.

Table 2
Mean Work Addiction Scores for School Grade Level

<table>
<thead>
<tr>
<th>Educ. Level of School</th>
<th>Mean Work Score</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary School</td>
<td>3.32</td>
<td>81</td>
</tr>
<tr>
<td>Middle School</td>
<td>3</td>
<td>70</td>
</tr>
<tr>
<td>High School</td>
<td>3.15</td>
<td>64</td>
</tr>
<tr>
<td>Average</td>
<td>3.17</td>
<td>215</td>
</tr>
<tr>
<td>F-Test</td>
<td>3.34*</td>
<td></td>
</tr>
</tbody>
</table>

Hypothesis 3. Examines school performance and work addiction scores. In table 3, we examine three categories of schools: Star
and High-Performing, Successful, and At-Watch and below. Teachers in struggling schools demonstrate higher levels of work addiction tendencies (3.32) compared to those in successful (3.19) and high performing (3.11) schools. However, as shown by the ANOVA F-Test, there is not a statistically significant difference between the groups. While not significant, the findings suggest teachers show higher levels of work addiction in poor performing schools.

Table 3
The Relationship between School Performance and Work Addiction Scores

<table>
<thead>
<tr>
<th></th>
<th>Mean Work Score</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Performing</td>
<td>3.11</td>
<td>112</td>
</tr>
<tr>
<td>Successful</td>
<td>3.19</td>
<td>55</td>
</tr>
<tr>
<td>At-Watch or Below</td>
<td>3.32</td>
<td>46</td>
</tr>
<tr>
<td>Average</td>
<td>3.17</td>
<td>215</td>
</tr>
<tr>
<td>F-Test</td>
<td>1.19</td>
<td></td>
</tr>
</tbody>
</table>

Specific demographic variables were also evaluated in their relationship to workaholism, tendencies that included gender, ethnicity, marital, and parental status. Using these demographic variables the analysis yielded no results to suggest a significant difference based upon gender, ethnicity, marital, or parent status.

**Discussion**

The purpose of this study was to examine workaholism tendencies for K-12 teachers in the state of Mississippi. Specifically, we sought to discover the relationship between workaholism tendencies and teaching experience, type of occupation (e.g., elementary vs. high school teacher), school setting (being employed in a public or private school), and school district rating (star vs. low performing). Specific demographic variables were also evaluated in their relationship to workaholism, including gender, ethnicity, marital, and parental status.

Our initial results indicate that our beginning teachers had some of the highest levels of work addiction tendencies. This unhealthy orientation towards work may be related to the long work weeks that many educators experience – those that include arriving at school early in the morning, working a full 8-hour day, planning lessons and grading papers late into the evening, as well as working on weekends (Forgasz & Leder, 2006). It is interesting to note, however, that those with the most teaching experience also have a greater tendency to become workaholics. This may be due to how senior teachers take on more responsibilities such as chairing their department, becoming a Teacher Support Team chair, etc. Knowing that these two groups in particular - those with either the least or the most amount of teaching experience - are important for school leaders and personnel to consider when developing interventions.

Second, we found that there was a difference between number of years of teaching experience and occupation type, with elementary school teachers showing higher levels of work addiction than middle and high school teachers. We postulate that these workaholism tendencies may be due to the result of the tasks that elementary school teachers complete on a regular basis that are specific to the age group they teach. These tasks may include the teaching of all subject areas, the responsibility for the same set of children for the entire school day and the intense nature of the relationship with parents of elementary school children. Knowing that elementary teachers in particular exhibit these tendencies could help administrators develop support plans or interventions that are specific to this occupation type. These efforts may take the form of workshops that are focused on developing a better work-life balance.

Next, we found that participants who are employed in the lowest-performing schools have the highest levels of work addiction. We believe this finding is especially important, as it means these educators not only have the difficult task of helping the students who are closest to failing academically, but are also, themselves, at the
The greatest risk of having to cope with the adverse consequences of work addiction.

The results of our study indicate that the types of teachers mentioned above are at the greatest risk of work addiction. These consequences may take the form of mental- (Chamberlin & Zhang, 2009) or physical health-related problems (Booth-Kewley & Friedman, 1987), a decrease in happiness, difficulty maintaining social relationships, reduced work performance (Schaufeli et al., 2008) and productivity (Liang & Chu, 2009), as well as job burnout (Salmela-Aro & Nurmi, 2004).

Although correlation does not necessarily equal causation, we speculate that the more pressure educators experience in trying to help their students succeed, the more likely they are to develop an unhealthy orientation towards role as educators. The results of this study lead us to believe that these groups of teachers are in great need of resources provided by their schools.

