

STUDENT ENGAGEMENT: RE-EXAMINING BEHAVIORAL DISAFFECTION WITHIN  
THE SELF-SYSTEM MODEL OF MOTIVATIONAL DEVELOPMENT

by

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## ABSTRACT

The purpose of this study is to extend the Engagement vs. Disaffection with Learning Scale – Student Report (EvsD; Skinner, Kindermann, & Furrer, 2009) and examine the structural components of the measure. This was done by adapting and adding items that measure active behavioral disaffection to EvsD and examining the structural fit of the extended measure among predominately Hispanic 3<sup>rd</sup>-7<sup>th</sup> graders. Student engagement, as measured by EvsD, is multidimensional consisting of behavioral engagement, behavioral disaffection, emotional engagement, and emotional disaffection. However, within the behavioral disaffection component, the scale fails to include items that measure behaviors that are in active opposition to classroom learning (e.g. disruptive, defiant, and restless type behaviors), and only measures behaviors that are passive yet do not interfere with classroom learning (e.g. inattention and lack of effort). Further, the structural components of the measure have not been validated among predominately Hispanic students.

EvsD was extended, translated into Spanish, and administered to 216 inner city youth, ages 8 to 14 years old, who attended summer programs in a southwestern U.S. state. Using Structural Equation Modeling with AMOS 4, the component of behavioral disaffection was examined with the inclusion of active disaffection items. The other components of EvsD were also individually examined. Alternative models of EvsD were then compared to determine if the extended measure best fits a one, two, or four factor structure. Regression analyses were also

conducted to examine if components of EvsD predict school outcome measures of attendance, discipline referrals, and GPA.

Study results indicated that with the addition of active behavioral disaffection items, the component of behavioral disaffection best fits both one and two factor structural models. The other components of EvsD also fit the data well, with behavioral and emotional engagement fitting a one factor model, and emotional disaffection fitting a hierarchical structure differentiating three factors of worry, boredom, and frustration. Comparison of alternative models determined that EvsD best fits a four factor multidimensional structure with active and passive disaffection differentiated within behavioral disaffection. Further, regression analyses confirmed the discriminant validity of active and passive behavioral disaffection with active behavioral disaffection predicting discipline referrals, and passive behavioral disaffection, along with boredom, predicting GPA.

## DEDICATION

This dissertation is dedicated to My Lord Jesus Christ who guided me through this process, helped me overcome every obstacle, and calmed my anxieties. This dissertation is also dedicated to my family – Gentry Jr., Gentry III, and Gabrielle who provided endless support, laughter, and joy during this long process. To my husband Gentry, you are truly my best friend, love of my life, and my daily angel on earth. Your service to this country and junior sailors speaks volumes. Even more, your devotion to me and our family demonstrates that you are pure love. I would not have accomplished this task without your continuous support.

## LIST OF ABBREVIATIONS AND SYMBOLS

<i>a</i>	Cronbach's index of internal consistency
CFI	Comparative Fit Index: also known as the Bentler Comparative Fit Index, which compares the existing model fit with an independent model
$\chi^2$	Chi-square: a goodness-of-fit statistic that shows the difference between the observed covariance matrix and the model covariance matrix.
<i>df</i>	Degrees of freedom: number of values free to vary after certain restrictions have been placed on the data
e.g.	<i>exempli gratia</i> (meaning "for example")
et al	<i>et alia</i> (meaning "and others")
<i>F</i>	Fisher's <i>F</i> ratio: A ratio of two variances
i.e.	<i>id est</i> (meaning "that is")
<i>M</i>	Mean: the sum of a set of measurements divided by the number of measurements in the set
<i>p</i>	Probability associated with the occurrence under the null hypothesis of a value as extreme as or more extreme than the observed value
<i>r</i>	Pearson product-moment correlation
RMSEA	Root Mean Square Error of Approximation: discrepancy per degree of freedom
<i>t</i>	Computed value of <i>t</i> test
>	Less than
=	Equal to
%	percent

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## CHAPTER 1

### INTRODUCTION

Described as *energy in action*, or the connection of energy between the student and the activity (Russell, Ainley, & Frydenberg, 2005), engagement in learning is critical for student achievement and long-term school success. Student engagement is a measure of students' behavioral and emotional involvement in classroom learning and predicts outcomes of learning (Finn, 2006; Skinner, Kindermann, & Furrer, 2009). Continued engagement across elementary, middle, and high school is a predictor of academic achievement and graduation. Conversely, increasing disengagement across K-12 schooling is a predictor of academic underachievement and high school dropout (Christenson, Sinclair, Lehr, & Godber, 2001; Finn, 1989; Finn, 2006; Wehlage, Rutter, Smith, Lesko, & Fernandez, 1989). Student engagement is an essential component within education research due to national efforts to focus on the educational effectiveness of schools, student achievement, high school completion, and continued post-secondary training and education of students (Aud et al., 2012; Finn, 2006).

#### **What is Student Engagement?**

Student engagement assesses class participation or disruption, and learning interest or boredom among students (Finn, Pannozzo, & Voelkl, 1995; Skinner et al., 2009; Yazzie-Mintz, 2010). Student engagement is critical to educational research because it measures components

that are malleable, open to intervention, and can be influenced by teachers in the classroom environment (Christenson et al., 2008; Klem & Connell, 2004). That is, student engagement measures variables that the school environment can control, and looks beyond status variables (e.g. socio-economic level, family structure, and ethnic background) that are not within the schools' control (National Research Council, 2004; Yazzie-Mintz, 2010). Student engagement gives educators an avenue to intervene at the earliest signs of student disengagement from school in efforts to prevent underachievement and high school dropout (Appleton, Christenson, & Furlong, 2008).

Student engagement is also an indication of students' motivational *state of being* in learning, rather than a fixed characteristic trait of learning (Sinclair, Christenson, Lehr, & Anderson, 2003; Skinner, Kindermann, Connell, & Wellborn, 2009). This is important given that students' engagement in classroom learning varies daily and is continuously affected by co-occurring events across all environments to include the home, school, and classroom environments. Students' engagement is also affected by internal personal factors such as self-perceptions, values, and goals (Finn & Voelkl, 1993; Niemiec & Ryan, 2009; Skinner et al., 2009; Van Ryzin, Gravely, & Roseth, 2009). In considering these multiple influential factors, the motivational *state of being* quality is what makes student engagement malleable and open to the influence of interventions conducted within the school environment.

Student engagement is also considered critical to assessing the predictability of academic achievement and school success among at-risk students (Brewster & Bowen, 2004; Connell,

Spencer, & Aber, 1994; Finn & Rock, 1997; Garcia-Reid, Reid, & Peterson, 2005). Although national strides have been made to close the achievement gap between majority white and ethnic minority students, Hispanic and African American students continue to be more prevalent for underachievement and high school dropout (Cataldi, et al., 2009; Rampey, Dion, & Donahue, 2009). Educators and researchers continue to consider ways to assess and intervene against the underachievement and dropout rates of at-risk students. Student engagement has proven to be an assessable and malleable indicator of school success despite students' ethnic backgrounds and economic status (Connell, et al., 1994; Finn & Rock, 1997; Garcia-Reid, et al., 2005).

### **Conceptualization Issues of Student Engagement**

When considering the malleable characteristics and critical outcome predictors of student engagement, it is important to examine the sub-constructs that makeup the construct to ensure differing aspects of engagement are properly and reliably measured. There are several conceptualizations and measures of student engagement within the research literature. These conceptualizations often differ in identifying factors that are influencers of engagement (i.e., environmental or personal factors), outcome indicators of engagement (e.g., classwork completion, achievement, or attendance), and actual behavioral and emotional indicators of engagement (Appleton et al., 2008; Finn, 1989; Fredericks, Blumenfeld, & Paris, 2004; Jimerson, Campos, & Greif, 2003; Skinner et al., 2009). Conceptualizations that entangle facilitators, indicators, and outcomes of engagement muddle the construct, making the measure

less effective for assessment and less useful for intervention development (Appleton et al., 2008; Fredericks et al., 2004).

### **Self-System Model of Motivational Development**

This study identifies the *self-system model of motivational development (SSMMD)* as an ideal theory of student engagement. SSMMD theorizes the construct of student engagement within a model of motivation development (Skinner, Furrer, Marchand, & Kindermann, 2008; Skinner et al., 2009). SSMMD hypothesizes student engagement or disengagement in learning to be an active display of motivation, in which external contextual factors and personal psychological factors influence the display of motivation (Skinner et al., 2009). Within the classroom, *external contextual factors* include classroom structure and teacher-student relationships. *Personal psychological factors* include students' academic competence, relatedness to learning and the learning environment, and individual autonomy in learning. Together, contextual and psychological factors are believed to influence student engagement and affect overall learning and achievement outcomes in school.

### **Engagement versus Disaffection with Learning Scale**

As measured by the Engagement Versus Disaffection with Learning Scale – Student Report (EvsD; Skinner et al., 2009), student engagement within SSMMD is multidimensional (Skinner et al., 2008). One dimension distinguishes the emotional and behavioral characteristics of students' engagement in relation to classroom learning. The second dimension distinguishes the positive and negative aspects of students' emotional and behavioral characteristics of

engagement (see Figure 1.1). The positive aspects are labeled engagement, and the negative aspects are labeled disaffection (in place of disengagement). Combined, student engagement consists of four components: behavioral engagement, behavioral disaffection, emotional engagement, and emotional disaffection.

Figure 1.1

Components of Engagement vs. Disaffection with Learning Scale

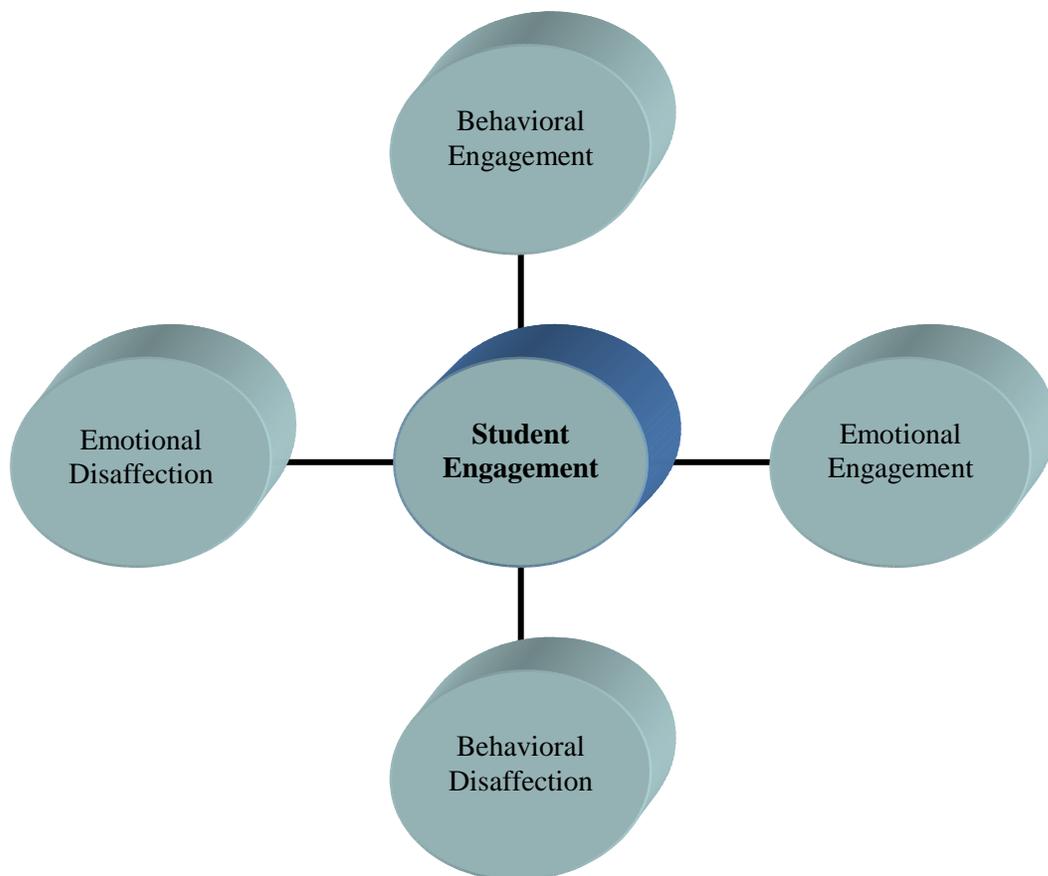


Figure 1.1. The multidimensional components of EvsD include behavioral engagement, behavioral disaffection, emotional engagement, and emotional disaffection.

**Examining behavioral disaffection within EvsD.** Although SSMMD provides an evidence-based model of student engagement, it is not without critique. SSMMD treats the behavioral disaffection component as a unitary construct that only measures negative behaviors which are passive. The behavioral disaffection component measures passive behaviors that are withdrawn, inattentive, and effortless (Skinner et al., 2008). The EvsD scale does not measure behaviors that are actively disaffected (Skinner et al., 2009). Active behavioral disaffection, as defined by Finn (1989), consists of behaviors that are disruptive, oppositional, and restless during learning. Not measuring behaviors that are actively disaffected and differentiating between passive and active behaviors is problematic. Students display behavioral disaffection with learning in different ways and for different reasons. For example, a student can be disruptive in class, an indicator of active behavioral disaffection, but still try hard in school. The display of disruptive behaviors in class, despite having academic effort and good grades, maybe due to boredom, classroom structure, or events external to the class environment. A student can also not try hard in school, an indicator of passive behavioral disaffection, but follow class rules. A student's lack of academic effort, despite efforts to follow class rules, maybe due to low academic competence. Capturing these modes of disaffection is critical to methods of

remediating student disengagement. These are different characteristics of behavioral disaffection that may require different methods of educational intervention.

There is also empirical data that lend evidence for the inclusion of active behavioral disaffection. Skinner, Kindermann, and Furrer (2009) reported that actively disaffected behaviors are more readily and reliably observed than passively disaffected behaviors. They also found that actively disaffected behaviors contributed more to off-task behaviors than passively disaffected behaviors (Skinner, Kindermann, & Furrer, 2009). These findings are not surprising, but it highlights that active behavioral disaffection is more likely to disrupt instruction than passive behavioral disaffection because it is more likely to be observed. In addition, Skinner and colleagues also found that actively disaffected behaviors were a strong negative predictor of teacher ratings of student engagement. That is, teachers perceived engagement more as an active function rather than passive behavioral disaffection. In short, it was found that active disaffected behaviors were strongly associated with perceived student engagement, more noticeable, easily observed, and disruptive in class than passive disaffected behaviors. Such evidence further contributes to the argument of the necessity to complete the measure of behavioral disaffection within SSMMD's measure of student engagement by including both active and passive measures of disaffection.

### **Participation Identification Model**

After reviewing the student engagement literature, the participation identification model (PIM) was identified as a theory of engagement that conceptualizes and measures active

behavioral disaffection (Finn, 1989; Finn et al., 1995). Similar to SSMMD, PIM theorizes student engagement as a developmental process of learning that is influenced by environmental and psychological factors (Finn, 1989). Additionally, PIM identifies the positive and negative valence of behavioral engagement and disengagement as measured by the Student Participation Questionnaire (SPQ; Finn et al., 1995). Specifically, SPQ is a teacher report four scale measure which assesses students' effortful and autonomous behavioral engagement or inattentive and disruptive behavioral disengagement in learning. Of particular interest for this study, the Disruptive Scale of SPQ measures behaviors that are in active behavioral opposition to classroom learning. For this reason, the items from the Disruptive Scale were adapted to create a measure of active behavioral disaffection for this study.

### **Purpose of Study**

This research study is a replication of Skinner, Kindermann, and Furrer (2009) examining the factor structure of the Engagement vs. Disaffection with Learning Scale – Student Report (EvsD). The purpose of this study was threefold. First, the primary purpose of this study was to develop and add items measuring active behavioral disaffection with learning (e.g. disruptive, oppositional behaviors) to the behavioral disaffection component of EvsD. The behavioral disaffection component of the EvsD scale was extended by adapting items from the Disruptive Scale of the Student Participation Questionnaire to create a measure of active behavioral disaffection (Finn, 1989; Finn, Pannozzo, & Voelkl, 1995). Items were adapted from SPQ given the similar theoretical orientations of SSMMD and PIM. Additionally, unlike SSMMD, PIM

identifies both the passive and active aspects of student behavioral disengagement in learning, as measured by the Inattentive and Disruptive Behavior Scales of the SPQ. By integrating the two models of student engagement, this paper seeks to add further conceptual clarity and utility to student engagement research.

Second, by replicating the statistical approach conducted by Skinner et al. (2009), the structural properties of EvsD were examined with the added active behavioral disaffection items. Previously, the structural properties of the individual components of EvsD were separately examined, including behavioral engagement, behavioral disaffection, emotional engagement, and emotional disaffection. Additionally, the overall factor structure of EvsD was examined using alternative modeling to determine if EvsD best fits a one, two, or four factor structural model of student engagement. In this study, first the factor structures of the individual components of student engagement were separately examined. Behavioral disaffection was hypothesized to best fit a two factor structure distinguishing active and passive behavioral disaffection. This hypothesis was made given the extension of behavioral disaffection to include items measuring active behavioral disaffection in learning. Consistent with previous studies, emotional disaffection was hypothesized to best fit a three factor structure distinguishing boredom, frustration, and worry; additionally, behavioral engagement and emotional engagement were hypothesized to fit a one factor structure.

Continuing to follow the statistical approach of Skinner et al. (2009), alternative models of EvsD were conducted to determine the best structural fit of all components. Previous studies

identified EvsD to best fit a four factor structure distinguishing behavioral disaffection, behavioral engagement, emotional disaffection, and emotional engagement. These four factor components of EvsD are hypothesized to continue to be distinguished.

Lastly, the structural properties of EvsD were validated amongst a predominately Hispanic student population. The factor structure of EvsD was previously examined among a predominately Caucasian student population from a working class background (Skinner, et al., 2009). Examining various alternative structural models of EvsD amongst a predominately Hispanic student population will further validate the scale as measure of student engagement. Further, the relation of EvsD to measures of school outcomes will be examined to determine if the measure is a valid predictor of school success. Measures of EvsD are hypothesized to predict school outcome measures of G.P.A., attendance, and discipline referrals.

## CHAPTER 2

### LITERATURE REVIEW & CONCEPTUAL FRAMEWORK

Chapter two will provide a brief review of the general student engagement literature and of the student engagement literature among ethnic minorities, specifically Hispanic minorities. Chapter two will also provide a conceptual framework for the theoretical rationale of extending the behavioral disaffection component of student engagement. First, the conceptual issues within the construct of student engagement will be reviewed; followed by a discussion of student engagement among ethnic minorities. Second, SSMD and the measurement of student engagement within SSMD will be reviewed, and conceptual issues within the model will be critiqued. Specifically, extending the behavioral disaffection component to measure active behavioral disaffection will be addressed. Next, the participation identification model will be introduced and reviewed. Lastly, the theoretical rationale for extending behavioral disaffection within SSMD to include items of active behavioral disaffection adapted from PIM will be explained in this section

#### **Student Engagement**

Student engagement is considered to be a dynamic construct that is the centerpiece of student motivation (Skinner et al., 2009). Student engagement is the outward manifestation of the combined effects of home contexts, school contexts, and self-perceptions on student emotional regulation and behavioral involvement in classroom learning (Appleton et. al., 2008; Finn, 1989;

Fredericks, et. al., 2004; Skinner et al., 2009). For example, teacher support in the classroom, or the lack thereof, can influence if a student is behaviorally and emotionally engaged in learning (Skinner & Belmont, 1993). Likewise, a poor self-perception of academic competence can cause a student to be behaviorally and emotionally disengaged in classroom learning (Skinner, Wellborn, Connell, 1990).