Practical Implications

It appears that teachers from specific sub-populations are at the greatest risk of developing workaholism tendencies. Educators who work in the lowest-performing schools, teach at the elementary level, and/or fall at the ends of the teaching experience spectrum appear to be the most likely to become workaholics. These results lead us to conclude that work addiction develops as a maladaptive strategy to cope with work-related pressures. This finding goes along with Schaufeli et al. (2008), who conceptualized workaholism as a compulsion to work, one that is excessive in nature. We encourage school administrators and counselors to consider developing both preventative measures as well as interventions for workaholic teachers.

Limitations

There were several limitations to this study. First, although the sample size obtained was adequate and represented a variety of schools, the researchers had hoped to acquire a sample size that included more private school teachers. As 100% of respondents mentioned being employed at a public school, obtaining data from a larger number of private school teachers would have helped make our findings more generalizable to all Mississippi teachers. We recommend future research be conducted on private school teachers and their experience of work addiction.

Second, although our participants came from a diverse sample, only 3% of those sampled were from the lowest-performing schools. With our research indicating that these teachers in particular may struggle with work addiction tendencies, we recommend further research be conducted on this group of instructors specifically.

Last, our research was conducted using volunteers. Those who took part in this study knew workaholism was a variable, based on how the study was advertised. This way of advertising may have attracted workaholics in particular to participating, which may have influenced our results.

Conclusion

As workaholism is a disorder that has been associated with a variety of adverse consequences (i.e. burnout, mental and physical health issues, etc.), we believe that the results of this study are crucial for educators, administrators, and school counselors to consider. Additionally, through our research we have identified specific groups of Mississippi educators who tend to struggle with this addiction; these groups are beginning teachers, those with 10 or more years of experience, elementary school teachers, as well as those who work in the lowest-performing schools. These results may lay the foundation for future researchers to explore why these groups in particular struggle with such a difficult disorder. These findings are also why we highly recommend that future studies be conducted on interventions that can be used within the school system to help workaholic teachers develop a healthier work-life balance.
References


Taris, T. W., Van Beek, I., & Schaufeli, W. B. (2012). Demographic and occupational correlates of workaholism. *Psychological Reports, 110*, 547-554. doi: 10.2466/03.09.17.PR0.110.2.547-554


Rebekah Reysen is a Learning Specialist for the Center for Teaching and Learning. Dr. Reysen is the corresponding author on this article and can be contacted at rreysen@olemiss.edu.
S. Ryan Niemeyer is the UM Program Director of METP and an Assistant Professor in the Leadership & Counselor Education in the School of Education.

Amanda Winburn is an Assistant Professor in the Leadership and Counselor Education Department in the School of Education.

Ann Monroe is the Elementary Program Coordinator and an Associate Professor in the Teacher Education Department in the School of Education.
I think our state as a whole, our country as a whole -- somebody is going to have to wake up and say, “These people are here, they need things just as our children need things”. . . And you know, if we don’t help them, then we are running the risk of having new crime in the streets. . . And back there, the boys and girls who are 15 can get out of school and find whatever work there is. What kind of possibilities do we have for children who are 15 and uneducated?

This comment by a U.S. elementary school teacher presents a complex view of Latino students and parents who come from another culture and speak a different language. In the study we report, we found that such images of Latinos’ schooling, the effects of immigration, and the way our educational system responds to immigrants were common among the educators who participated. Through focus group interviews, we elicited educators’ perceptions of language minority students in a school district in the Southeastern U.S. that has been strongly affected by recent immigration.

With the latest waves of immigration over the last 4 decades, demographic patterns in many public schools across the U.S. have changed markedly. Between 1980 and 2010, the U.S. “Hispanic” [1] population more than tripled, increasing from 14.6 million to 50.5 million. In 2010, Hispanic individuals made up 16.3% of the total U.S. population, and the latest Pew Research projections are that Hispanic individuals will comprise 29% of the population in 2050 (Passel & Cohn, 2008).

Pine County, the site of our study, is a striking example of this sea change. In 1990, fewer than 1,500 Hispanic individuals lived in Pine County, or about 2% of the population. This figure officially increased to more than 12,000 in 2012, which constituted 10.7% of the population. The Hispanic population in Pine County rose 89.52% from 2000 to 2010.
Pine County public schools’ student population is predominantly comprised of minority students. The African-American population is 52%, and the White population has decreased to less than 20% of the students. Hispanic individuals make up 23% of the students, surpassing the White population. The largest change has been the dramatic expansion of the Mexican immigrant population. From 1990-2013, the number of Hispanic students in the Pine County schools rose from 149 to about 3,085 (data from Pine County school district documents). Approximately 90% of the English to Speakers of Other Languages (ESOL) population is Spanish-speaking.

For a number of years, concerns have been raised regarding immigrant students’ integration into the U.S. educational system. Specifically, Latino students have frequently been in the headlines because of alarming statistics on high school graduation rates. According to 2011 national figures, 82% of Latino students between ages 18-24 have a high school diploma or equivalent credential, compared to 90% of Black students and 94% of White students (U.S. Census Bureau, School Enrollment Supplement). In 2011, 14% of Hispanic/Latino 16-24 year olds were high school dropouts, while the rate was 5% for White students (NCES, 2013). The graduation rates for White students and Hispanic students were 83.0% and 71.4%, respectively (NCES, 2013). Young Hispanic college students are less likely than their white counterparts to enroll in a 4-year college (56% versus 72%).

Such statistics have accompanied extensive research from many theoretical perspectives that examine the perceived educational failure of Latino students. The combination of an extensive population shift and associated cultural changes has serious implications, not only for students, but also for local educators who try to work with families and teach all students. In this study, we took a closer look at some of these changes from the perspective of educators, a group whose voices are sometimes missing in the discourses on Latino students in the educational system.

From Deficit Models to Concerns with Conditions

For decades, much of the writing about Latino students and their schooling assigned responsibility for students’ high dropout rates and academic difficulties to characteristics of family and culture. Valencia and Black (2002) reviewed the “cultural deprivation” literature of the 1960’s and the “at risk” studies of the 1980’s and 1990’s, both of which were examples of a “deficit model” and found that for at risk students,

the primary focus is on familial characteristics (e.g., race or ethnicity, poverty, single parenthood) and personal characteristics of students (e.g., poor self-concept, self-destructive behaviors, English as second language, juvenile delinquency. . . (p. 86; emphasis in original)

Writers have characterized Latino students as being uncommitted to education, lacking support from families in academic pursuits, and suffering hardships that make education of secondary importance. Author B (2013) found that teachers blamed unsupportive and uncaring parents for ELLs’ lack of success. Valencia and Black (2002) and Alfaro et al. (2009) have attempted to debunk the “myth” that Latinos don’t value education by describing numerous examples of students’ and families’ struggles to gain access to adequate schooling.

In the past several decades, researchers have paid more attention to the conditions of schools in order to describe the difficulties that Latino students experience there. This line of research has commonly emphasized misunderstandings due to language and other cultural mismatches (Birch & Ellis Ferrin, 2001), divergent expectations of teachers, students, and parents (Cammarota, 2006; Gibson, Gándara, & Koyama, 2004), and differing views of work and academics (Lopez, 2001; Orellana, 2001). According to Walker, Shafer, and Iiams (2004), “Local community contexts are large determinants in the extent and nature of societal attitudes” and “when teachers
internalize dominant societal messages, they bring them directly into their schools and classrooms” (p. 131). Walker et al. (2004) also investigated the effects of context on attitudes and found that teachers working in schools with few ELLs held positive, but perhaps naïve attitudes about ELLs, teachers in schools with a rapid influx of ELLs held neutral attitudes, and migrant-serving schools’ teachers held the most negative attitudes toward ELLs. Educators’ perspectives can profoundly influence interactions with students and their families.

The Importance of Educators’ Perspectives

Student success and failure is often determined by their ability to form positive relationships with school personnel (Gonzalez, 2010). Villenas and Deyhle (1999) found in their review that teachers were key actors in Latino students’ educational experiences, and the teachers appeared to harbor “low expectations” and “negative beliefs”. Sharkey and Layzer (2000) found that the “benevolent conspiracy” of well-meaning teachers often produced low expectations for ELLs (p. 3). Teachers frequently attributed problems to students’ families, whose values were compared unfavorably with those of White middle-class families. Quiroz (2001) indicated that by the time Latino students reached high school, they felt that teachers were “racist, or uninterested in their education” and their descriptions of school became less positive (p. 339). Blanchard (2011) found that educators are less likely to expect Latinos, especially immigrants and boys, to complete college. This is unfortunate because teacher support can significantly affect Latinos’ school engagement and perception of school meaningfulness (Brewster & Bowen, 2004).

In the above studies, teachers appeared to project images held within society at large, but these gloomy depictions of how educators view Latino students are sometimes contradicted in other studies. Social assets, including supportive teachers, can positively affect school success of Latinos (Brewster & Bowen, 2004). Gonzalez (2010) found that close relationships with educators can help offset some negative effects of the undocumented status of Latino students, while perceived discrimination against Latino boys is negatively related to academic motivation and success (Alfaro et al., 2009). In fact, a common thread among the studies is that many educators believe Latino students have a strong desire to succeed and are optimistic about teaching ELLs (Villenas & Deyhle, 1999; Author B, 2014). For example, Author B (2014) found the majority of teachers trusted that ELLs can master the required curriculum and believed that the inclusion of ELLs in mainstream classes benefited all students.