Student engagement combines several areas of research including motivation, sense of belonging, and academic involvement into one comprehensive model (Appleton, et al., 2008; Fredericks et al., 2004). The construct is multidimensional and consists of observable and internal indicators of student learning (Appleton, et al., 2008; Yazzie-Mintz, 2010). Observable indicators are behaviors that typically are considered to be indicators of classroom learning, such as participation, active listening, and academic effort. Internal indicators are emotional states that are also typically considered to be indicators of classroom learning. These emotions include learning interest, enjoyment, and excitement (Skinner, et. al., 2008).

The components that make up student engagement vary across differing theories, yet typically include behavioral engagement, emotional engagement, and cognitive engagement (Fredericks et al., 2004). However, behavioral and emotional engagement are generally identified as the central constructs of student engagement, and are most commonly defined across theories of engagement (Yazzie-Mintz, 2010; Finn, 1989; Fredericks et al., 2004; Skinner et al., 2009). This study identifies behavior and emotion as primary components of student

engagement, given they are more consistently defined across theories of engagement and are specifically identified within SSMMD.

### **Behavioral Engagement**

Behavioral engagement is an observable measure of student engagement that can be generally defined as positive behaviors that facilitate learning in the classroom. Indicators of behavioral engagement include positive conduct, active listening, class participation, and academic effort (Appleton et al., 2008, Finn et al., 1995, Skinner et al., 2008). Negative behaviors that are the direct opposite of behavioral engagement are called behavioral disengagement, or behavioral disaffection. Such behaviors include disruptive classroom behaviors, inattention and withdrawal from learning activities, and lack of academic effort (Finn, 1989; Finn et al., 1995; Skinner, et. al., 2008). Given that measures of behavioral engagement and disaffection are directly observable, both teacher and student ratings of such behaviors are typically intercorrelated (Skinner, et. al., 2009). Such intercorrelation further validates behavioral engagement and disaffection as salient indicators of student engagement.

### **Emotional Engagement**

Emotional engagement is an internal measure of student engagement, and is defined as affective reactions to learning activities within the context of the classroom environment (Fredericks, et. al., 2004, Skinner et. al., 2008). Indicators of positive emotional engagement include emotional states of feeling interest, enjoyment, and happiness when involved in classroom learning activities (Skinner, Kindermann, & Furrer, 2009). Emotional engagement is

also measured by a negative aspect called emotional disengagement, or emotional disaffection. Indicators of negative emotions include emotional states of boredom, unhappiness, frustration, and anxiety when involved in classroom learning activities (Skinner, et. al., 2008). Given that emotional engagement and disaffection are internal measures, the students themselves are considered the best raters of their emotional states when involved in classroom learning (Skinner, et al., 2009). Student and teacher ratings of emotional engagement and disaffection have modest correlation (Skinner, Kindermann, & Furrer, 2009).

### **Multidimensionality within Student Engagement**

Researchers debate the clear conceptualization and practical utility of student engagement due to the construct's multidimensionality and combination of multiple disciplines (Fredericks et al., 2004). The multidimensionality of student engagement is the source of several conceptualization issues within the construct. Conceptual issues include inconsistent definitions of sub-constructs across theories, and distinguishing factors that influence engagement from factors that actually measure engagement (Appleton et al., 2008; Fredericks et al., 2004; Jimerson et al., 2003).

Student engagement is made up of broad components that are defined differently across theories (Fredericks et al., 2004). Various theories have been found to have qualitatively different definitions for behavioral engagement and emotional engagement. For example, the different definitions of behavioral engagement include conduct and rule compliance, classwork completion and time-on-task, involvement in academic activities, and/or academic effort (Finn,

1989; Fredericks et al., 2004; Sinclair et al., 2008; Skinner et al., 2008). Different definitions of emotional engagement include sense of belonging, learning interest and enjoyment, and liking for school (Finn, 1989; Hart, Stewart, & Jimerson, 2011; Skinner et al., 2008). Although some definitions of behavioral and emotional engagement vary according to the context in which academic engagement is measured (e.g. school versus classroom), many theories fail to identify the specific context in which engagement is measured (Fredericks et al., 2004). Different definitions do not reliably identify indicators of behavioral and emotional engagement in learning, and weaken the practical use of student engagement as a measurement tool (Appleton et al., 2008; Fredericks et al., 2004, Skinner et al., 2008).

#### **Distinguishing between facilitators and indicators of student engagement.**

Conceptual problems of student engagement include distinguishing factors that influence engagement from actual indicators of engagement (Appleton et al., 2008; Fredericks et al., 2004; Skinner et al., 2008). Such conceptual problems also contribute to the aforementioned problems of defining components within student engagement. *Facilitators* of student engagement are factors that influence students' levels of engagement. *Indicators* of student engagement are the measures of engagement themselves (i.e. behavioral and emotional engagement and disaffection; Skinner et al., 2008). Facilitators of student engagement include contextual factors (e.g. school environment, classroom environment, and teacher support), and psychological factors (e.g. sense of relatedness, academic competence, and academic autonomy) that influence levels of engagement in learning. Contextual and psychological factors are separate facilitators of

engagement that have also been found to have a reciprocal relationship and influence each other (Skinner & Belmont, 1993). For example, a chaotic classroom environment and an unsupportive teacher (contextual factors) and a sense of not relating to the classroom and what is taught (a psychological factor) may cause a student to behaviorally and emotionally disengage from activities in that class. Facilitators of student engagement are external to the construct, and influence behavioral and emotional engagement levels in the classroom (Skinner et al., 2008; Skinner, Kindermann, Connell et al., 2009).

Researchers often misidentify facilitators of student engagement as indicators of student engagement (Skinner et al., 2008). For instance, sense of relatedness is often treated as an indicator of student engagement rather than a facilitator (Fredericks et al., 2004). However, sense of relatedness is a psychological factor external to the construct of student engagement that influences students' actions of engagement (Skinner & Belmont, 2003; Skinner et al., 2008). For example, having a sense of relatedness to academic activities in the classroom environment motivates students to display interest and participation in the classroom, all of which are displays of engagement (Furrer & Skinner, 2003; Skinner & Kinderman, 1997). It is important to distinguish the facilitators and indicators of student engagement for research and intervention development that examines the influence of external factors on student engagement in learning (Skinner et al., 2008). Clarification between the two allows educators to identify and manipulate environmental factors that influence learning engagement.

The self-system model of motivational development (SSMMD; Skinner et al., 2008) begins to address the conceptual and definitional ambiguity of student engagement. SSMMD distinguishes between facilitators and indicators of student engagement, allowing for clear conceptual organization. SSMMD outlines conceptually distinct components within engagement (emotional and behavioral), and accounts for valence of the components (positive and negative). SSMMD also specifically measures student engagement within the context of the classroom environment, clearly identifying the domain of measurement. Lastly, SSMMD measures student engagement as a motivational state of being rather than a fixed characteristic of the student (Skinner, Kindermann, Connell et. al., 2009). For these reasons, I chose SSMMD as an ideal framework to study student engagement. However, I acknowledge limitations of the student engagement measure within SSMMD, and seek to add further conceptual clarity to the behavioral disaffection component.

### **Student Engagement among Hispanic and African American Populations**

As previously mentioned, SSMMD's measure of student engagement, EvsD, has not been examined among a predominately Hispanic student population. The student population of this study consists of both Hispanic and bi-racial Hispanic and African American students. For this reason, a brief review of the student engagement literature among Hispanic and African American student populations is discussed.

There have been positive gains in the narrowing of the achievement gap between ethnically diverse and Caucasian American students over several years. However, despite these

gains, Hispanic and African American students continue to show significant achievement disparities in comparison to Caucasian students (Cataldi et al., 2009; Rampey et al., 2009). Typically, status variables (e.g. single parent households, economic disadvantage, and number of siblings in household) have been used to explain the variations between the achievement of ethnic minority and white American students (Whelage, 1989). However, student engagement has been found to be a malleable variable that can explain variations between the achievements of ethnically diverse students (Conchas, 2001; Connell et al., 1994).

Research on student stereotypical views of engagement indicate that students typically view Latino and African American boys as mostly disengaged in learning in school (e.g. poor effort, inattentive, and lack of participation; Hudley & Graham, 2001). Further, Hispanic and African American boys report identifying less with academic related school influences and identifying more with non-academic social influences (Strambler & Weinstein, 2010). Research on ethnic identity and student engagement has indicated that the lack of identification and relatedness to school for ethnic minorities may be related to a mix-match between the mainstream Euro-American culture of the school environment to the cultural practices, behaviors, and beliefs of minorities (Tyler et al., 2008). Positive cultural factors have also been found to effect the engagement of ethnically diverse students. Specifically, students who embrace their ethnic culture while also maintaining a bicultural identity and accepting mainstream culture have been found to be more engaged in learning than students who are least accepting of either culture (Ogbu, 1992; Okagaki, 2001; Okagaki, Izarraraz, & Bojczyk, 2003).

Students' perceptions of racial discrimination have also been found to negatively affect engagement in learning (Okagaki, Frensch, Dodson, 1996; Smalls, White, Chavous, & Sellers, 2007). However, students who perceived the fundamental importance of education and its relation to their future successes were found to positively engage in learning despite their perceptions of racial discrimination (Okagaki et al., 2003).

Student engagement, however, has been found to predict achievement and graduation above status risk factors such as ethnic and economic background. For example, behavioral engagement has been consistently found to have direct impacts on school outcomes of students, to include academic achievement, graduation, discipline referrals, and post-secondary achievement when risk factors are controlled (Finn, 2006; Pannozzo, Finn, & Boyd-Zaharias, 2004). Additionally, affective, or emotional engagement, has been found to have indirect effects on school outcomes, yet direct relationship to behavioral engagement. Research has consistently indicated that student engagement in school is a protective factor for academic achievement and school graduation in at-risk Hispanic and African American students (Brewster & Bowen, 2004; Conchas, 2004; Connell et al., 1994; Finn, 2006). Given that EvsD has not been examined among predominately low socio-economic Hispanic students, this study seeks to examine the structural components of student engagement and their relationship to school outcomes among this student demographic.

### **Self-System Model of Motivational Development (SSMMD)**

SSMMD (Connell & Wellborn, 1991) organizes student engagement within a model of motivation that consists of four components: context, self, action, and outcomes (See Figure 2.1; Connell, 1990; Skinner et al., 2008; Skinner, Kindermann, Connell et al., 2009). The context and self components influence levels of student engagement, and are considered facilitators of student engagement. They both influence whether students are positively or negatively engaged in learning activities. Context is an environmental factor that facilitates student engagement. Examples of context include classroom environment, school environment, and parent and/or teacher support for learning. Context is defined around the notion of the environment (e.g. classroom and/or school environments) producing positive conditions that facilitate learning and positive support from authority figures (e.g. parents and/or teachers) who also facilitate learning.

Self, also called the *self-system*, consists of psychological factors that are apart of a student's system of thinking and influences their engagement in learning (Connell & Wellborn, 1991). The psychological factors that influence learning include academic competence, academic autonomy, and relatedness. Academic competence is a student's perception of their learning capabilities, whether students believe they have what it takes to learn and achieve in the academic environment (Skinner, Wellborn, & Connell, 1990). Academic autonomy is a student's perception of their freedom to seek and pursue their own learning interest in academic subjects. Lastly, sense of relatedness is a student's perception of belonging or relating to their academic environment and understanding the usefulness of their academic environment (Connell &

Wellborn, 1991; Deci, Hodges, Pierson, & Tomassone, 1992; Furrer & Skinner, 2003; Skinner & Belmont, 1993).

The context and self-system components have a reciprocal relationship, and can positively or negatively influence each other (Hardre & Reeve, 2003; Connell & Wellborn, 1991; Skinner & Belmont, 1993; Skinner et al., 2008). The context of the classroom environment and teacher-student relationship can positively or negatively influence the psychological self-system of the student. This is based on how well the classroom environment and teacher-student relationship meets the student's needs of academic competence, autonomy, and relatedness (Connell & Wellborn, 1991; Niemiec & Ryan, 2009).

The outcomes component of SSMMD is the cumulative result of the effects of the context and self-system on student behavioral and emotional engagement or disaffection in school (Skinner, Kindermann, Connell et. al., 2009). Outcomes may include classwork completion, academic achievement or under-achievement, school attendance, disciplinary referrals, identification with school, and general student well-being. In sum, SSMMD proposes that students' behavioral and emotional engagement or disaffection in academic tasks is the result of how well contextual factors, the classroom environment and teacher support, addresses students' psychological self-system of competence, autonomy, and relatedness. This in turn determines their achievement, behaviors, and motivation outcomes in school (Connell & Wellborn, 1991; Skinner et al., 2008; Skinner, Kindermann, Connell et al., 2009).

Figure 2.1

*Self-System Model of Motivational Development*

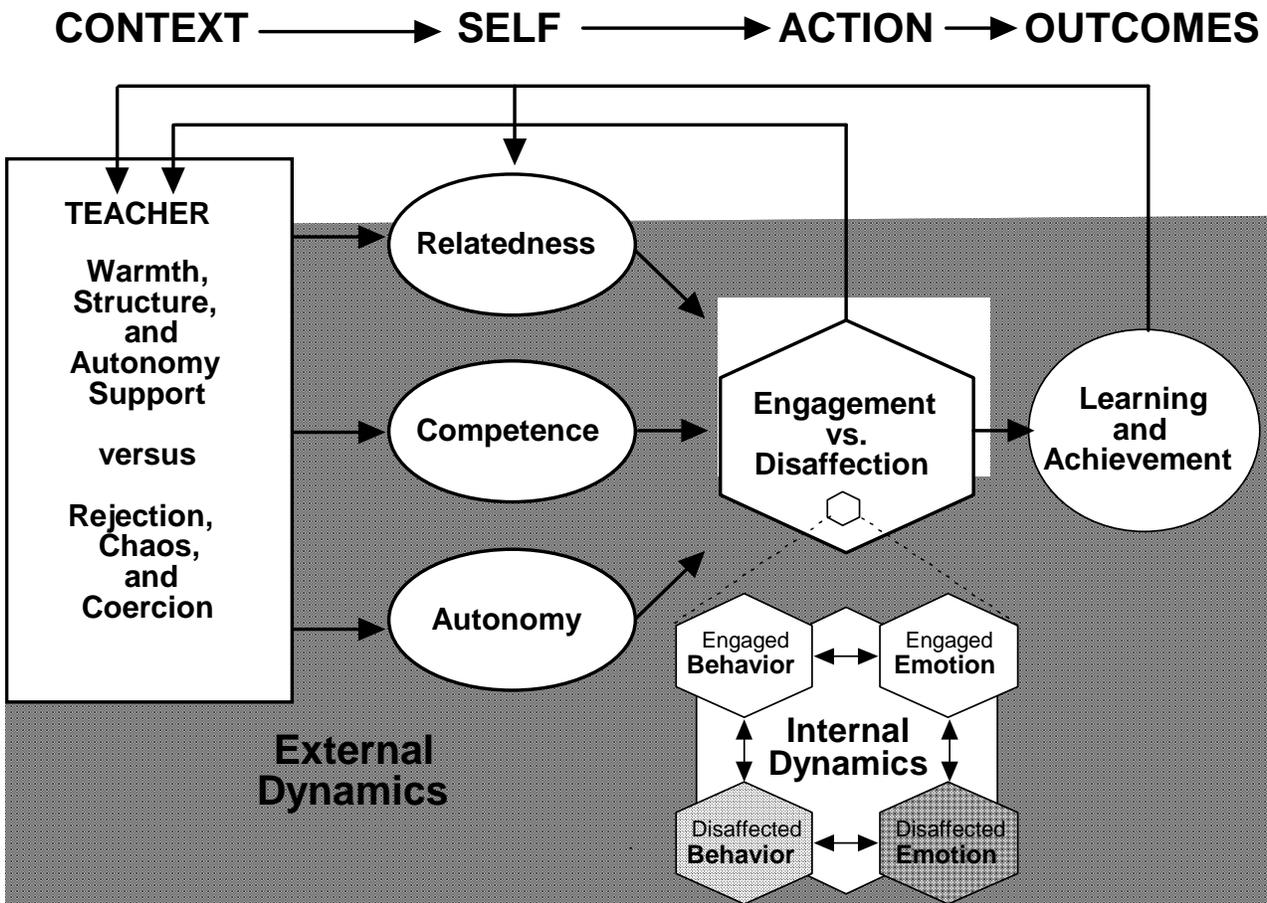


Figure 2.1: A depiction of The Self-System Model of Motivational Development, from Skinner, Furrer, Marchand, and Kindermann, p. 26, 2008

**Student Engagement within SSMMD**

Student engagement, as measured by the Engagement Versus Disaffection with Learning Scale (EvsD), is the central construct within SSMMD (Skinner, Kindermann, Connell, et al.,

2009). It is the action component of the model that represents an *action schema*, or goal directed behaviors and emotions. Student engagement is the outward demonstration of student motivation in school. Behavioral engagement and emotional engagement are the indicators of these ongoing motivated actions (Skinner et al., 2008; Skinner, Kindermann, Connell et al., 2009). *Behavioral engagement* consists of actions that demonstrate effort, involvement, and attentiveness during classroom learning activities. *Emotional engagement* consists of affective states that demonstrate interest and enjoyment during classroom learning activities (Skinner et al., 2008).

SSMMD further describes the action schema of student engagement by distinguishing positive and negative valence called *engagement* and *disaffection* (Skinner et al., 2008; Skinner, Kindermann, & Furrer, 2009). Opposite of engagement, disaffection consists of behaviors that demonstrate passivity and withdrawal, and emotions that demonstrate boredom, frustration, and anxiety during learning activities. Such displays of disaffection during learning activities are indicators of a low learning motivational state. The distinction of valence is critical in the assessment of engagement levels when considering methods for remediation of disaffection and low learning motivation.

In sum, student engagement within SSMMD is measured by four components – behavioral engagement, emotional engagement, behavioral disaffection, and emotional disaffection. Comparative structural analyses of behavioral and emotional engagement and disaffection demonstrate that student engagement is best represented as a multidimensional model that distinguishes these four factors (Skinner, Kindermann, & Furrer, 2009). Structural

analyses indicated that behavioral disaffection, behavioral engagement, and emotional engagement were each found to be individual unitary factors. However, emotional disaffection was not found to be unitary. Boredom, frustration, and anxiety were found to represent three separate dimensions that make up emotional disaffection and load onto emotional disaffection as a second-order factor (Skinner, Kindermann, & Furrer, 2009). This finding indicates that emotional states do not occur on a continuum, but rather are an expression of different emotions within the context of the classroom environment. The same may be true for behavioral disaffection, although it is identified to consist of a unitary dimension.