The situation is complex, but many Latino students attend schools in which teachers who lack intercultural preparation and a challenge to their prevailing attitudes may still resort to blaming student failure on cultural deficiencies. Some teachers are not adequately prepared to work with a linguistically diverse student population (American Federation of Teachers, 2004; Author B, 2014). Specifically for our study, the focus was on teachers’ perceptions of their students and the students’ families, in order to illuminate the complexity of those perceptions.

Method

Purpose and Design

The qualitative data in this report were drawn from a larger mixed-methods study evaluating the situation of students in the Pine County school district who speak a first language other than English. A group of teachers, other educators, professors, parents, and graduate students carried out a “local educational assessment of resources and needs” (“LEARN”). The research questions from the assessment were:

- What do teachers think about how well the language-minority students are doing in their classes and about students’ school experiences?
- What are the most important needs of language-minority students in the schools, according to educators?
- How adequate is the communication between families and their children’s school(s),
and among educational professionals who work with these students?

- What sort of community resources are educators aware of, and what resources do educators need in order to serve the needs of this population?

Of the 19 schools in the district, 6 target schools (4 elementary schools, 1 middle school, and 1 high school) were chosen to participate because they had the district’s highest percentage of language-minority students at different grade levels. The 6 schools in our study enrolled 66% of the district total of language-minority students at the time. In the 4 elementary schools, the percentage of ESOL population ranged from 13.1% to 17.5%. The middle school had a 9.4% ESOL population and the high school 2.9%.

The educators who participated in our interviews were grouped according to shared professional membership categories: Classroom teachers, ESOL teachers, other professional staff (social workers and counselors), and administrators. This strategy has been found to increase participants’ comfort with expressing their opinions, while also allowing participants more opportunities to feed off each others’ responses (Bloor, Frankland, Thomas, & Robson; 2001; Morgan, 2002).

Data Collection

The LEARN team conducted 18 focus group interviews, each with 3-7 participants. Interviews were audiotaped and later transcribed. The interview moderators included ESOL teachers, regular classroom teachers, counselors, a Migrant Education worker, a bilingual Parent Liaison, a school social worker, a professor (also a parent), a graduate assistant, and the director of a local social agency. All moderators attended an orientation session before conducting the interviews. Each interview lasted 30-60 minutes. For this report, we focus only on interview data from 10 of the focus groups: 6 with “regular” teachers from each school in the study, 2 with ESOL teachers from across the district, 1 with principals district-wide, and 1 with professional staff (such as counselors, nurses, and social workers) from two of the elementary schools.

Data Analysis

After transcribing the taped interviews, we collaboratively analyzed the data. To enhance the consistency of coding and interpretation we read the same transcripts and met to discuss parallel and discrepant patterns in the data. We initially worked inductively (Coffey & Atkinson, 1996) during an open-ended coding and categorization process (Bogdan & Biklen, 1998) to generate multiple categories for future coding.

In the first phase of the analysis, we focused solely on teachers’ descriptions of students and families within different sets of interviews, and we compiled a list of all indicative quotes. In the second phase, we tried to categorize the images as negative or positive, but we found that the images expressed by educators were complicated and difficult to categorize in that manner. Quotes often seemed contradictory but were connected by related themes. Therefore, in a third phase, we re-examined the data by focusing our analysis on five themes that broadly represented educators’ perceptions of Latino students and families: (1) students’ and families’ attitudes towards education; (2) students’ and families’ educational background; (3) work ethic; (4) family life; and (5) community life. Throughout the process, representative quotes were chosen to ensure that the coded categories and major themes were firmly situated in the words of participants. In the subsequent analysis of data, we code quotes in this way: PS for primary school teachers, MS for middle school teachers, HS for high school teachers, ES for ESOL teachers who were interviewed in mixed school groups, AD for administrators, and PP for other professional staff. Their words and perceptions follow.

Educators’ Perceptions

Educators recognized that they often lacked a knowledge base about Latino students and families, and they gave many examples of the contextual factors (ineffective policies and
lack of resources) that made it difficult to fulfill their objectives. However, educators rarely questioned the values implicit in their images of Latino students and families. We now turn our attention to these images. The data are grouped according to educators' perceptions of: (1) students' and parents' attitudes toward education, (2) students' educational background, and (3) Latino families.