The dimensional difference between emotional disaffection and behavioral disaffection may possibly be due to the limited items identifying the component of behavioral disaffection. Identifying additional items that make up an active dimension of behavioral disaffection, in addition to passive behavioral disaffection, may produce a multidimensional two factor structure within behavioral disaffection similar to emotional disaffection. Similar to the differentiation within emotional disaffection, I hypothesize that characteristics of behavioral disaffection do not occur along a single continuum of disaffection. Rather, there are differing aspects of behavioral disaffection that students demonstrate in the classroom. Passive and active behavioral disaffection are different displays of disaffection that may express the different educational needs of students.

### **Active Behavioral Disaffection**

Overall, the SSMMD framework organizes the construct of student engagement around a comprehensive model that identifies facilitators and indicators of engagement versus disaffection, which predicts learning outcomes; thus making it a general model of student motivation and achievement in school (Skinner, Kindermann, Connell, et al., 2009). However, as discussed previously, the behavioral disaffection component within student engagement fails to include a measure of active-behavioral disaffection in addition to passive-behavioral disaffection. *Active-behavioral disaffection* is active non-compliance to rules and established classroom social norms that interferes with the engagement and learning of others and academic instruction in class (Finn, 1989; Finn et al., 1995). *Passive-behavioral disaffection* is non-compliance to the learning expectations of participation and effort within the classroom, yet does not interfere with the engagement and learning of others and academic instruction in class (Finn et al., 1995; Skinner et al., 2008).

Within the business domain, research on employee engagement highlights the importance of assessing, preventing, and intervening upon behaviors of active disengagement within the work environment (Gallup Corporation, 2010). Employee engagement research defines actively disengaged employees as employees who are actively against the overall mission of the job organization, and undermine its productivity. The literature indicates that employees may become actively disengaged due to the lack of supervisory support, needed resources, high demand, and controlling nature of the work environment (Harter, Schmidt, Killham, & Agrawal, 2009). Eventually, the employees who are actively disengaged negatively affect the productivity

and overall profitability of the work organization, and negatively affect the attitudes of engaged employees in the process. The Gallup Organization (2010) estimates that in the U.S. actively disengaged employees cost their employers more than \$300 billion in lost productivity alone. Engaged versus actively disengaged employees are indicated to demonstrate a dramatic difference in work productivity, profitability, safety incidents, and absenteeism (Harter et al., 2009; Harter, Agrawal, Plowman, & Asplund, 2010). For this reason, major corporations seek assistance in assessing their ratio of engaged versus actively disengaged employees, in efforts to prevent or intervene upon demoralized employees who yield low productivity (Harter et al., 2010).

In a similar sense, behaviors of active disaffection among students are found to negatively impact the instruction of teachers and the learning environment in the classroom. Research literature on teacher efficacy and engagement indicates that teachers who suffer from burnout are more withdrawn and less engaged in teaching their students (Pas, Bradshaw, Hershfeldt, & Leaf, 2010; Reschly & Christenson, 2006). The literature also indicates that student behavioral problems are one of the primary causes of teacher disengagement and burnout. Further, it is indicated that behavioral problems to include restlessness, hyperactivity, disruptive behaviors, and failure to follow directions are behaviors that teachers rate as the most common behavior problems among their students (Harrison, Vannest, Davis, & Reynolds, 2012). Teachers both in the general and special education classroom settings expect students to demonstrate behavioral self-control, get along with peers, and follow classroom rules and teacher

instructions (Harrison et al., 2012; Lane, Pierson, Stang, & Carter, 2010). Further, teachers generally rate actively disaffected behaviors as the primary cause of disruption to a classroom that is conducive to learning (Harrison et al., 2012; Lane et al., 2010).

Characteristics of active behavioral disaffection are also strong indicators of high school dropout (Pannazzo et al., 2006; Reschly & Christenson, 2006; Sullivan et al., 2009; U.S. Department of Education, 2003). Behaviors of active disaffection have been found to equally contribute to low academic achievement just as passively disaffected behaviors (Finn et al., 1995). Research has consistently found that students who actively disrupt instruction, are poorly engaged in learning, and display oppositional behaviors are more at risk for school removal and eventual school dropout (Archambault, Janosz, Morizot, & Pagani, 2009; Battin-Pearson et al., 2000; Christenson & Thurlow, 2004; Finn, 1989; Finn, 2006; Petras, Masyn, Buckley, Ialongo, & Kellam, 2011). Considering these factors, the literature indicates that active behavioral disaffection is a critical component in measuring student engagement in classroom learning when assessing factors that contribute to or undermine academic achievement.

SSMMD only measures classroom behavioral disaffection that is passive and does not interfere with learning. The measure includes such items as “not trying hard at school” and “in class my mind wanders” (Skinner et al., 2009). The addition of an active behavioral disaffection measure to behavioral disaffection is important because it highlights diverse indicators of student learning disengagement that are different from and not identified by a measure of passive behavioral disaffection alone. The behavioral disaffection component of student engagement is

treated as a unitary construct (Skinner et al., 2009). Such a measure fails to measure all aspects of behavioral disaffection, which may give reason to its lack of multidimensionality. Adding an active disaffection measure to EvsD's measure of behavioral disaffection not only extends the structural dimension of student engagement, but also lends to its diverse measurement utility in the classroom.

### **Participation Identification Model**

The participation identification model (PIM) is a theory of engagement that identifies and measures active behavioral disaffection (Finn, 1989; Finn et al., 1995). PIM posits that positive or negative participation and identification with school is a developmental process, beginning in early school years, during which a student's experiences of home and school support, academic successes and failures, and academic self-perceptions determine their behavioral engagement and long-term valuing and achievement outcomes in school (Finn, 1989). As previously mentioned, Finn's conceptualization of the developmental process of engagement is similar to Skinner in that he acknowledges environmental and psychological influences on behavioral engagement (1989).

Although PIM identifies the positive and negative valence of engagement and disengagement, PIM does not conceptualize engagement to be multidimensional consisting of emotional and behavioral components (Finn et al., 1995). Rather, student engagement is conceptualized to be a behavioral measure of participation and involvement in school that is the antecedent to emotional identification with school, valuing of school, and resulting achievement

or under-achievement overtime (Finn, 1989). PIM's concept of behavioral engagement is indicated to occur across four levels of school participation and involvement: level one – basic attention, rule compliance, and responsiveness to teacher directions within class; level two – academic initiative in asking questions, completing assignments, and subject related activities outside of class; level three – participation in the social, extra-curricular, and athletic aspects of school; and level four – participation in school governance and decision-making roles. PIM theorizes that students' level of participation in school determines whether they will excel academically and strongly identify with school, maintain minimal grades and graduate with minimal school identification, or eventually dropout with no school identification.

In a study among 4<sup>th</sup> grade students using the Student Participation Questionnaire, teachers rated the classroom behaviors of students as passively or actively disengaged, which was then related to student academic achievement (Finn et al., 1995). The Student Participation Questionnaire measures students' positive and negative behaviors of classroom participation, broken into four scales – effort and initiative (positive behaviors); inattentive and disruptive (negative behaviors). Effort measures the basic requirements of classroom participation, rule compliance, and work effort; while initiative measures more autonomous engaged behaviors such as doing more work than required, and staying after class to discuss assignments. The inattentive scale measures passive behaviors of classroom disengagement, such as inattentive behavior, unpreparedness for assignments, and not completing assignments; while the disruptive

scale measures active disaffection such as peer annoyance, talkativeness, and need to be reprimanded.

Study results indicated that students who demonstrated inattentive and passively disengaged behaviors were found to have low academic achievement to the same extent as students who demonstrated disruptive behaviors in class. The study indicated that students who are passively or actively disengaged in learning are both equally at-risk for underachievement. Likewise, by including a component of active disaffection within SSMMD's behavioral disaffection measure of engagement, this study seeks to prove the equal importance of differentiating and measuring both types of behavioral disaffection – active and passive.

PIM's Student Participation Questionnaire delineates behavioral disaffection into passive and active components, which represents the diverse indicators of disaffection (Finn et al., 1995). In particular, the measure of disruptive behavior identifies components of behavioral disengagement that interferes with classroom learning and instruction. PIM's measure of disruptive behavioral disengagement will be adapted in this study. Unlike behavioral disengagement within SSMMD's measure of engagement, this model of engagement includes an active component of disaffection that measures non-rule compliance and disruption in the classroom (Finn et al., 1995; Skinner, Kindermann, & Furrer, 2009). It captures the total measure of behavioral disaffection within the classroom.

## CHAPTER 3

### METHODOLOGY

The general purpose of this study was to extend the behavioral disaffection measure within the Engagement vs. Disaffection with Learning Scale and examine the structural fit of the modified scale among predominately Hispanic students. This study occurred in three phases to include: a.) development of active behavioral disaffection items, b.) administration of EvsD scale, and c.) analyses of EvsD and its relation to school outcomes. Chapter three provides further detail of the conducted research phases within this dissertation. In particular, the specific methods used for item development, procedures of data collection, and tested research hypotheses are described in further detail below.

Prior to conducting the study, research approval was obtained from the Institutional Review Board of the University of Alabama (see Appendix C). Research approval was also obtained from the City Parks and Recreation Department and the Office of Human Resources of a large urban school district, both located in a large city in southern U.S. (see Appendix E). Permission was obtained from Ellen Skinner for use and extension of items on the EvsD scale. Permission was also obtained from Jeremy Finn to adapt items from the Disruptive Behavior scale of the SPQ.

#### **Development of Active Behavioral Disaffection Items**

The development of active behavioral disaffection items for this study occurred in three steps. First, the student engagement research literature was reviewed, including the PIM and SSMMD literature. The literature was reviewed in efforts to identify scales of student engagement that included items measuring behavioral disaffection. Second, a panel of reviewers was selected to review the content of the adapted active behavioral disaffection items developed from the literature review. The panel consisted of researchers of the student engagement literature. Panelists were asked to rate and critique the developed items for needed changes. Third, all survey items from the Engagement vs. Disaffection with Learning Scale and the developed items of active behavioral disaffection were translated from English to Spanish. Given that the study participants were predominately Hispanic and consisted of bilingual English and Spanish speaking students, a Spanish version of the survey measure was developed. The development of items measuring active behavioral disaffection is further detailed below.

### **Literature Review**

Efforts were made to synthesize theories of engagement and to adapt items of active behavioral disaffection from the existing research literature. The student engagement literature was reviewed to identify measures that included items assessing behavioral disaffection among students. Differing theoretical backgrounds, methods of scale development, scale structural components, and items measuring behavioral disaffection were reviewed. After conducting an extensive review, the Participation Identification Model (PIM; Finn et al., 1995) of school

engagement was identified as a theory of engagement that measures all aspects of behavioral engagement and disaffection.

PIM measures the positive and negative valence of behavior, and accounts for both passive and active aspects of behavioral disaffection on the Student Participation Questionnaire (Finn et al., 1995). The Student Participation Questionnaire is a teacher rating of student behavioral engagement and disaffection (i.e. disengagement). The questionnaire consists of two scales that specifically measure behavioral disaffection, to include the Inattentive Scale and the Disruptive Scale. Items that comprise the Inattentive Scale include the student "loses, forgets, or misplaces materials"; "comes late to class"; "doesn't seem to know what is going on in class"; "is withdrawn, uncommunicative"; and "doesn't take independent initiative, must be helped to get started and kept going on work" ( $\alpha = .75$ ). Items comprising the Disruptive Scale include the student "acts restless, is often unable to sit still"; "needs to be reprimanded"; "annoys or interferes with peers' work"; and "talks with classmates too much" ( $\alpha = .90$ ).

Items from the Disruptive Scale are the specific items of focus for this study. These items measure the active aspects of behavioral disaffection in class. Further, the items are actual indicators of disaffection instead of facilitator or outcome measures of disaffection. For these reasons, items comprising the Disruptive Scale were identified as ideal measure of active behavioral disaffection.

The items from the Disruptive Scale of SPQ were adapted for the dissertation study to assist in developing a student report of active behavioral disaffection for SSMMD. First, the

items from the Disruptive Scale of SPQ were changed to reflect the wording of the items on the Engagement vs. Disaffection with Learning Scale from SSMMD. The sentence stem “When I’m in class” was added to the items, and the items were re-worded to measure active behavioral disaffection in the classroom from the student’s perspective. The postulated items that were adapted and then used in the dissertation study as measures of active behavioral disaffection are as follows:

- a. When I’m in class, I don’t sit still and I get out of my seat.
- b. When I’m in class, I talk a lot with my classmates.
- c. When I’m in class, I disrupt the class work of others.
- d. When in class, I annoy my classmates.
- e. I get in trouble for not following classroom rules.
- f. I argue with my teacher in class.

### **Review Panel**

The review panel consisted of three researchers of the student engagement literature. Researchers on the review panel were identified as Panelist 1; Panelist 2; and Panelist 3. Both Panelist 1 and Panelist 2 are PhD candidates in Educational Psychology. These panelists were identified as reviewers given their familiarity with the student engagement research literature. Both panelists are using different measures of student engagement within their dissertation research. Panelist 3 is a college professor and researcher of the student engagement literature. Panelist 3 has also assisted with the development of a measure of student engagement and has

critiqued other measures of student engagement. All panelists were invited to participate in the dissertation study by email.

Using Qualtrics software Version 37,892, panelists were asked to complete a reviewer consent form and a rating scale (Appendix C) to critique the adapted items. On the scale panelists were provided with a definition of active behavioral disaffection. For each of the six developed items, the panelists were asked to rate whether they believe the item accurately describes active behavioral disaffection. Panelists could choose to rate if the item is a poor, fair, good, very good, or excellent measure of active behavioral disaffection. Panelists could also provide suggestions for re-wording items to indicate if they believed changes were needed.

Panelists 1 & 2 indicated suggestions for re-wording the items “When I’m in class, I don’t sit still and get out of my seat” and “When I’m in class I talk a lot with my classmates.” Both panelists rated these particular items as “fair.” Reviewers suggested that the items be more specific in explaining the situation to indicate talking and out of seat activities as problem behaviors. Reviewers were concerned that some classrooms may be more interactive in nature and allow out of seat activity and talking for lessons requiring student group work and problem solving. Panelist 3 rated both of the aforementioned items to be “very good” indicators of active behavioral disaffection. Due to the general wording of items comprising EvsD, the wording of these two items was also kept general. These two items were not revised. All other items were rated to be either very good or excellent measures of active behavioral disaffection, and no suggestions for re-wording were provided. After considering the input provided from the

research panel, the final items measuring active behavioral disaffection remained as previously listed above.

### **Translation of Survey Items**

Data was collected among students residing in a large city in the southwestern United States. Given that the city consists of a predominately Hispanic and large bilingual English and Spanish speaking population, several of the research documents were translated into Spanish. The translated research documents included parental consent, student assent, EvsD survey, and the Debriefing form. A team of five bilingual translators assisted in the translation of all research documents from English to Spanish. All of the translators live in the city, are familiar with the local Spanish language in the area, and are fluent in both the English and Spanish languages. Further, the team of translators regularly interpret and translate official school documents for a large urban school district in the southwestern, U.S.

The documents were first separately translated into Spanish by two translators. The translators and the research investigator then compared translated documents for inconsistent wording, interpretation, and meaning. It was indicated that many words in English have a different meaning in Spanish, or do not have a direct word translation to the Spanish language. For this reason, words and word phrases were carefully selected in Spanish to reflect the same indicated meaning in English. The primary research investigator and two translators compared these translations together as a group. Next, two additional translators individually re-translated the documents word-by-word back to the English language, and indicated any confusion in

understanding. Needed changes were then made by the two initial translators and compared for consistency. Lastly, the parent of a student in the local school district re-read the Spanish documents out-loud in English to the primary investigator, and indicated understanding of the documents read.

### **Pilot Administration of Survey**

The extended EvsD scale was piloted at the first park and recreation community center data collection site. The process for administration is later described in the Procedures section. The administration of the survey was considered a pilot to determine the efficiency of survey administration, time required to complete the survey, questions regarding survey items, and needed revisions to the layout of the survey instrument. A total of 18 students participated in the pilot administration of the extended EvsD scale. The students were 51% male, 64% Hispanic, and everyone's predominate language was English.

Students completing the survey during the initial administration were timed and asked for feedback at the end of administration regarding questions of items and efficiency of completion. Students were generally able to complete the survey within the timeframe of 10 to 20 minutes. Students generally indicated that they understood wording of the items, but had questions regarding the meaning of the word "effort." Students also had questions regarding the meaning of the item "In class, I do just enough to get by." Students were able to understand wording and items once they were explained. Students indicated that they layout of the survey was simple to follow. The preliminary descriptive statistics of the piloted surveys were examined for

consistency of the means, standard deviations, and reliabilities. All preliminary data were within expected ranges (see Appendix G).

### **Participants**

Research participants included 3<sup>rd</sup> – 7<sup>th</sup> grade students who participated in holiday and spring break camps offered by the Parks and Recreation Community Centers in an urban southwestern city. Holiday and spring break camps are available to students residing in the city when public schools are dismissed for the weeks of Christmas and spring break during December and March. Students ranging from 6 to 14 yrs. old are able to participate in structured camp activities from 7:30am – 5:30pm. The students are registered by their parents/guardians and attend for a cost of \$3.00 per day. Students who participate in the camps are primarily from families categorized as low socio-economic status and from working class backgrounds.

Using a-priori sample size calculator for SEM analyses, it was determined that a minimum sample size of 268 study participants were needed for study results with adequate statistical power (Soper, 2012). A total of 236 students attending the camps at fifteen different community centers throughout the city participated in the research study and completed study surveys. After accounting for patterned, inconsistent, and missing responses on completed surveys, only a total of 216 students completed valid surveys. The sample size of 216 participants was below the required sample size of 268 participants for adequate statistical power. Resultantly, the statistical power of the research findings in this study were weakened by the limited number of study participants.

## Materials

### Demographics

Demographic information was obtained by student report on the administered survey (see Appendix A). Students were asked to report their grade, gender, and ethnicity on the demographic section of the survey measure. The student participants were 49% male, 62% Hispanic, and approximately evenly distributed across grade levels. Most of the student participants considered English to be their primary language, with 98% of the students completing an English survey. Only 2% of the student participants chose to use a Spanish version of the survey instrument. The low number of student participants using the Spanish survey may be attributed to the effectiveness of the English Language Learner (ELL) programs provided by the local education agencies. Table 3.1 displays the demographic make-up of the student participants.