Perceptions of Students’ and Parents’ Attitudes toward Education

The views concerning students’ attitudes toward education were often contradictory. Teachers seemed to see Latinos as respectful, but perhaps lacking in the assertiveness necessary for school success. In addition, teachers at times seemed to value the diversity that comes with bilingualism, but would also discuss the use of Spanish with negative connotations by referring to the “language barrier.” Similarly, when discussing parents’ attitudes toward education the views were mixed. Teachers believed that parents were supportive of school to an extent, but felt that Latinos lacked positive role models to encourage them to stay in school. These three categories of conflicting perceptions of educators about students’ and parents’ attitudes toward education are discussed in the following paragraphs.

“The sweetest children in my class.” In classroom interactions, teachers described Latino students as very “sociable,” “cooperative,” and “group oriented in many ways.” (HS). ESOL teachers, especially, described Latino students as friendly and willing to “appreciate you when they realize you are on their side.” In these accounts, students are depicted as good “role models” for American students: “I think, generally speaking, most students from other backgrounds, other than native-born Americans, tend to have more respect for teachers. And I think that’s good for the other students to see that the respect is there” (HS).

The polite social nature and positive attitude of students was, however, perceived as problematic at times. One teacher complained that respect for teachers and attempts to fulfill expectations were actually obstacles in students’ development, since these traits would hide any learning difficulties that students were experiencing. She explained:

[A] lot of times they will just smile at you politely or just be real polite, but you know deep down that they don’t understand anything of what you’re saying. And I think that’s just part of their culture to be polite to the teacher and be very respectful. (MS)

Regular classroom teachers believed that students had to “learn assertiveness” and tell teachers about “what is going on” (PS). In a similar vein, teachers correlated Latino students’ strong cooperative working style and sociability with negative classroom behaviors such as “getting off task,” or coming to school simply “to see friends, and not wanting to do schoolwork” (MS). Latino students were perceived to be at a disadvantage because their collective values interfered with a drive toward individual achievement.

“The language barrier.” Educators appreciated the linguistic diversity that Latino students brought with them. However, although some teachers had begun to learn Spanish, and many ESOL teachers were bilingual, a theme in educators’ discussions of bilingualism was what they referred to metaphorically as “the language barrier.” Across all interviews, the lack of a fully shared language was described as a root problem, which left little room for other explanations such as the difficulties of students’ adjustment or the inadequacy of educators’ help. Using Spanish during school hours was often discouraged. Even though teachers did not know the content of students’ conversations when students reverted to Spanish while working together, this behavior was described as troublesome.

Most educators did not see bilingualism as a possible resource rather than as an assumed deficiency. One teacher, for example, said of her Latino students: “If they are highly motivated, and they can somewhat compensate for their language deficits, they do well” (MS). An ESOL
teacher said that when “the kids don’t know how to read or write in their native language” they may become “semi-lingual” and risk feeling that “you don’t fit anywhere,” neither in the “English school life” nor “Spanish [sic] school life” (ES). Despite the requests for resources in Spanish for their Latino students, many educators viewed these materials as a means to obtain fluency in English rather than as a way to maintain the first language.

There were countervailing viewpoints. Some of the social workers and ESOL teachers worried that people in the district were not “tolerant of people that speak another language.” Several ESOL teachers explicitly criticized an “English only” approach to learning, and promoted the idea of a dual-immersion bilingual program in English and Spanish.

“Supportive, but bad role models.” Parent support is vital to students’ success in school. Some of the educators had directly encountered Latino families, and they found that parents willingly supported the school and the teachers’ objectives. On one occasion, Latino parents supported a school by collecting a large sum of money to hire a band for a celebratory “heritage night.” Administrators also reported that parental involvement was increasing, indicating a positive parental attitude toward school (AD).

On the other hand, educators’ perceptions were fraught with ambivalence and conflicting feelings. Although educators did not believe that parents directly resisted schooling, there was a prevalent belief that students lacked role models for academic success at home (MS). Another teacher stated: “[M]aybe that could be something, some kind of goal that we could aim for, to educate and communicate to our parents that it’s important that their children stay in school and finish school and not just quit and get a job” (MS). In a similar vein, a principal said:

We still have some cultural values that -- and I don’t want to say equate to not caring about education, that’s not it. They care lots about education until the child’s a certain age, and then at that point, in that culture, the person needs to be doing something else, not being in school. (AD)

Educators were reluctant to blame individual students or parents. Instead, students and parents were positioned as part of a cultural group with an inadequate educational background.

Perceptions of Educational Background

Unlike the conflicting positive and negative perceptions educators seemed to hold about students’ and parents’ attitude toward education, the educator’s perceptions of the educational backgrounds of Latinos was consistently negative. Educators tended to view Latino students’ (and parents’) prior schooling as flawed or even non-existent. One teacher explained how she struggled with “instilling” the right kind of values in her Latino students:

Keeping the standards high. The fact that they have to do their homework, they’ve got to put an effort on their homework like everybody else. And if they don’t have it then you have to do study hall, but after a while they learn that “no more, no play.” And all my little Spanish (sic) children at the beginning of the year didn’t do their homework, except for maybe a couple that did. (PS)

An ESOL teacher asserted that poor teaching in Mexico was to blame: “I have a first grader that came in copying very well. She does not know how to write or anything, but she can copy somebody else upside down and backwards across from her on the table. That’s the skill she was taught in school” (ES).

Some educators seemed unaware of the social class differences among Latino immigrants, or that families emigrating from South America generally have higher levels of income and education than families from Mexico or Central America:

And I have found -- what do y’all think of this? A lot of times the South American Peruvians and the Argentines
and the Brazilians do better than the children in Mexico on a lot of the stuff. Seems like their educational system might have been a little more advanced. (PS)

Parents were commonly portrayed as illiterate and unable to provide help, even in their native language. Across interviews, there was a widespread belief that despite some effort, Latino parents still did not possess a strong, overarching commitment to education. A teacher summarized this view by saying: “[S]ome cultures seem to value education more than others. My Asian students just always seem to – parents especially put a high value, maybe too high, you know, on grades, for instance” (HS).

Teachers’ beliefs about Latino students’ and parents’ educational attitudes and backgrounds were often entangled in perceptions of parents’ work ethic. Work and education were juxtaposed as two fundamentally different and conflicting activities. This view of work and education being at odds with each other is also apparent in the next section of educators’ perceptions of Latino families.

**Perceptions of Latino Families**

Just as educators had mixed views about students’ and parents’ attitudes toward education, participants’ discussions of Latino families were also peppered with both positive and negative perceptions. Educators appreciated the close-knit families in the Latino culture, but believed education should sometimes come before family. Similarly, educators admired the work ethic of many Latinos while simultaneously looking down on the families who forced the children to do housework instead of use their imagination to play. These two themes of close families and the importance of work over education, along with the purely negative view of poverty in Latino culture will be the focus in the following section.

“**Just us on our own.**” Across all interviews, participants saw Latino families as close and caring. ESOL teachers, especially, talked extensively about the positive influence of this closeness on the children:

The other thing that would be so good I think for our teachers is the whole affirming of family that you could hear in that room yesterday, as the kids were talking about what happens, and parents and fathers, and the importance of the priest. All of the things that we tend to, from our prejudice, not see in people who are different from us. . . (ES)

Despite the positive values that a close-knit family provided, teachers suspected that parents did not really support and care for their children in the proper ways. Students were characterized as having no access to “printed material” and as living in “crowded houses” with up to “15 kids in a family.” One teacher said: “They don’t have much of the sight word and those kinds of things that I would think they would have acquired had they been in a culture that would give them more of the reading” (MS). Several educators stated that immigrants set the wrong priorities, always placing the family first:

The kids stay home for all sorts. . . Then there are some other cultural things. There was one thing, that she missed one more day she would lose credit for the class -- and she understood it very clearly -- and then she was absent the whole next week working in Miami, and of course it was their culture. (HS)

**“Always working, but with the wrong priorities.”** Numerous accounts of parents’ hard work described their struggles to survive and support family and relatives by holding several jobs simultaneously. Educators admired the Latino parents’ determination, but believed that labor had a dangerous downside for students’ academic achievement. An elementary ESOL teacher asserted:

Parents don’t have time. They are always working. One parent is working so that they don’t have to pay for day care, they have got the split shift. One parent is home and is probably asleep with the children there, but what are the children doing? Are they being told, “OK, now it’s homework time?” No!
It’s: “Clean the house, let’s make sure the laundry gets done, let’s do this, this”. . . (ES)

Another teacher described how her Latino students had no conceptual understanding about things outside the “real concrete” life of work and other basic survival needs:

I was reading a book to him, to the group, and it had some imagination in there, like a mouse who talks, that lives under a house. And he said: “How can a mouse live under, how can a family live under?” And I said, “Well, it’s imagination.” [H]e was like, “That’s not -- how can that happen?” They have so much knowledge about the real world, the things that happen, and they know so much about other stuff that they don’t know their book is fictional. (ES)

By being forced to take on many adult responsibilities, the teachers worried that play and children’s activities were neglected. The educators’ views implied a dichotomous relationship between valuing and performing hard (manual) labor, as represented by the Latino family, and valuing academic achievement, as represented by the school world.

“Climbing through the drainpipe.”