Table 3.1

Characteristics of Sample Population (N = 216)

	Characteristic	Number of students	Percentage of students
Gender	Male	106	49.1
	Female	110	50.9
Ethnicity	Native American	3	1.4
	Asian/Asian American	0	0
	Black/African American	16	7.4

	Hispanic/Latino	134	62.0
	2 or more Racial Groups	52	24.1
	White/Caucasian	3	1.4
	Other	8	3.7
Grade	3 <sup>rd</sup>	38	17.6
	4 <sup>th</sup>	52	24.1
	5 <sup>th</sup>	47	21.8
	6 <sup>th</sup>	42	19.4
	7 <sup>th</sup>	37	17.2
Language	English	212	98.1
	Spanish	4	1.9

### **School Outcomes**

All other student information, including grade point average (GPA), school attendance, and discipline referrals, was obtained from school records. GPA, school attendance, and discipline referrals were categorized as measures of school outcomes. GPA was measured according to the grading scales of local city school districts (A = 100-90; B = 89-80; C = 79-75; D = 74-70; F = Below 70). School attendance was measured by percentage of days attending school. Discipline referrals were measured by frequency of receiving either an office referral or school suspension for inappropriate behavior as indicated by the school district.

### **Student Engagement**

The Engagement Versus Disaffection with Learning Scale – Student Report (Skinner et al., 2009) was used to measure emotional engagement, emotional disaffection, behavioral engagement, and passive behavioral disaffection. Students completed the self-report questionnaire rating their levels of engagement and disaffection in class. The student report consists of 27 items rated on a 4-point Likert-type scale (1 - not at all true, 2 - not very true, 3 - sort of true, 4 - very true).

The student report contains four subscales, including behavioral engagement, behavioral disaffection, emotional engagement, and emotional disaffection. Emotional engagement is measured by five items assessing positive emotional reactions when involved in class activities. Sample items include “When I’m in class, I feel good” and “Class is fun.” Emotional disaffection is measured by nine items assessing various negative emotions experienced during class activities, including boredom, worry, and frustration. Sample items include “When I’m in class, I feel worried,” “When I’m doing work in class, I feel bored,” and “When I’m in class, I feel bad.” Behavioral engagement is measured by five items that assess behavioral involvement in class such as attention and effort. Sample items include “I try hard to do well in school,” and “I pay attention in class.” Behavioral disaffection is measured by five items that assess passive un-involvement in class, including lack of effort and attention during class activities. Sample items include “When I’m in class, my mind wanders,” and “I don’t try very hard at school.”

Individual subscale scores can be obtained by averaging the items making up each subscale. For each subscale, a total mean score is obtained and represents levels of engagement

or disaffection. For example, a high mean score of behavioral engagement or emotional engagement indicates high levels of student engagement in learning. Likewise, a high mean score of behavioral disaffection or emotional disaffection indicates high levels of student disaffection in learning. Internal reliabilities for the subscales were generally .70 and above on the student report measure, with the exception of behavioral engagement (Skinner et al., 2009). The subscale internal reliabilities were adequate and valid indicators of student engagement in learning. Descriptive data from the previous research of Skinner et al. (2009) is presented in Appendix G.

### **Active Behavioral Disaffection**

The behavioral disaffection measure was extended to include an active component of disaffection using the procedures described earlier in chapter three. Active behavioral disaffection measures negative behaviors that interfere with classroom learning activities, including disruptive and restless behaviors (Finn et al., 1995). Six items from the Disruptive Scale of the Student Participation Questionnaire (Finn et al., 1995) were adapted and added to the behavioral disaffection measure of EvsD (Appendix A & B). The adapted items were rated on the same 4-point Likert-type scale as the items on EvsD (1- not at all true to 4 - very true; Skinner et al., 2009). The final adapted items measuring active behavioral disaffection are listed again below:

- a. When I'm in class, I don't sit still and I get out of my seat.
- b. When I'm in class, I talk a lot with my classmates.

- c. When I'm in class, I disrupt the class work of others.
- d. When in class, I annoy my classmates.
- e. I get in trouble for not following classroom rules.
- f. I argue with my teacher in class.

### **Procedures**

Data was collected at fifteen Parks and Recreation Community Centers throughout an urban southwestern city during holiday and spring break camps. Permission to recruit students to participate in the study was first obtained from the Parks and Recreation Director for the city. Once permission was obtained, various dates and times were scheduled to visit each community center to conduct research. Eight centers were scheduled to be visited during the fall holiday camp, and seven centers were scheduled to be visited during the spring break camp. Before both fall and spring data collections, a staff meeting was held with the individual community center directors at the Parks and Recreation Central Office. During this time the research, purpose of research, and procedure for data collection was introduced and explained by the principal investigator and the Parks and Recreation Director of Community Centers. Parental Permission forms were also disseminated and explained to the group of community center directors at this time.

On the first day of camp, community center directors gave parents/guardians Parental Permission forms to take home to read and sign (see Appendix D). The Parental Permission forms explained the research study and detailed the procedures for data collection,

confidentiality, and review of students' educational records. With the permission of parents and of local school districts, students' educational records were reviewed for G.P.A, attendance, and disciplinary referrals. The Parental Permission form also requested permission to obtain student assent for study participation. The form was made available both in English and Spanish, with translations on either side. Parents were also provided with a debriefing statement that contained a list of references for additional information on student engagement and the contact information of the primary investigator for further information concerning study outcomes.

The primary investigator collected data by conducting motivational sessions with student participants called "Get Engaged" at the fifteen community centers. The sessions were scheduled into the activity day at each community center. Each session was an hour and thirty minutes long and focused on motivating students to become engaged in learning. Two US Navy Corpsmen volunteered to participate in the sessions by giving 30 minute motivational speeches to students concerning the relationship between school engagement and later life success. Only students who returned signed Parental Permission forms were allowed to participate. At the start of each session, students were informed of their choice to not participate in the study and their assent for study participation was obtained. Students who chose not to participate were given the option to take part in free-play activities in the center gymnasium. Students who chose to participate in the study by returning the signed parental permission form, completing the survey, and taking part in the "Get Engaged" session received pizza, drinks, and snacks as incentives.

At the start of the sessions, the meaning of student engagement and the purpose of the research survey was briefly explained by the research investigator. Students were then given 30 minutes to complete the survey measure, during which the survey questions were read aloud and explained to the students. Community center directors and assistants who were proficient in both English and Spanish assisted students with Spanish translations and reading the Spanish survey. Once all surveys were completed US Navy Corpsmen spoke with the students for 30 minutes. Navy personnel spoke with students about the importance of student engagement, their personal school and military experiences in relation to academic achievement, and answered students' individual questions. Lastly, for the remaining 30 minutes students participated in games about creative ways of being engaged in school and ate pizza and snacks.

Using the signed parental consent forms of study participants, school outcome measures, including GPA, school attendance, and discipline referrals, were obtained via student records. Student records were accessed using the Open Records Request process of the participating school district. Student records were formally requested once the process of data collection for the fall and spring time periods were completed. During the student record review process, hard copies of parental permission forms, containing student identifying information (i.e. student name, grade level, and parent names), were mailed to the school district's Associate Superintendent of Human Resources. School district staff of the Human Resources Department used the student identifying information to match school record information with each student participant. A database that contained the school record data for each student participant was

created for the research investigator The Associate Superintendent then released the requested information from the personal educational records of students by emailing the primary investigator a password protected Excel file.

Of the 216 study participants, record information was only able to be obtained for 37 participants. This occurred in part for two reasons. First, some study participants attended other school districts within the city. The process of obtaining student record information for research purposes was attempted with two other school districts within the area; however, student information was unable to be obtained. Second, many of the study participants who attended school within the participating school district were unable to be accurately located within the student directory by district Human Resources personnel despite having both parent and student first and last names on parental consent forms. Given the small sample size of students with available school outcome data, research analyses examining the relation of engagement and disaffection to school outcomes were adjusted accordingly.

### **Data Analyses**

Structural Equation Modeling (SEM) with AMOS 4.0 was used to examine the factor structure of the Engagement vs. Disaffection with Learning Scale with active behavioral disaffection items added. The scale was examined to determine if measures of student engagement best fit a one, two, or four factor structural model. In particular, this study sought to replicate the SEM statistical approach conducted by Skinner et al. (2009) in their previous study

examining EvsD. To further validate EvsD, regression analyses with SPSS were used to examine the relationship of engagement and disaffection with measures of school outcomes.

Before data entry and conducting analyses, steps were taken to identify invalid data on the administered surveys. Surveys with patterned responses and incomplete surveys were determined to be invalid and were not included in study results. Surveys determined to be valid were entered and scored, and the data was further analyzed for outlier scores.

Below, Figure 3.1 presents the proposed structure of Engagement vs. Disaffection with Learning with active behavioral disaffection items added. As previously discussed, student engagement is theorized to be measured by four components: behavioral engagement, emotional engagement, behavioral disaffection, and emotional disaffection. The components of emotional disaffection and behavioral disaffection are indicated to be further differentiated by sub-components assessing various aspects of disaffection. Emotional disaffection is further differentiated by the sub-components of worry, frustration, and boredom, as proven in previous studies (Skinner, et al., 2009). This dissertation study highlights that behavioral disaffection is further differentiated by the sub-components of passive and active behavioral disaffection.

Figure 3.1

Structural Model of EvsD with Active Behavioral Disaffection

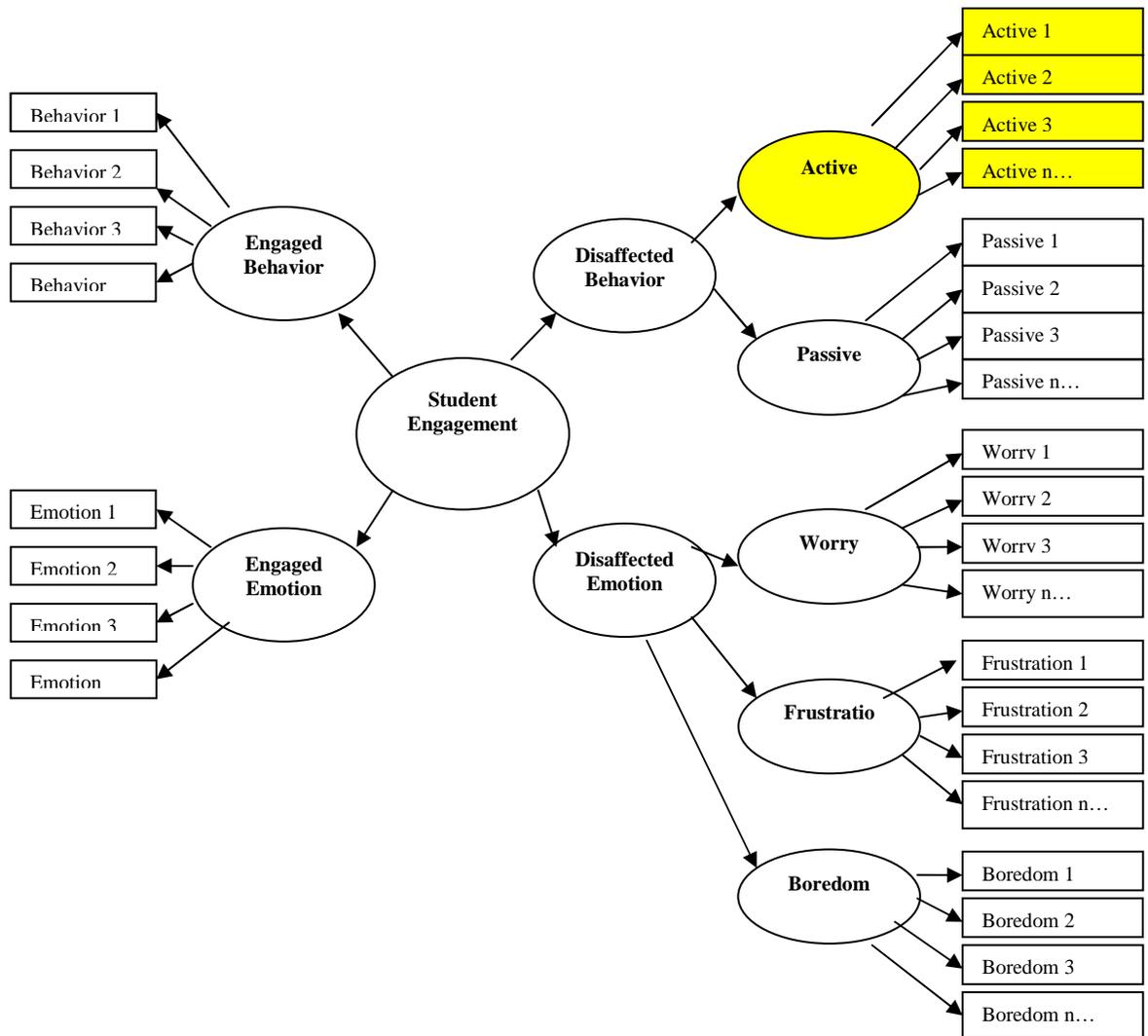


Figure 3.1. Hypothesized structural model of Engagement vs. Disaffection with Learning Scale, including depicted dimensional difference within behavioral disaffection with addition of active behavioral disaffection items.

**Hypothesis 1: Behavioral Disaffection Best Fits a Two Factor Measure of Active and Passive Behavioral Disaffection.**

Items measuring active behavioral disaffection were added to the behavioral disaffection component of student engagement, further distinguishing two aspects of behavioral disaffection: active and passive. Confirmatory factor analyses, using Structural Equation Modeling (SEM) with AMOS 4.0, were used to examine the structure of behavioral disaffection. The item set of behavioral disaffection was examined to determine if it better fits a unidimensional structure or a two factor structure. In previous studies, behavioral disaffection was found to fit a unidimensional structure in which the items loaded onto a single latent factor (Skinner et al., 2009). With the addition of items measuring active behavioral disaffection, behavioral disaffection is hypothesized to better fit a two factor structure. Indicators of disaffected behaviors will be differentiated, identifying two latent factors (active and passive).

Figure 3.2

Hierarchical Structure of Behavioral Disaffection

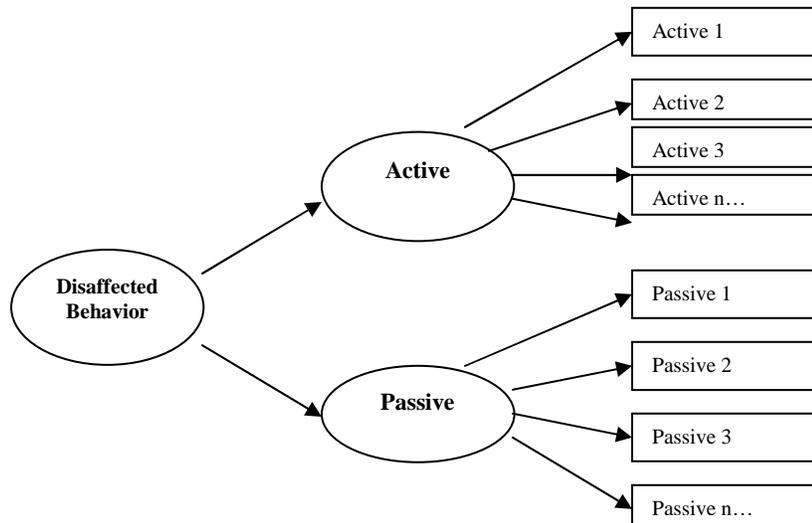


Figure 3.2. The proposed hierarchical structure of behavioral disaffection with active and passive disaffection.

**Hypothesis 2: Behavioral and Emotional Engagement Fit a One Factor Model; Emotional Disaffection Fits a Three Factor Latent Model.**

Confirmatory factor analyses with SEM were also used to separately examine the structures of behavioral engagement, emotional engagement, and emotional disaffection to determine if their item sets are unidimensional or multidimensional. Similar to previous research findings, both behavioral engagement and emotional engagement are hypothesized to have a unidimensional structure. However, emotional disaffection is hypothesized to have

multidimensionality, with three latent factors of worry, boredom, and frustration (Skinner et. al., 2009).

**Hypothesis 3: Engagement Vs. Disaffection with Learning Scale Best Fits a Two Factor Structure Instead of a One Factor Structure.**

Using confirmatory factor analysis with SEM, alternative models of student engagement components were compared to determine if components better fit a one or two factor structural model. In previous research, student engagement best fit a two factor structural model when compared to a one factor alternative model (Skinner, et al., 2009). Likewise, it is hypothesized for components of student engagement to best fit a two factor structure after active behavioral disaffection items are added to the component of behavioral disaffection. A figure of the models for each research question is presented below.

**Hypothesis 3a: Behavior Best Fits a Two Factor Model Distinguishing Engagement from Disaffection.**

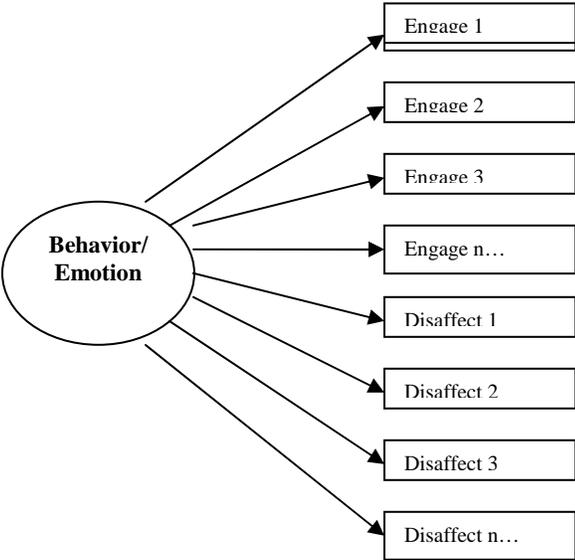
Alternative models of items measuring behavioral engagement and disaffection were compared to determine if the items better fit a one factor model or a two factor model. Similar to previous findings, behavioral engagement and disaffection is hypothesized to better fit a two factor model that distinguishes engagement from disaffection.

**Hypothesis 3b: Emotion Best Fits a Two Factor Model Distinguishing Engagement from Disaffection.**

Likewise, alternative models of items measuring emotional engagement and disaffection were compared to determine if the items better fit a one factor model or a two factor model. It was also hypothesized for emotional engagement and disaffection to better fit a two factor model that distinguishes engagement from disaffection.

Figure 3.3

Alternative Models of Behavior and Emotion



Vs.

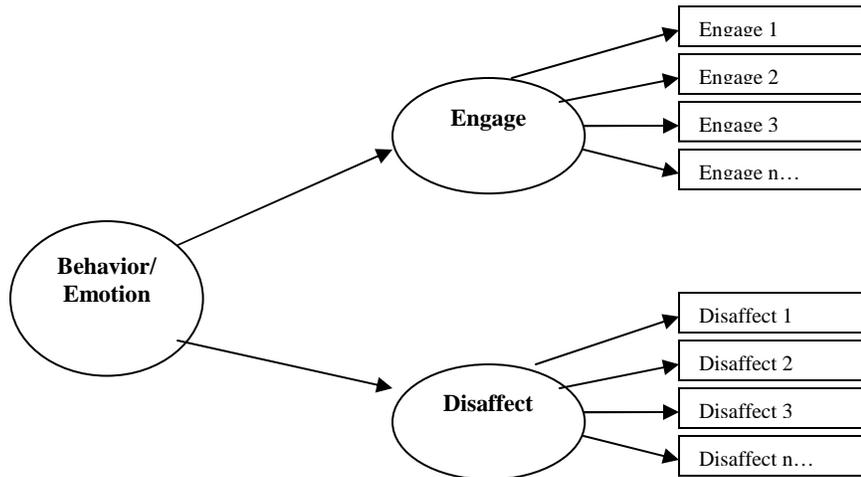


Figure 3.3. Depiction of hypotheses 3a & 3b. One factor structural model with unidimensional structure of engagement and disaffection, versus two factor structural model distinguishing engagement and disaffection. Behavior = Behavioral engagement & Disaffection; Emotion = Emotional Engagement & Disaffection; Engage = Engagement; Disaffect – Disaffection.