Educators portrayed the Latino community as being in a state of crisis, with few resources and numerous social problems such as poor health and poverty. There was a widespread belief that many families had come here illegally by “climbing through the drainpipe,” and therefore were unlikely to seek support. Educators believed that Latino students often came to school “hungry and dirty,” and thus were less able to learn. One teacher said: “You’re not going to have an achiever if everything’s not okay, if they’re not fed, if they’re not clothed, if they’re living in, you know, chaos.” (ES)

Comments such as these reflect how educators’ perspectives of economics and culture were closely interwoven. Absenteeism and other obstacles to academic success were, in general, attributed to home culture and problems in the Latino community, whether or not educators had correct information.

The Interplay of Self-Reflection and Assumption

Teachers, administrators, and professional staff drew a complex picture of Latino students and families. The faculty talked extensively about issues related to cultural differences, which they perceived as problematic for students’ academic achievement. Some of the “problems” related to characteristics that were initially described positively. Educators’ perceptions of Latino families and their lifestyles rarely derived from direct contact with the immigrant families in their community, and information regarding Latino families was often stereotypical. Although educators bemoaned their lack of knowledge, criticized constraints that affected Latino students, and offered numerous suggestions to remedy the perceived problems, there was scant self-reflection about Latino families’ values and lifestyles. Latino students’ participation in household activities, their help with translation, and their paid labor were all taken as signs of parents’ lack of support for children’s academic development. This corresponds with what a teacher participant in Author B’s study said: “I don’t think they are real strict about making them go to school down there. You can quit school when you are like 9 or something” (2013, p. 16). These views reflect educators’ failure to examine their own assumptions about school systems in Mexico and other Latin American countries.

Professional Learning

Professional learning has been shown to have a positive impact on teachers of ELLs. For example, Author B (2011a) found that teachers who had received pre-service education in teaching ELLs were more prepared to help ELLs understand class materials and were less likely to believe that if students can speak English fluently with their friends, they should be able to understand the course content as well as others. Improved programs, resources, and staffing are necessary to change the conditions of educators’ work, but not sufficient to alter people’s points
of view. How do we enable educators to examine what they know and do not know about the values, beliefs, and experiences of students and families?

We will group professional learning into three overlapping tiers, which differ in relation to the depth of challenging experiences. First, an intercultural information approach draws on Barajas and Ronnkvist’s (2007) suggestions for color-conscious rather than color-blind thinking. Next, educators might use an intercultural inquiry approach in order to interact with and address problems in their communities. Finally, intercultural immersion can be used to engage educators with families through home visits, or with foreign communities.

Intercultural information builds on the positive views of educators toward their students, and engages educators in classes, workshops, or in-school projects that promote greater understanding of cultural issues. Trumbull, Rothstein-Fisch, Greenfield, and Quiroz (2001), in their “Bridging Cultures” work, built a dualistic conceptual framework that asked teachers to compare a collectivist and an individual orientation to life. Similarly, Cammarota (2006) found that Latino students had difficulties in school because of their negative relationships with school personnel and called for a compassionate education in which learning is connected with genuine care and concern that includes knowledge of students and their families. Educators working with Mexican immigrant children should also be cognizant of resources such as the Migrant Education Binational Program and information about children’s schooling in Mexico (Author A, 2003; Author A & Bryan, 2003; Bryan & Author A, 2005).

Intercultural information can also be enhanced through consistent communication between regular classroom teachers and ESOL teachers, counselors, social workers, and administrators. As Yoon (2008) states, “Teaching ELLs is not a responsibility of only ESL teachers but also of classroom teachers” (p. 516). Educators in our study wanted more time for regular and ESOL teachers to talk about particular students, more information about ESOL policies and practices in regular classrooms, and “Spanish for Teachers” courses. Many school districts have talented and knowledgeable ESOL teachers who could develop ongoing workshops for their colleagues, rather than utilizing the common staff development practice of hiring outside experts to conduct one-day workshops. Release time to visit other schools and to develop the workshops would be necessary for this to happen. He, Prater, and Steed (2011) were successful in creating a research-based, needs-oriented professional development model for teachers of ELLs that included collaboration between university and schools districts, as well as between ESOL and regular classroom teachers.