**Hypothesis 3c: Engagement Best Fits a Two Factor Model Distinguishing Behavioral Engagement from Emotional Engagement.**

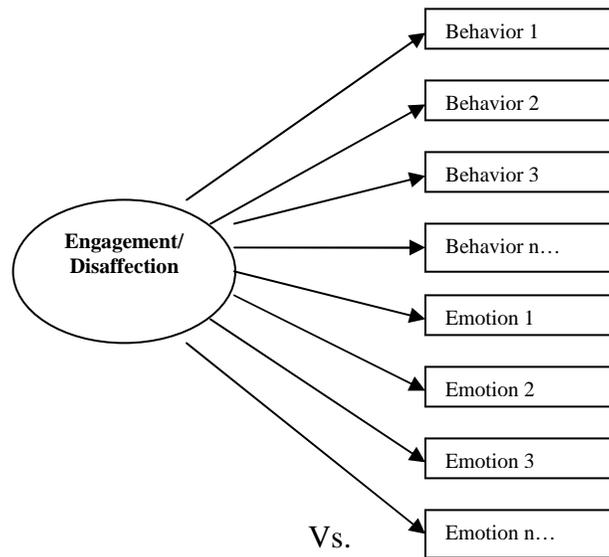
Alternative models of engagement items were compared to determine if behavioral engagement and emotional engagement better fit a one factor model or a two factor model (distinguishing behavior from emotion). Behavioral engagement and emotional engagement are hypothesized to better fit a two factor model distinguishing behavioral items from emotional items.

**Hypothesis 3d: Disaffection Best Fits a Two Factor Model Distinguishing Behavioral Disaffection from Emotional Disaffection.**

Alternative models of disaffection items were compared to determine if behavioral disaffection and emotional disaffection better fit a one factor model or a two factor model (distinguishing behavior from emotion). Behavioral disaffection and emotional disaffection are also hypothesized to better fit a two factor model distinguishing behavioral items from emotional items.

Figure 3.4

Alternative Models of Engagement and Disaffection



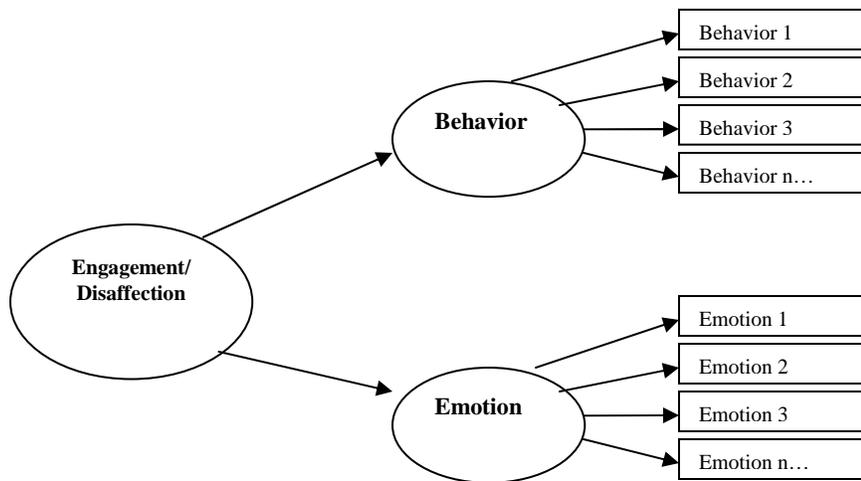


Figure 3.4. Depiction of hypotheses 3c & 3d. One factor structural model with unidimensional structure of behavior and emotion, versus two factor structural model distinguishing behavior and emotion. Engagement = behavioral engagement & emotional engagement; Disaffection = behavioral disaffection & emotional disaffection; Behavior = behavioral engagement or behavioral disaffection; Emotion = emotional engagement or emotional disaffection.

**Hypothesis 4: Engagement Vs. Disaffection with Learning Scale Best Fits a Four Factor Structure Instead of a Two Factor Structure.**

Using confirmatory factor analysis with SEM, alternative models of student engagement components were compared to determine if components better fit a two factor versus a four factor structural model. Alternative models were first compared to determine if structural fit improved once active behavioral disaffection items were added to the behavioral disaffection component. Once this was determined, two factor models were compared to a four factor model

to examine improvement in model fit. In previous research student engagement best fit a four factor structural model when compared to two factor alternative models (Skinner, et al., 2009). Likewise, the components of student engagement are hypothesized to best fit a four factor structure.

**Hypothesis 4a: The Two Factor Structure of Engagement and Disaffection with Differentiated Active and Passive Behavioral Disaffection has the Best Model Fit.**

Two factor alternative models, distinguishing engagement from disaffection items, were compared to determine the best structural fit of student engagement. Alternative models with passive behavioral disaffection items only, unidimensional passive and active behavioral disaffection items, and distinguished passive and active behavioral disaffection factors were compared. The two factor model of engagement and disaffection distinguishing active and passive behavioral disaffection is hypothesized to provide a better structural fit to the data.

**Hypothesis 4b: The Two Factor Structure of Behavior and Emotion with Differentiated Active and Passive Behavioral Disaffection has the Best Model Fit.**

Two factor alternative models of behavior and emotion were compared to determine if model fit improved with active and passive behavioral disaffection items distinguished. Likewise alternative models with passive behavioral disaffection items only, unidimensional passive and active behavioral disaffection items, and distinguished passive and active behavioral disaffection factors were compared. The two factor model of behavior and emotion distinguishing active and passive behavioral disaffection is hypothesized to provide a better structural fit to the data.

**Hypothesis 4c: The Engagement Vs. Disaffection with Learning Scale Best Fits a Multidimensional Four Factor Structural Model.**

Finally, the two factor alternative models were compared with a four factor model of student engagement (distinguishing behavioral engagement, behavioral disaffection, emotional engagement, and emotional disaffection) to determine the best structural fit. For the four factor model, active and passive behavioral disaffection were distinguished within the behavioral disaffection component. Similar to previous findings, the four-factor model of student engagement is hypothesized to provide a better structural fit to the data than the two-factor alternative models of student engagement.

Figure 3.5  
Multidimensional Structure of Student Engagement

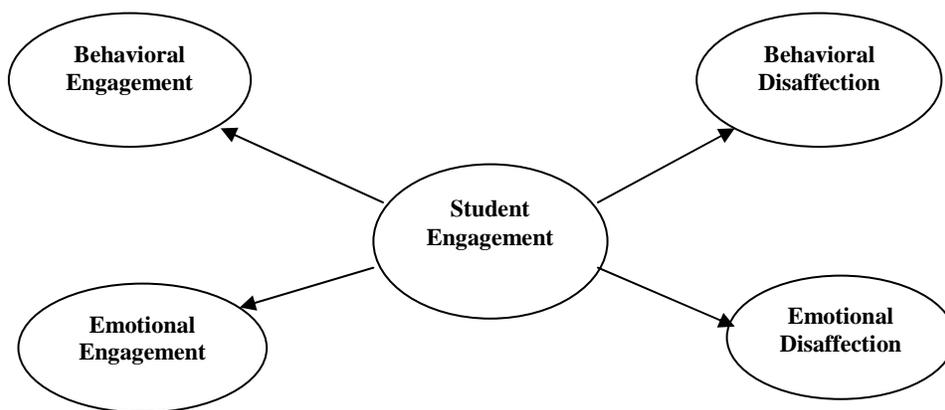


Figure 3.5. Four-factor structural model of EvsD.

**Hypothesis 5: Engagement Vs. Disaffection with Learning Scale Predicts School Outcome Measures.**

Lastly, using regression analyses, the relationship of components of student engagement to school outcome measures of academic achievement, school attendance, and discipline referrals were examined. I expect behavioral and emotional engagement to positively predict academic achievement and school attendance. I expect behavioral disaffection, particularly active behavioral disaffection, to predict discipline referrals.

## CHAPTER 4

### RESULTS

The purpose of this study was to adapt and add a measure of active behavioral disaffection to the Engagement Vs. Disaffection with Learning scale (EvsD), examine the factor structure of the revised scale, and examine its relation to school outcome factors among predominately Hispanic students. This chapter reports the results of this study in two parts. First, the adjusted factor structure of EvsD, to include active behavioral disaffection items, was examined using Structural Equation Modeling (SEM) with AMOS 4.0. As previously discussed, this study replicated the statistical approach of a previous study examining the factor structure of EvsD (Skinner, et al., 2009). The factor structure of active behavioral disaffection was first examined with confirmatory factor analyses (CFA). CFA was also then used to examine the other components of EvsD, to include behavioral disaffection (active and passive items), behavioral engagement, emotional engagement, and emotional disaffection. Next, alternative models of EvsD were conducted to determine if the measurement model best fits a one, two, or four factor model.

Second, the measurement model of EvsD was examined to determine how it relates to school outcome measures including attendance, discipline referrals, and GPA. Given that school outcome data was only available for a small sample of the study participants (n=37), regression analyses using SPSS was used to maintain statistical power. Additionally, analyses of variance (ANOVA) was used to compare the means of EvsD measures between study participants with

school outcome data and without school outcome data. This was done in efforts to justify generalizing the statistical findings of the regression analyses to the rest of the study participants (n=179).

Table 4.1 presents the resulting descriptive statistics and reliabilities on the Engagement vs. Disaffection with Learning Scale. The Chronbach alpha reliability coefficients for the measure were adequate and comparable to previous studies (see Appendix G; Skinner et al., 2008; Skinner et al., 2009). Similar to previous research, the mean scores of behavioral and emotional engagement suggest that students report themselves to be more behaviorally engaged than emotionally engaged in classroom learning (Skinner, et al., 2009). In particular, students report themselves to participate and listen more than being interested and enjoying class. Mean scores were elevated in areas of behavioral and emotional disaffection in comparison to previous research (see Appendix G; Skinner, et al., 2009). In particular to this study, when comparing active and passive behavioral disaffection, students reported themselves to be more passively disaffected, lacking effort and inattentive. When comparing aspects of emotional disaffection, students reported themselves to be more bored and lacking interest in class. Mean scores of behavioral and emotional engagement were comparable to previous studies; however, the scores for behavioral and emotional disaffection were more elevated (see Appendix G; Skinner et al., 2008; Skinner et al., 2009).

Table 4.1

Comparison of Chronbach Alpha Reliabilities, Means, and Standard Deviations of Engagement (N=216)

	$\alpha$	$M$	$SD$
Behavioral Engagement	.68	3.41	.53
Behavioral Disaffection (Passive)	.64	2.27	.69
Behavioral Disaffection (Active)	.75	2.10	.74
Behavioral Disaffection (Passive & Active)	.81	2.82	.66
Emotional Engagement	.72	3.12	.67
Emotional Disaffection	.77	2.36	.60
Emotional Disaffection (Worry)	.64	2.24	.82
Emotional Disaffection (Frustration)	.52	2.34	.64
Emotional Disaffection (Boredom)	.78	2.50	.93
Engagement vs. Disaffection	.90	2.91	.52

**Hypothesis 1: Behavioral Disaffection Best Fits a Two Factor Measure of Active and Passive Behavioral Disaffection.**

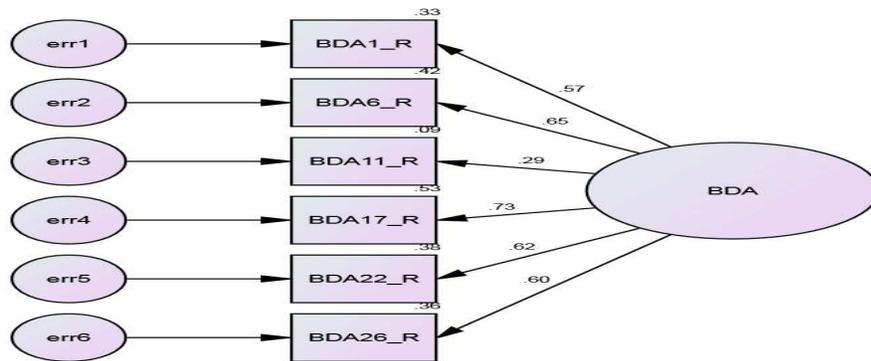
Four models were tested using CFA to examine the revised structure of behavioral disaffection. The factor structure of active behavioral disaffection was first examined to measure the content validity and model fit of the items (Model A, Figure 4.1). Likewise, the factor

structure of passive behavioral disaffection was also examined (Model B, Figure 4.2). Next, both active and passive items were then combined to determine if the measure of behavioral disaffection best fits a unidimensional one factor structure or a two factor structure (Model C, Figure 4.3 & Model D, Figure 4.4). The fit statistics for active behavioral disaffection (Figure 4.1) indicated a good fit to the model,  $\chi^2 = 12.57$  (9, 216),  $p < .183$ , CFI = .99, TLI = .976, RMSEA = .043. The model demonstrated good factor loadings, ranging from .57 to .73, with the exception of the item “When in class, I annoy my classmates” which was .29.

The model fit statistics for passive behavioral disaffection (Figure 4.2) also indicate a good model fit  $\chi^2 = 5.56$  (4, 216),  $p < .235$ , CFI = .99, TLI = .976, RMSEA = .043. Factor loadings were significant and accounted for a good amount of the variance, ranging from .48 to .78; however, the items “In class, I do just enough to get by” and “I don’t try very hard at school” demonstrated a loading of .22.

Figure 4.1

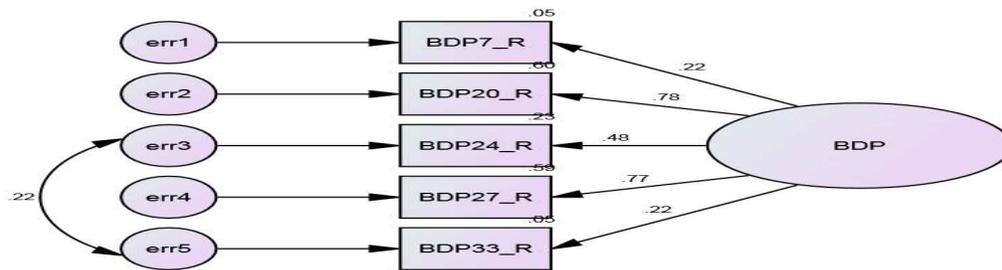
Model A – Examining Factor Structure of Active Behavioral Disaffection



Note: BDA = active behavioral disaffection; err = measurement error.

Figure 4.2

Model B – Examining Factor Structure of Passive Behavioral Disaffection



Note: BDP = passive behavioral disaffection; err = measurement error.

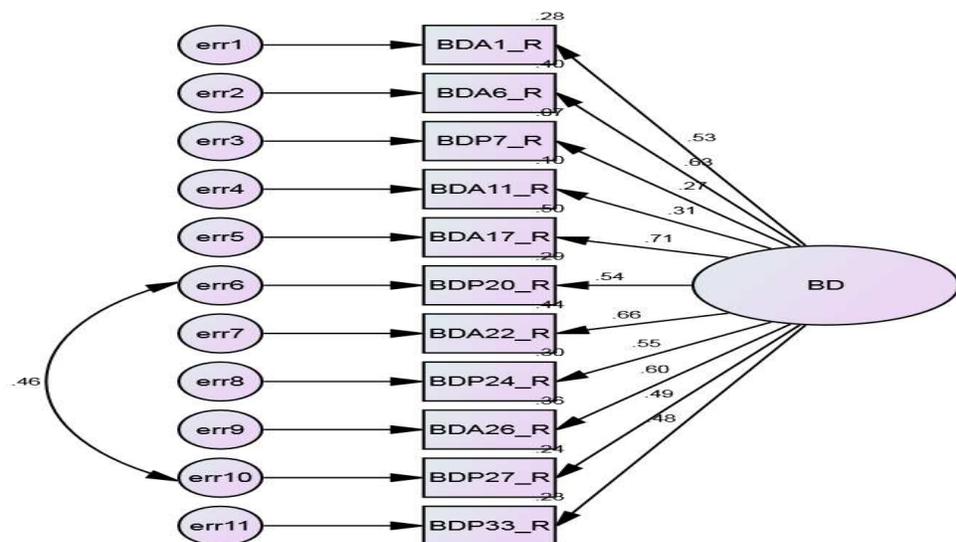
The items for active and passive behavioral disaffection were then combined to determine if the measure of behavioral disaffection better fits a one factor or two factor model. Results indicate that the one factor model (Figure 4.3) fits the data well,  $\chi^2 = 66.46$  (43, 216),  $p < .012$ , CFI = .956, TLI = .944, RMSEA = .050; and the two factor model (Figure 4.4) also fits the data well,  $\chi^2 = 65.00$  (42, 216),  $p < .013$ , CFI = .957, TLI = .944, RMSEA = .050. However, the models were not significantly different,  $\Delta \chi^2$  (1, 216) = 1.46,  $p < .05$ ;  $\Delta$ CFI = 0.001.

Additionally, the active and passive components have a high co-variance of .93. Keeping with

the hypothesis of this study, and given the slight improvement of the two factor model, active and passive behavioral disaffection will continue to be distinguished in structural analyses as two separate factors.

Figure 4.3

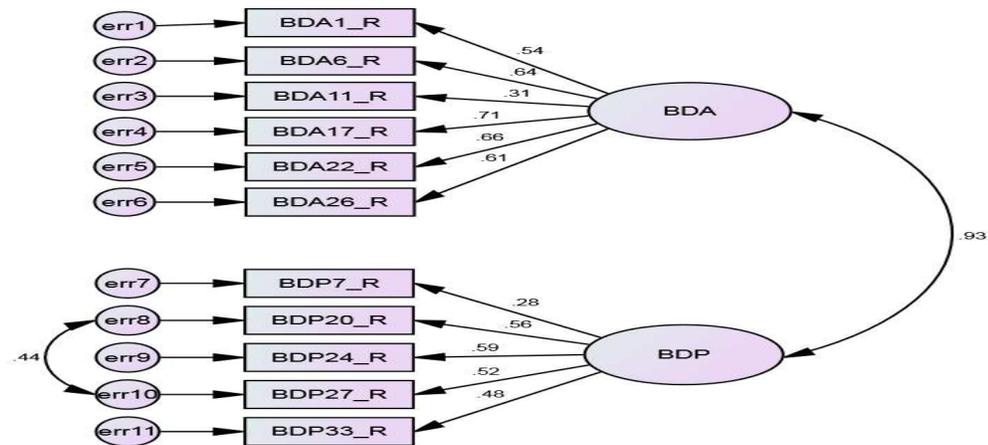
Model C – Examining Unidimensional Structure of Behavioral Disaffection



Note: BDA = active behavioral disaffection; BDP = passive behavioral disaffection; BD = behavioral disaffection; err = measurement error.

Figure 4.4

Model D – Examining Two Factor Structure of Behavioral Disaffection



Note: BDA = active behavioral disaffection; BDP = passive behavioral disaffection; err = measurement error.

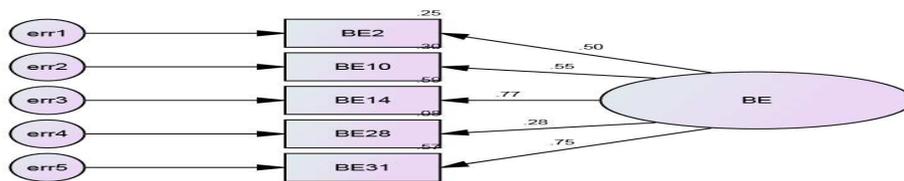
**Hypothesis 2: Behavioral and Emotional Engagement Fit a One Factor Model; Emotional Disaffection Fits a Three Factor Model.**

Similar to the analyses conducted by Skinner et al. (2009), the factor structure of behavioral engagement, emotional engagement, and emotional disaffection were separately examined. Both behavioral engagement and emotional engagement were hypothesized to best fit

a one factor structure (Model E, Figure 4.5 & Model F, Figure 4.6). However, emotional disaffection was hypothesized to best fit a three factor latent structure similar to previous research (Model G, Figure 4.7). Behavioral engagement (Figure 4.5) demonstrated good fit to a one factor model,  $\chi^2 = 10.81$  (5, 216),  $p < .055$ , CFI = .971, TLI = .942, RMSEA = .074. The factor loadings explained a good amount of the variance, ranging from .50 to .77, with the exception of the item “When I’m in class, I participate in class discussions” which was .28. Emotional engagement (Figure 4.6) also demonstrated a good fit to a one factor model,  $\chi^2 = 4.318$  (4, 216),  $p < .357$ , CFI = .998, TLI = .996, RMSEA = .021. Factor loadings were good and ranged from .49 to .77, with the exception of “When we work on something in class, I get involved” which was .22. Additionally, similar to previous research, emotional disaffection (Figure 4.7) best fit a three factor model of boredom, worry, and frustration,  $\chi^2 = 49.97$  (31, 216),  $p < .017$ , CFI = .958, TLI = .939, RMSEA = .053. Factor loadings ranged from .39 to .89. All factor structures of engagement and disaffection were similar to previous research findings (Skinner et al., 2009).

Figure 4.5

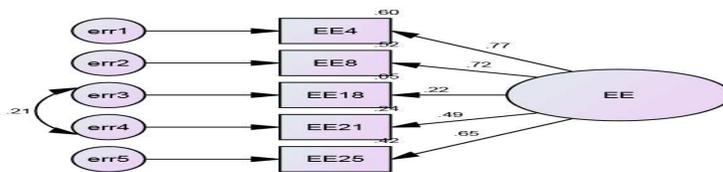
Model E – Examining Factor Structure of Behavioral Engagement



Note: BE = behavioral engagement; err = measurement error.

Figure 4.6

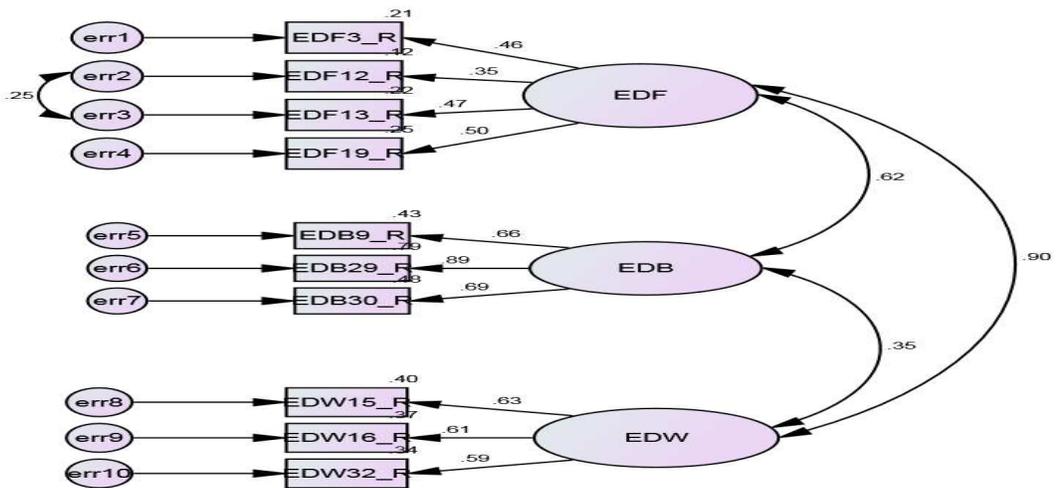
Model F – Examining Factor Structure of Emotional Engagement



Note: EE = emotional engagement; err = measurement error.

Figure 4.7

Model G – Examining Three Factor Structural Model of Emotional Disaffection



Note: EDF = emotional disaffection, frustration; EDB = emotional disaffection, boredom; EDW = emotional disaffection, worry; err = measurement error.

### Hypothesis 3: Engagement Vs. Disaffection with Learning Scale Best Fits a Two Factor Structure Instead of a One Factor Structure.

Confirmatory factor analysis was used to examine the structure of the EvsD. Various alternative models were examined to determine if the previously confirmed components (behavioral engagement, behavioral disaffection, emotional engagement, and emotional

disaffection) best fit a one or two factor model when combined. Indicators representing the differentiated components of behavioral disaffection (active and passive) and emotional disaffection (frustration, boredom, and worry) were used in place of the items making up the indicators. This was done in order to maintain statistical power. Chi Square and Comparative Fit Index difference statistics ( $\Delta\chi^2$ ,  $\Delta\text{CFI}$ ) were used to determine the significant difference between the models. A  $\Delta\text{CFI}$  of 0.01 indicates a significant difference of fit between models (Cheung & Rensvold, 2002). Such analyses were conducted to further replicate the previous study of Skinner et al. (2009).

Correlations among the components of EvsD were examined before analyzing the alternative structural models. Correlations were all significant and of expected magnitude. Emotional and behavioral engagement and emotional and behavioral disaffection were tightly and positively correlated ( $r = .620$  &  $.520$  respectively, see Table 4.2). Components of engagement and disaffection also resulted in expected negative correlations. Additionally, correlation results were moderate and below  $|1|$  suggestive of multidimensionality among the components. Correlation results were comparable to previous study results (Skinner et al., 2009).

Table 4.2

Correlations among Components of EvsD (N = 216)

	Behavioral Engagement	Emotional Engagement	Behavioral Disaffection		Emotional Disaffection		
			Active	Passive	Frustration	Boredom	Worry
Behavioral Engagement	1						

Emotional	.620**	1							
Engagement									
Behavioral	-.487**	-.442**	1						
Disaffection									
Active	-.370**	-.333**	.924**	1					
Passive	-.526**	-.481**	.869**	.614**	1				
Emotional	-.242**	-.437**	.520**	.439**	.506**	1			
Disaffection									
Frustration	-.166*	-.276**	.408**	.348**	.392**	.826**	1		
Boredom	-.364**	-.588**	.577**	.502**	.542**	.753**	.430**	1	
Worry	-.011	-.120	.200**	.148*	.222**	.744**	.499**	.271**	1

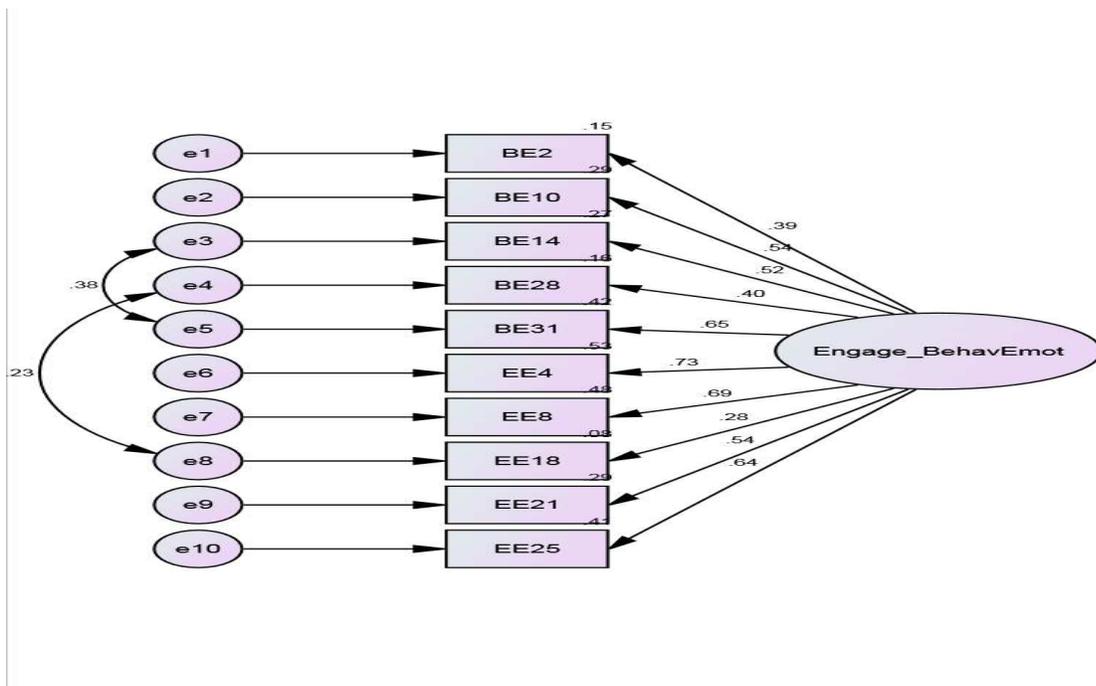
Note: \*\*Correlation is significant at the 0.01 level, \*Correlation is significant at the 0.05 level.

### **Hypothesis 3a: Engagement Best Fits a Two Factor Model Distinguishing Behavioral Engagement from Emotional Engagement.**

One and two factor alternative models of engagement were compared to determine if engagement best fits a one factor model of behavior and emotion (Model H; Figure 4.8) or a two factor model distinguishing behavior and emotion (Model I; Figure 4.9). Chi square and CFI difference statistics were calculated to obtain the significant difference in the fit of the one versus two factor models. The one factor model (Figure 4.8) resulted in a good model fit,  $\chi^2 = 59.67$  (33, 216),  $p < .003$ , CFI = .949, TLI = .931, RMSEA = .061; however, the two factor model (Figure 4.9) demonstrated a better fit to the data,  $\chi^2 = 47.39$  (32, 216),  $p < .039$  CFI = .971, TLI = .959, RMSEA = .047;  $\Delta \chi^2(1, 216) = 12.28$ ,  $p < .05$ ;  $\Delta \text{CFI} = 0.022$ . Therefore, the results support a two factor model that distinguishes between behavior and emotion.

Figure 4.8

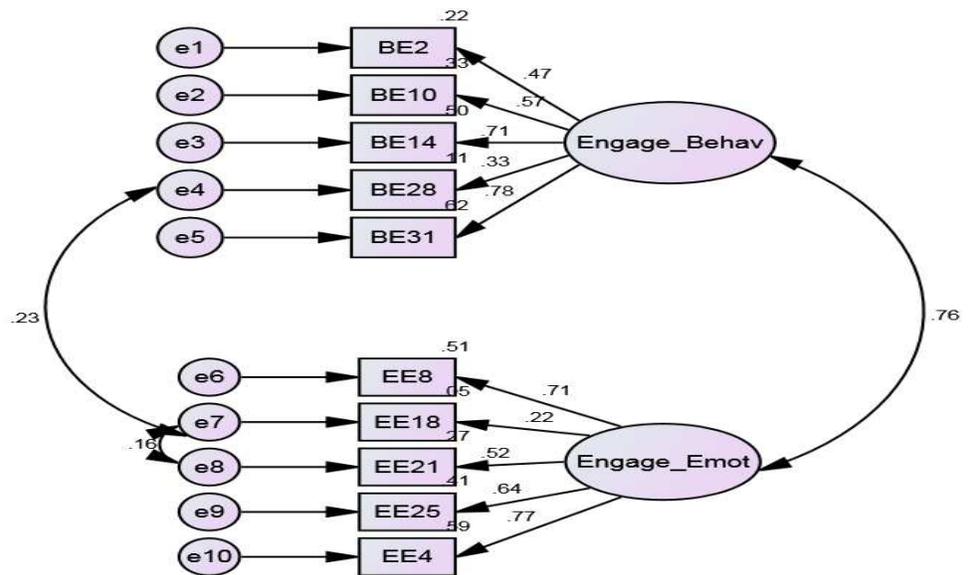
Model H – Examining One Factor Model of Engagement with Behavioral and Emotional Engagement Items



Note: Engage\_BehavEmot = behavioral and emotional engagement; BE = behavioral engagement; EE = emotional engagement; e = measurement error.

Figure 4.9

Model I - Examining Two Factor Model of Engagement with Behavioral and Emotional Engagement Items



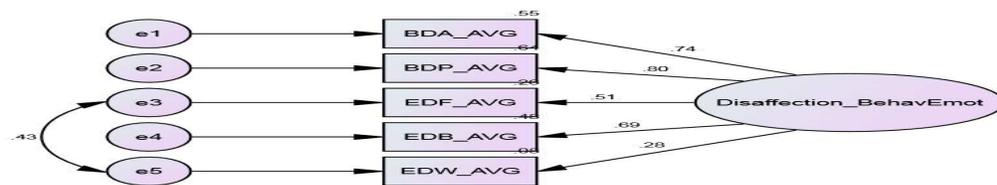
Note: Engage\_Behav = behavioral engagement; Engage\_Emot = emotional engagement; BE = behavioral engagement items; EE = emotional engagement items.

**Hypothesis 3b: Disaffection Best Fits a Two Factor Model Distinguishing Behavioral Disaffection from Emotional Disaffection.**

One and two factor alternative models of disaffection were also compared to determine if disaffection best fits a one factor model of behavior and emotion (Model J; Figure 4.10) or a two factor model distinguishing behavior and emotion (Model K; Figure 4.11). Similar to engagement, results indicate that the model for disaffection better fits a two factor model distinguishing factors of behavior and emotion. Although the one factor model (Figure 4.10) resulted in a good model fit,  $\chi^2 = 7.109$  (4, 216),  $p < .130$ , CFI = .990, TLI = .974, RMSEA = .060; the two factor model (Figure 4.11) demonstrated a better fit to the data,  $\chi^2 = 1.782$  (3, 216),  $p < .619$  CFI = 1.00, TLI = 1.014, RMSEA = .000;  $\Delta\chi^2$  (1, 216) = 5.327,  $p < .05$ ;  $\Delta$ CFI = 0.01.

Figure 4.10

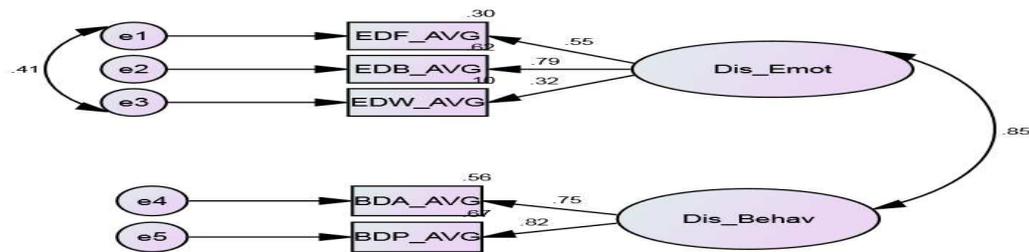
Model J - Examining One Factor Model of Disaffection with Behavioral and Emotional Disaffection Items



Note: Disaffection\_BehavEmot = behavioral and emotional disaffection; BDA\_AVG = active behavioral disaffection; BDP\_AVG = passive behavioral disaffection; EDF\_AVG = emotional disaffection, frustration; EDB\_AVG = emotional disaffection, boredom; EDW\_AVG = emotional disaffection, worry; e = measurement error.

Figure 4.11

Model K – Examining Two Factor Model of Disaffection with Behavioral and Emotional Disaffection Items



Note: Dis\_Emot = emotional disaffection; Dis\_Behav = behavioral disaffection; BDA\_AVG = active behavioral disaffection; BDP\_AVG = passive behavioral disaffection; EDF\_AVG =

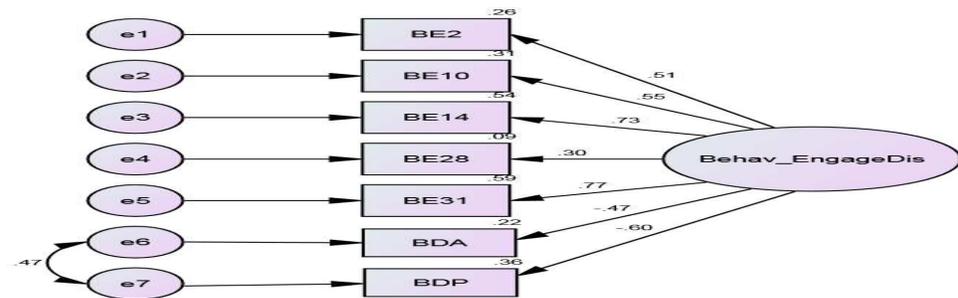
emotional disaffection, frustration; EDB\_AVG = emotional disaffection, boredom; EDW\_AVG = emotional disaffection, worry; e = measurement error.

### **Hypothesis 3c: Behavior Best Fits a Two Factor Model Distinguishing Engagement from Disaffection.**

One and two factor alternative models of behavior were compared to determine if behavior best fits a one factor model of engagement and disaffection (Model L; Figure 4.12) or a two factor model distinguishing engagement and disaffection (Model M; Figure 4.13). Results indicate a better fit to a two factor model distinguishing engagement and disaffection. The one factor model (Figure 4.12) resulted in a good model fit,  $\chi^2 = 27.425$  (13, 216),  $p < .011$  CFI = .962, TLI = .939, RMSEA = .072; however, the two factor model (Figure 4.13) demonstrated a better fit to the data,  $\chi^2 = 18.643$  (12, 216),  $p < .098$  CFI = .983, TLI = .969, RMSEA = .051;  $\Delta \chi^2$  (1,216) = 8.782,  $p < .05$ ;  $\Delta$ CFI = 0.021.