In an intercultural inquiry approach, educators would develop research projects with colleagues and gather data from students’ out-of-school linguistic and social experiences. These data need to be relevant to the teachers and authentically indicative of students' lives. An inquiry approach to professional development has been shown to improve teachers’ practice through demonstration, observation, collaboration, fieldwork, and reflection (Burke, 2013). Nieto believes that educators should become “students of their students,” to learn about, with, and for their students and wrote eloquently about “multicultural learning communities” (1999, p. 142). Gonzalez et al. (2013) wrote about engaging educators in projects where they use anthropological methods to learn about students’ culture and the “funds of knowledge” by learning in the community. Moll believes that educators need to reflect on how they “come to depict these families for themselves, for their work, and for other educators” (2010, p. 455). An administrator in our study stated that the crucial point is for educators to learn from the Latino population. She said:

These children and these families have so much to share with us -- and we’re so intent on making sure that we teach them about how to be here and how to work in our culture, that we’re not listening enough to what they have to
offer us and what we have to learn from them about themselves. (AD)

This sort of work can help teachers to see beyond presumed “language barriers” and to question their perceptions of what they know and do not know. Such questioning is important because, as Author B stated, “although training and professional development are critical, they need to be focused on belief change in order to be effective” (2011, p. 130). Such activity should be paired with closer investigations of language learning and cultural adaptation to change (for immigrants and their teachers), so that we can counteract lingering stigmatizing views of “other” children. He, Prater, and Steed (2011) believe that teachers working with ELLs need not just knowledge of language and culture, but skills in collaboration, leadership, and critical reflection. Given our powerful assumptions about culture and education, educators need to create ways to talk face-to-face with parents and students outside of regular school hours and classroom sites. Such “cultural conversations” could allow educators to inquire about students’ prior educational experiences, allow parents to talk about their educational expectations, and allow both parties to ask questions that are rarely broached.

*Intercultural immersion* is an uncommon and potentially dramatic form of professional learning about students, families, the communities in which students live – and oneself (Diaz, 2013). Barajas and Ronnkvist (2007) state that “recognizing race is not the problem; the problem is being willing to recognize what we are doing, and then creating relationships that support a socially just educational organization” (p. 1536). By "immersion" we do not imply living with people; the intent is to connect in a deeper way with children and families. Some experiences are local, and take the form of community gatherings and home visits. Moll (2010) advocates for ethnographic-style home visits in order to establish relations of trusts between families and teachers for developing “educational capital” (p. 455). A pattern of home visits, family dinners hosted by school parents that bring together parents and teachers to talk across the table, and events held in a local community center could be arranged by a team of faculty and administrators, aided by a bilingual school social worker and a small group of parents. This would enable parents to feel more comfortable talking and would help educators to learn about family and community life.

There are also opportunities for educators to live in a host community or another country. For example, a number of programs have taken educators to Mexico, primarily foreign language teachers and bilingual teachers. Indiana University has outstanding programs for pre-service experiences on the US-Mexican border or in other countries, and there have been successful professional development abroad program for U.S. educators in Mexico (Author A, Hotch, & Sargent, 2002) and other sites. Sleeter (2001) found that community-based cross-cultural immersion experiences produced a considerable power of learning from the community. Such *intercultural immersion* programs create an experiential space that challenges us to see, hear, and think in a different form than is possible in our everyday lives.

**Conclusion**

School professionals need to learn more about “Latino cultures, specifically about practices and interventions that are effective for the educational achievement and attainment of Latino youth” (Brewster & Bowen, 2004, p. 63). Our hope is that school leaders will think broadly about the possibilities available to encourage the deepest and most long-lasting positive change among faculty.

“The public school has been one of the most important institutions in the lives of immigrant children, wielding the power to either replicate societal inequalities or equalize the field” (Gonzalez, 2010). To reach toward the positive "equalizing" potential of public education for immigrant Latino children, it is urgent that we develop powerful ways to overcome stereotyped images of Latino students.
and families, through intercultural information, inquiry, and immersion.

References


Pettit, S. K. (2011b). Teachers’ beliefs about English Language Learners in mainstream classrooms: A Review of


---

[1] Hispanic is the Census Bureau’s term, which has been criticized because it refers only to Spanish speakers (Suárez-Orozco & Páez, 2002). When not citing census data, we will use the term “Latino,” which we take to indicate “the broadest, most inclusive, and most generous definition of Latinos: that segment of the U.S. population that traces its descent to the Spanish-speaking, Caribbean, and Latin American worlds,” as suggested by Suárez-Orozco and Páez in their 2002 book *Latinos Remaking America*.

**H. James McLaughlin** holds the Richard James Mertz Chair of Education at Rollins College. His current research interests include educational issues related to Latino immigrant students in the U.S., the education of Muslim immigrants in the Netherlands, and reinterpretations of U.S. students’ performance on international tests.

**Stacie K. Pettit** is an Assistant Professor of Teacher Education at Georgia Regents University. Her research interests include teaching English Language Learners in mainstream classrooms, particularly middle school mathematics classrooms, and using social media in education. Dr. Pettit is the corresponding author on this article and can be contacted at stacie.pettit@gmail.com.