Figure 4.12

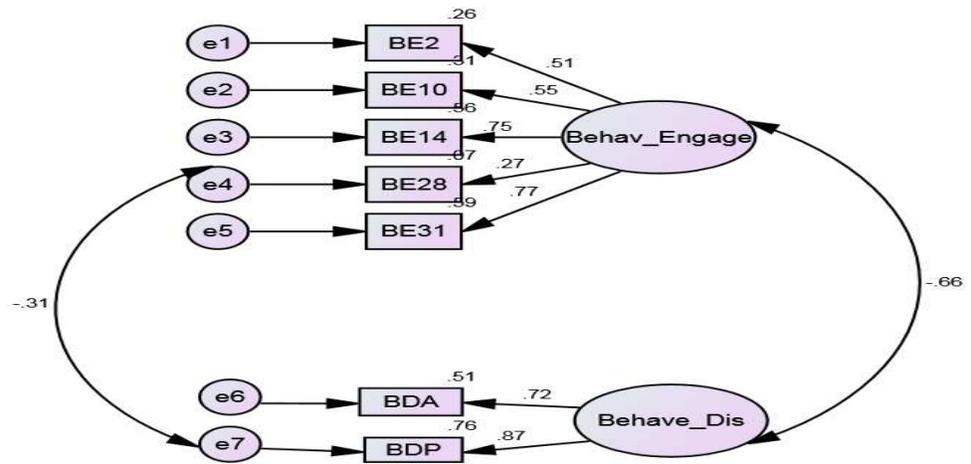
Model L – Examining One Factor Model of Behavior with Engagement and Disaffection Items



Note: Behav\_EngageDis = behavioral engagement and disaffection; BE = behavioral engagement; BDA = active behavioral disaffection; BDP = passive behavioral disaffection; e = measurement error.

Figure 4.13

Model M – Examining Two Factor Model of Behavior with Engagement and Disaffection Items



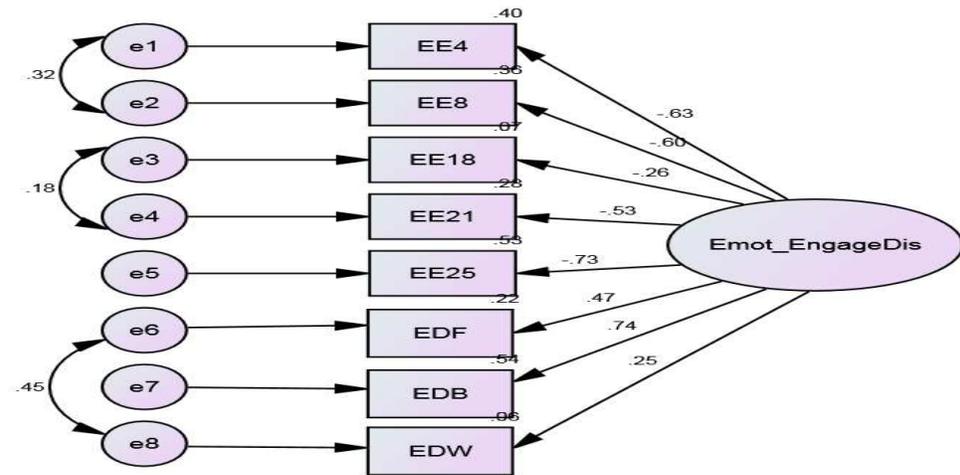
Note: Behav\_Engage = behavioral engagement; Behave\_Dis = behavioral disaffection; BE = behavioral engagement; BDA = active behavioral disaffection; BDP = passive behavioral disaffection; e = measurement error.

### **Hypothesis 3d: Emotion Best Fits a Two Factor Model Distinguishing Engagement from Disaffection.**

One and two factor alternative models of emotion were compared to determine if emotion best fits a one factor model of engagement and disaffection (Model N; Figure 4.14) or a two factor model distinguishing engagement and disaffection (Model O; Figure 4.15). Similarly, for emotion results also indicate that the two factor model distinguishing engagement from disaffection fit the data significantly better than the one factor model. The one factor model (Figure 4.14) demonstrated a good fit to the data,  $\chi^2 = 34.188$  (17, 216),  $p < .008$  CFI = .960, TLI = .934, RMSEA = .069; however, the two factor model (Figure 4.15) demonstrated a significantly better fit to the data,  $\chi^2 = 26.113$  (16, 216),  $p < .052$  CFI = .976, TLI = .959, RMSEA = .054;  $\Delta \chi^2(1,216) = 8.075$ ,  $p < .05$ ;  $\Delta$ CFI = 0.016.

Figure 4.14

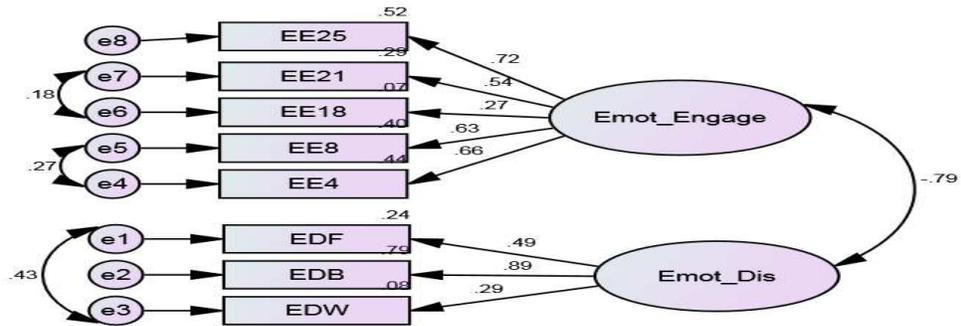
Model N – Examining One Factor Model of Emotion with Engagement and Disaffection Items



Note: Emot\_EngageDis = emotional engagement and disaffection; EE = emotional engagement; EDF = emotional disaffection, frustration; EDB = emotional disaffection, boredom; EDW = emotional disaffection, worry; e = measurement error.

Figure 4.15

Model O – Examining Emotion with Two Factors of Engagement and Disaffection



Note: Emot\_Engage = emotional engagement; Emot\_Dis = emotional disaffection; EE = emotional engagement; EDF = emotional disaffection, frustration; EDB = emotional disaffection, boredom; EDW = emotional disaffection, worry; e = measurement error.

#### **Hypothesis 4: Engagement Vs. Disaffection with Learning Scale Best Fits a Four Factor Structure Instead of a Two Factor Structure.**

The previous results show that EvsD best fits a two factor structure rather than a one factor structure. To build on the previous results, two factor alternative models and a four factor model of EvsD were examined. This was done to examine the relationships between all four components and to determine the best model fit for the components. Additionally, the structure of two factor alternative models with passive behavioral disaffection, unidimensional active and passive behavioral disaffection, and differentiated passive and active behavioral disaffection were compared and examined for best model fit. This was done to highlight the improved structure of EvsD with the addition of active behavioral disaffection items to the behavioral disaffection component. As previously mentioned, indicators representing the differentiated components of behavioral disaffection (active and passive) and emotional disaffection (frustration, boredom, and worry) were used in order to maintain statistical power. The Comparative Fit Index difference statistic ( $\Delta CFI$ ) was used to determine the significant difference between the models.

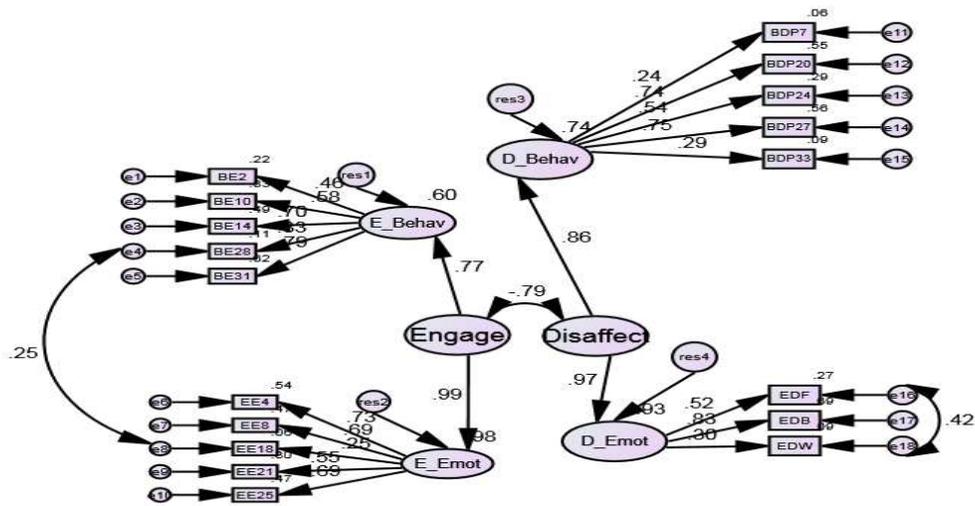
#### **Hypothesis 4a: The Two Factor Structure of Engagement and Disaffection with Differentiated Active and Passive Behavioral Disaffection has the Best Model Fit.**

Alternative two factor models distinguishing engagement and disaffection were compared to determine the best fit of behavioral disaffection items within EvsD. First a model of engagement and disaffection including passive behavioral disaffection items only (Model P;

Figure 4.16) was conducted and indicated a poor model fit:  $\chi^2 = 269.05$  (128, 216),  $p < .000$  CFI = .872, TLI = .846, RMSEA = .072. Second, an alternative model with passive and active items in a unidimensional structure (Model Q; Figure 4.17) was conducted and indicated a slight improvement in model fit:  $\chi^2 = 434.315$  (243, 216),  $p < .000$  CFI = .874, TLI = .857, RMSEA = .061,  $\Delta\text{CFI} = 0.002$ . A change in CFI of 0.002 indicated a non-significant improvement in model fit. Lastly, an alternative model distinguishing passive and active behavioral disaffection items (Model R; Figure 4.18) was conducted and demonstrated an adequate model fit in comparison to the previous models:  $\chi^2 = 168.952$  (83, 216),  $p < .000$  CFI = .913, TLI = .890, RMSEA = .069,  $\Delta\text{CFI} = 0.041$  & 0.039 respectively. A change in CFI of 0.041 and 0.039 indicated a significant improvement in model fit. Results demonstrated that the two factor model of engagement and disaffection with differentiated active and passive behavioral disaffection items provides the best model fit.

Figure 4.16

Model P – Examining Two Factor Model of Engagement and Disaffection with Passive Behavioral Disaffection Items

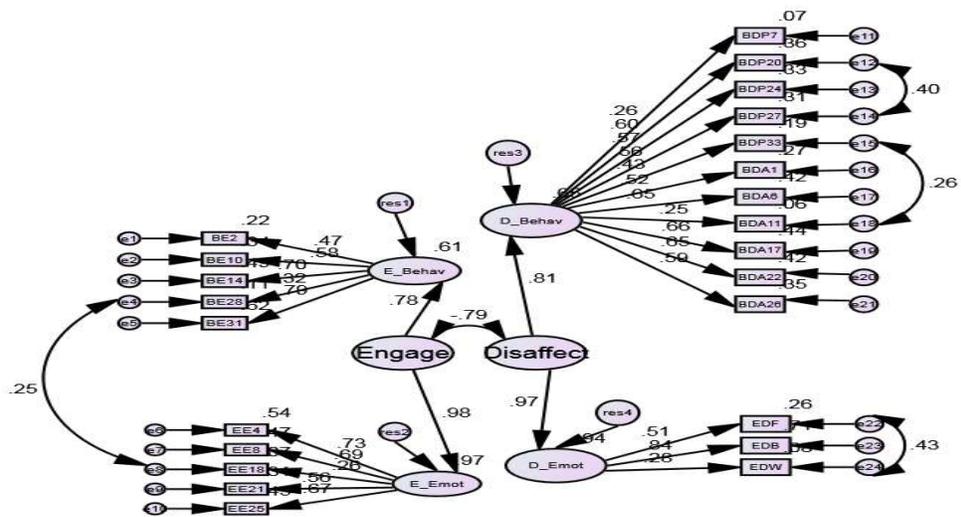


Note: E\_Behav = behavioral engagement; E\_Emot = emotional engagement; D\_Behav = behavioral disaffection; D\_Emot = emotional disaffection; BE = behavioral engagement; EE =

emotional engagement; BDP = passive behavioral disaffection; EDF = emotional disaffection, frustration; EDB = emotional disaffection, boredom; EDW = emotional disaffection, worry, e = measurement error.

Figure 4.17

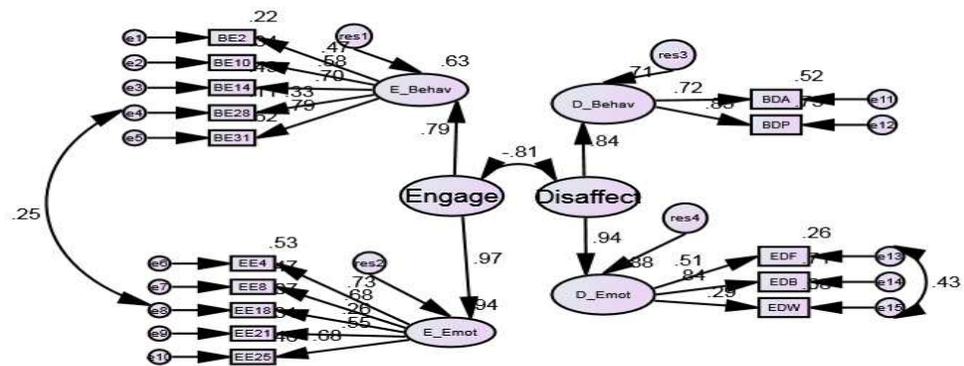
Model Q – Examining Two Factor Model of Engagement and Disaffection with Unidimensional Active and Passive Behavioral Disaffection Items



Note: E\_Behav – behavioral engagement; E\_Emot – emotional engagement; D\_Behav – behavioral disaffection; D\_Emot – emotional disaffection; BE – behavioral engagement; EE – emotional engagement; BDA – active behavioral disaffection; BDP – passive behavioral disaffection; EDF – emotional disaffection, frustration; EDB – emotional disaffection, boredom; EDW – emotional disaffection, worry, e – measurement error.

Figure 4.18

Model R – Examining Two Factor Model of Engagement and Disaffection with Differentiated Active and Passive Behavioral Disaffection Items



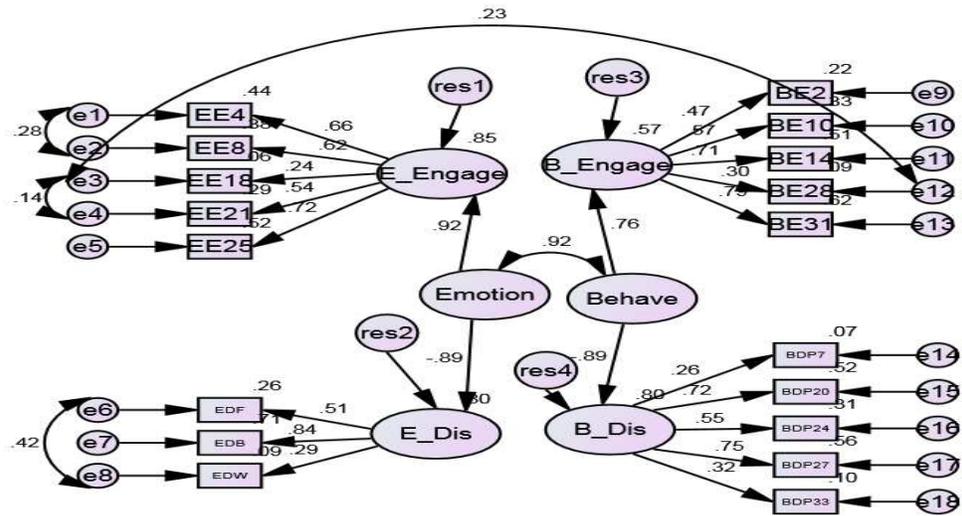
Note: E\_Behav = behavioral engagement; E\_Emot = emotional engagement; D\_Behav = behavioral disaffection; D\_Emot = emotional disaffection; BE = behavioral engagement; EE = emotional engagement; BDA = active behavioral disaffection; BDP = passive behavioral disaffection; EDF = emotional disaffection, frustration; EDB = emotional disaffection, boredom; EDW = emotional disaffection, worry, e = measurement error.

#### **Hypothesis 4b: The Two Factor Structure of Behavior and Emotion with Differentiated Active and Passive Behavioral Disaffection has the Best Model Fit.**

Likewise, alternative two factor models distinguishing behavior and emotion were also compared to determine the best fit of behavioral disaffection items within the structure of student engagement. The two factor model of behavior and emotion with passive behavioral disaffection items (Model S; Figure 4.19) demonstrated a poor model fit:  $\chi^2 = 267.479$  (126, 216),  $p < .000$  CFI = .871, TLI = .844, RMSEA = .072. The alternative model of behavior and emotion with a unidimensional structure of passive and active behavioral disaffection items (Model T; Figure 4.20) demonstrated a slight improvement yet poor model fit:  $\chi^2 = 432.330$  (241, 216),  $p < .000$  CFI = .874, TLI = .855, RMSEA = .061,  $\Delta\text{CFI} = 0.003$ . A CFI change of 0.003 indicated a non-significant improvement in model fit. However, the alternative model distinguishing passive and active behavioral disaffection items (Model U; Figure 4.21) demonstrated adequate and significant improvement in model fit:  $\chi^2 = 173.783$  (82, 216),  $p < .000$  CFI = .907, TLI = .882, RMSEA = .072,  $\Delta\text{CFI} = 0.036$  & 0.033 respectively. CFI changes of 0.036 and 0.033 indicated a significant improvement in model fit with differentiated active and passive items within behavioral disaffection.

Figure 4.19

Model S – Examining Two Factor Model of Behavior and Emotion with Passive Behavioral Disaffection Items

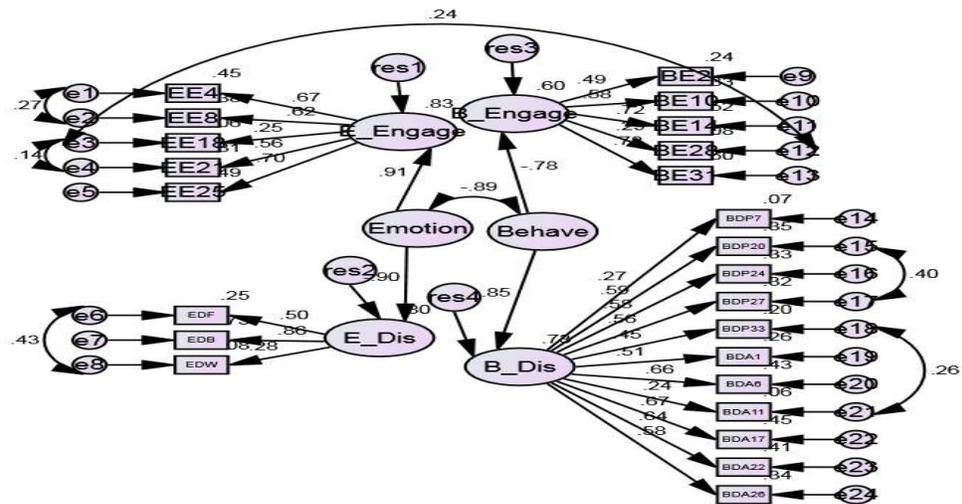


Note: E\_Behav = behavioral engagement; E\_Emot = emotional engagement; D\_Behav = behavioral disaffection; D\_Emot = emotional disaffection; BE = behavioral engagement; EE = emotional engagement; BDP = passive behavioral disaffection; EDF = emotional disaffection,

frustration; EDB = emotional disaffection, boredom; EDW = emotional disaffection, worry, e = measurement error.

Figure 4.20

Model T – Examining Two Factor Model of Behavior and Emotion with Unidimensional Active and Passive Behavioral Disaffection Items

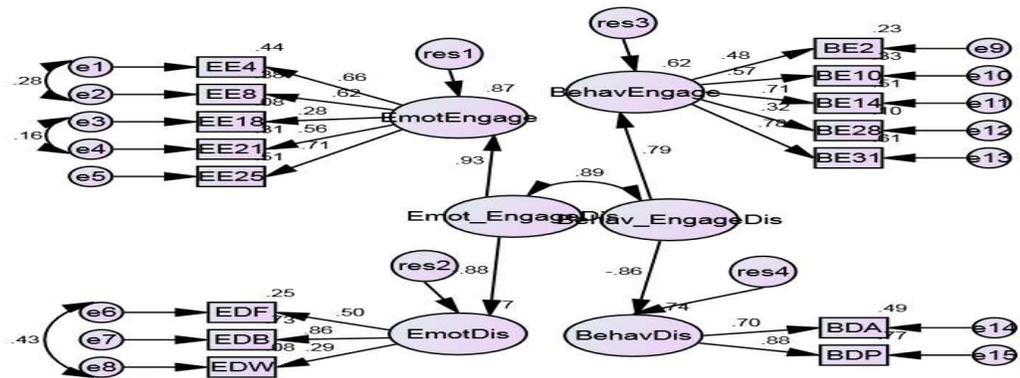


Note: E\_Behav = behavioral engagement; E\_Emot = emotional engagement; D\_Behav = behavioral disaffection; D\_Emot = emotional disaffection; BE = behavioral engagement; EE = emotional engagement; BDA = active behavioral disaffection; BDP = passive behavioral

disaffection; EDF = emotional disaffection, frustration; EDB = emotional disaffection, boredom; EDW = emotional disaffection, worry, e – measurement error.

Figure 4.21

Model U – Examining Two Factor Model of Behavior and Emotion with Differentiated Active and Passive Behavioral Disaffection Items



Note: Emot\_EngageDis = emotional engagement and disaffection; Behav\_EngageDis = behavioral engagement and disaffection; BehavEngage = behavioral engagement; EmotEngage = emotional engagement; BehavDis = behavioral disaffection; EmotDis = emotional disaffection;

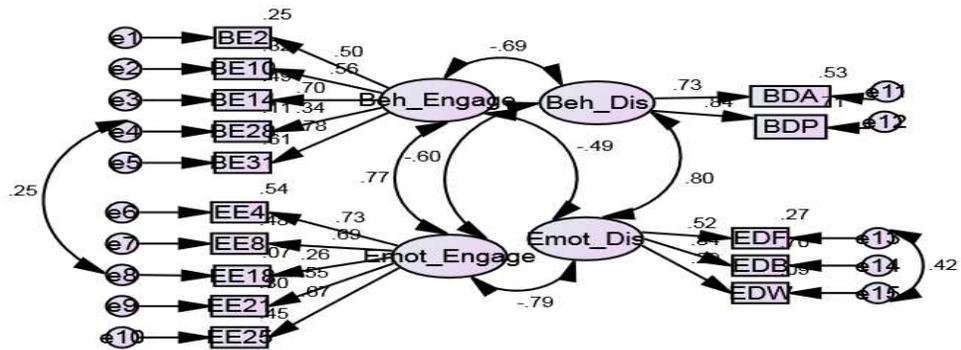
BE = behavioral engagement; EE = emotional engagement; BDA = active behavioral disaffection; BDP = passive behavioral disaffection; EDF = emotional disaffection, frustration; EDB = emotional disaffection, boredom; EDW = emotional disaffection, worry, e = measurement error.

**Hypothesis 4c: The Engagement Vs. Disaffection with Learning Scale Best Fits a Multidimensional Four Factor Structural Model.**

Finally, a four factor model distinguishing all components of student engagement was conducted (Model V; Figure 4.22). The components of behavioral engagement, behavioral disaffection, emotional engagement, and emotional disaffection were differentiated into four separate factors. Due to the improved model fit previously demonstrated by the two factor alternative models, active and passive disaffection were also differentiated within behavioral disaffection. The four factor model (Figure 4.22) demonstrated a good fit to the data:  $\chi^2 = 138.863 (82, 216), p < .000$  CFI = .943, TLI = .927, RMSEA = .057,  $\Delta$ CFI = 0.036 & 0.030 respectively. The four factor model demonstrated a significant improvement in fit when compared to the two factor alternative models that also distinguished active and passive behavioral disaffection (Engagement and Disaffection,  $\Delta$ CFI = 0.036; Behavior and Emotion,  $\Delta$ CFI = 0.030).

Figure 4.22

Model V – Examining Four Factor Model of Behavioral and Emotional Engagement and Disaffection



Note: Beh\_Engage = behavioral engagement; Emot\_Engage = emotional engagement; Beh\_Dis = behavioral disaffection; Emot\_Dis = emotional disaffection; BE = behavioral engagement; EE

= emotional engagement; BDA = active behavioral disaffection; BDP = passive behavioral disaffection; EDF = emotional disaffection, frustration; EDB = emotional disaffection, boredom; EDW = emotional disaffection, worry, e = measurement error.

### **Hypothesis 5: Engagement Vs. Disaffection with Learning Scale Predicts School Outcome Measures.**

Outcome data from school records were made available for a subset of the sampled population ( $n = 37$ ). Outcome data included number of discipline referrals, grade point average (GPA), and percentage of school attendance. Given the small sample size, hierarchical multiple regression analyses were used instead of SEM to examine how well the measures of student engagement predict school outcomes. Hierarchical regression analyses were also used to examine how well active behavioral disaffection contributed to the prediction of school outcome measures when separately added to the measures of student engagement. Pearson correlations were first conducted to examine the preliminary relationship of measures of student engagement with school outcome measures (Table 4.3). Results demonstrated expected correlational magnitudes and directions in relationships. GPA was significantly related to behavioral engagement, passive behavioral disaffection, and boredom. On the other hand, discipline referrals were only significantly related to active behavioral disaffection, while attendance was only significantly related to worry.

Table 4.3

## Correlations between Components of Student Engagement and School Outcome Measures

(n=37)

	Attendance (2012-2013)	Discipline Referrals	Grade Point Average (GPA)
Behavioral Engagement	.240	.068	.449**
Emotional Engagement	.008	-.085	.284
Behavioral Disaffection	-.268	.265	-.423**
Active	-.304	.455**	-.225
Passive	-.155	-.042	-.569**
Emotional Disaffection	.237	.087	-.189
Frustration	.253	-.012	.006
Boredom	-.067	.285	-.373*
Worry	.350*	-.099	-.023

Note: \*\*Correlation is significant at the 0.01 level, \*Correlation is significant at the 0.05 level.

Regression results revealed that discipline referrals and GPA were significantly predicted by measures of student engagement (Table 4.4). Specifically, a significant amount of the variance for discipline referrals was only predicted once active behavioral disaffection was added to measures of student engagement for Model 2 ( $R^2_{adj} = .23$ ,  $\Delta R^2 = .23$ ,  $F = 10.50$ ). Active behavioral disaffection was the only predictor of number of discipline referrals ( $\beta = .70$ ). Model 1 for discipline referrals did not predict a significant amount of the variance ( $R^2_{adj} = -.019$ ,  $F = .89$ ).

A significant amount of the variance for GPA was also predicted with the addition of active behavioral disaffection in Model 2 ( $R^2_{adj} = .336$ ,  $\Delta R^2 = .080$ ,  $F = 4.33$ ). Model 1 for GPA did not predict a significant amount of the variance ( $R^2_{adj} = .26$ ,  $F = 3.13$ ). Although correlational results indicated that behavioral engagement was significantly related to GPA, behavioral engagement was not a significant predictor within Model 1 regression results. For Model 2, consistent with correlation results, boredom and passive disaffection were negative predictors of GPA. However, active disaffection was a positive predictor of GPA, and behavioral engagement did not significantly predict GPA. Such results are possibly due to suppressor effects between measures of behavioral engagement and disaffection.

A significant amount of the variance was not predicted for attendance by Model 1 or Model 2. However, worry for emotional disaffection was the strongest predictor of attendance consistent with correlation results. Regression results indicate discriminate validity between active behavioral disaffection and passive behavioral disaffection. Active behavioral disaffection was the strongest predictor of discipline referrals and a moderate predictor of poor attendance. While passive disaffection, along with boredom, was the strongest predictor of GPA. Such results suggest that active disaffection and passive disaffection predict different school outcomes.

For generalizability of regression analyses to the entire research sample ( $n = 179$ ), ANOVA was conducted to examine the mean difference between participants with outcome data and without outcome data on measures of student engagement. No significant difference was found between groups for means scores on student engagement: Behavioral engagement ( $F =$

.758,  $p = .385$ ); Active behavioral disaffection ( $F = .134$ ,  $p = .715$ ); Passive behavioral disaffection ( $F = .882$ ,  $p = .349$ ); Emotional engagement ( $F = 3.43$ ,  $p = .065$ ); Frustration – Emotional disaffection ( $F = 2.15$ ,  $p = .144$ ); Boredom – Emotional disaffection ( $F = .512$ ,  $p = .457$ ); and Worry – Emotional disaffection ( $F = .016$ ,  $p = .900$ ). ANOVA results indicate that the results from the regression analyses, the prediction of school outcomes by measures of student engagement, can be generalized to the entire study participants.

Table 4.4

Multiple Regression Analyses for Discipline Referrals, GPA, and School Attendance on Measures of Student Engagement (n = 37)

Variable	Discipline Referrals		G.P.A.		Attendance	
	$\beta$		$\beta$		$\beta$	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Emotional Engagement	.045	.086	.126	.150	.209	.196
Frustration - Emotional Disaffection	.144	.066	.102	.227	.164	.102
Worry - Emotional Disaffection	.089	.056	.053	.033	.259	.249
Boredom - Emotional Disaffection	.430	.059	.256	.476*	.185	.075
Behavioral Engagement	.098	.185	.276	.328	.227	.201
Passive - Behavioral Disaffection	.182	.402	.351	.482*	.069	.003
Active - Behavioral Disaffection		.701**		.417*		.209
R <sup>2</sup>	.151	.377	.385	.465	.211	.232
R <sup>2</sup> <sub>adj</sub>	.019	.226	.262	.336	.054	.046
F	.890	10.50*	3.13	4.33**	1.34	1.25
$\Delta R^2$		.226		.080		.232
$\Delta F$		.003		.046		.760

Note: \*\*Correlation is significant at the 0.01 level, \*Correlation is significant at the 0.05 level.

## CHAPTER 5

### DISCUSSION

Results from this study demonstrate that the Engagement vs. Disaffection with Learning Scale continues to hold the same structure and multidimensionality among predominately Hispanic inner city youth. The tested models also indicate that the structural fit of EvsD improves when active disaffection is added and differentiated from passive disaffection within the behavioral disaffection component. Further analyses show that active and passive behavioral disaffection are different types of disaffection that predict different types of school outcomes.

#### **Levels of Student Engagement**

Student participants in this study self-reported being behaviorally and emotionally engaged in learning comparable to students in previous studies (see Appendix G, Skinner, et al., 2009). In particular, students reported themselves to be more behaviorally engaged in learning than emotionally engage in learning. Such findings are consistent with other research findings of student self-reports of learning engagement, where students report participating more in learning rather than being interested or enjoying learning (Skinner et al., 2008). Students in this study reported more behavioral and emotional disaffection with learning when compared to other students in previous studies (see Appendix G, Skinner, et al., 2009). Students reported more elevated mean scores of behavioral disaffection and emotional disaffection. In particular, students reported being more passively disaffected with learning (e.g. putting forth less effort

and mind wandering during class) than actively disaffect (e.g. disruptive and talkative). Students also reported more boredom with learning than feelings of frustration and worry. Elevated scores in behaviors that are passively disengaged in learning and feelings of boredom during learning are consistent with student reports in other studies of student engagement (Finn, et al., 1995; Skinner, et al., 2008).

### **Structure of Engagement Vs. Disaffection with Learning**

Study results confirmed the factor structure of the individual components of EvsD. Behavioral and emotional engagement continued to best fit a one factor structure, and emotional disaffection continued to best fit a three factor structure distinguishing worry, boredom, and frustration (Skinner, et al., 2009). Behavioral disaffection was found to fit either a one factor structure or a two factor structure distinguishing active and passive disaffection. However, after conducting various alternative models examining the structure of EvsD, it was found that distinguishing active and passive behavioral disaffection lead to the optimal structural fit of EvsD.

Following a similar statistical approach as Skinner, et al. (2009), alternative models examining the structure of EvsD proved that the scale best fits a four factor model distinguishing components of student engagement. Behavioral engagement, behavioral disaffection, emotional engagement, and emotional disaffection were all distinguished as separate factors contributing to the construct of student engagement.

In efforts to validate active behavioral disaffection as a measure of student engagement, alternative models of EvsD comparing various structures of behavioral disaffection were examined. EvsD was examined with passive behavioral disaffection items only, with one factor passive and active behavioral disaffection items, and with behavioral disaffection distinguished by active and passive disaffection as two factors. EvsD comprising of passive behavioral disaffection items only is consistent with the measure of EvsD in previous studies (Skinner, et al., 2009). Alternative modeling proved that the model fit of EvsD improved significantly with the addition of active behavioral disaffection items and when active and passive behavioral disaffection were distinguished as two separate factors. Such findings indicate the critical need to identify additional dimensions that make up student engagement. The improved model fit of EvsD with additional items indicates that student engagement can be better explained as a construct as dimensional components making up the construct are better identified.

### **Distinguishing Active and Passive Behavioral Disaffection**

Regression analyses indicated that active and passive behavioral disaffection are different types of disaffection that predict different types of school outcomes. Both active and passive behavioral disaffection directly predicted measures of school outcomes above measures of emotional engagement and emotional disaffection, with the exception of boredom predicting G.P.A.. In addition to the improved structure fit of EvsD, regression results further highlighted the discriminate validity between active and passive behavioral disaffection in predicting different school outcomes. In this study, active behavioral disaffection is predictive of school

discipline referrals. Such findings are consistent with student engagement research literature, in which behavioral disengagement that is disruptive to learning has been found to predict discipline problems in school and later delinquent behaviors (Finn, 2006; Ou, Mersky, Reynolds, & Koler, 2007). Additionally, in this study, passive behavioral disaffection, along with boredom, negatively predicts grade point average. Such findings are also consistent with student engagement research literature, in which behavioral disengagement of inattention and poor effort, and feelings of boredom, have been found to predict poor academic persistence and poor achievement in school (Finn, 1995; Skinner, 2008).

In sum, structural and regression analyses suggest that active and passive disaffection are discriminate and explain two different types of behavior. Actively disrupting the classroom may indicate that a student has problems with adjusting to social rules, school or classroom structure, or a student may simply be bored. Such behavioral problems can occur and be unrelated to a student's academic achievement in class. Being passively disengaged and inattentive may indicate that a student has problems with academic competence, maintaining focus, or other emotional and internal problems to also include boredom. Such passive behaviors indicate low motivation to academically perform and are directly related to achievement and grade outcomes. A student also may encompass both active and passive disaffected characteristics, resulting in problems with both discipline and achievement. Nevertheless, a separate or combination pattern of disengaged behaviors are suggestive of various methods of needed intervention.

## **Implications and Future Directions**

Findings from this study further support the multidimensional nature of student engagement. The multidimensional structure of the Engagement vs. Disaffection with Learning Scale continued to fit the data among predominately Hispanic inner city youth. Also the discriminate validity of active and passive behavioral disaffection was supported. These findings imply the need for continual exploration of the dimensionality within student engagement. Current student engagement research generally agrees to identification of the behavioral, emotional, and cognitive dimensions within engagement. However, there continues to be many inconsistencies in the identification of items and sub-components within these components of engagement. Despite this fact, outcomes of student engagement research findings tend to be related and consistent, implying that the field is converging in measurement and headed in the right direction. Conceptually, SSMMD neatly untangles student engagement by distinguishing facilitators, indicators, and outcomes. This model of student engagement would benefit from continued research that identifies additional dimensions of engagement, to include cognitive engagement and extension of items within behavioral and emotional engagement.

## **Application of Student Engagement**

The assessment of student engagement is valuable to the practice of school psychology. EvsD can be used as a measurement tool by teachers with additional data presented at Response to Intervention (RTI) meetings. Student engagement can be envisioned as students' response to educational supports provided in class. Such measurements as EvsD can aide RTI teams in

development, assessment, and monitoring of behavior intervention plans. In cases of active behavioral disaffection, interventions can be developed that encourage students to become behaviorally engaged in a positive manner (e.g. employing student helpers, shaping appropriate participatory behavior, catching students being good). Classroom reward systems can be developed to reward appropriate behaviorally engaged behaviors. Resultantly, student engagement in class can be reassessed after implemented interventions at a later time period for RTI data collection purposes. Altogether monitoring student engagement in learning provides avenues for intervention development to buffer against the process of gradual disengagement.

### **Study Limitations**

A major study limitation is the limited number of student participants. The sample size for this study was considered small given the large number of participants needed to meet the parameter requirements for structural equation modeling. Also, the number of participants with available school outcome data was relatively small, requiring a change in statistical analyses for continued power. Although the ANOVA analyses validated the generalizability of student engagement in predicting school outcomes, the change in analyses limits the research findings. In future studies, obtaining student school identification numbers from parents on parental consent forms would assist school districts in properly identifying student data within the student information system.

Another limitation to this study is the suppressor effects active behavioral disaffection on behavioral engagement in predicting GPA. When added to the measures of student engagement

in predicting school outcome measures, active behavioral disaffection significantly predicting school outcomes above the other measures of engagement. Opposite of correlational results, behavioral engagement was not a significant predictor of GPA with the addition of active disaffection. Also, active behavioral disaffection demonstrated a positive relationship with GPA. This also was opposition of correlational results, in which active behavioral disaffection demonstrated a significant negative relationship with GPA. In this study the predictive relationship of behavioral engagement and GPA was not demonstrated, which is a relationship that has been consistently found in student engagement research studies.

In conclusion, this study was able to replicate the structural multidimensionality of student engagement within SSMMD among an ethnically diverse, inner city, low socioeconomic population. This study was also able to extend the dimensionality of student engagement, as suggested from previous studies, and validate study findings with school outcome measures. The exploration of dimensionality within student engagement is an ongoing research endeavor, in which future studies will continue to prove the malleability and centrality of engagement as a gauge of student motivation in learning and predictor of future academic success.

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## Appendix A

Name: \_\_\_\_\_

### ACADEMIC ENGAGEMENT IN LEARNING

**Thank you for your willingness to participate in this research. Your responses will help school teachers and educators understand how students engage in learning. Please answer each question honestly, as your responses will remain confidential.**

#### PART I – BACKGROUND INFORMATION

What is your gender? (Circle One)      Male      Female

What is your age? \_\_\_\_\_

What grade are you in? (Circle One)      3<sup>rd</sup>      4<sup>th</sup>      5<sup>th</sup>      6<sup>th</sup>      7<sup>th</sup>

Which of the following choices best describes your ethnicity? (Check Only One)

\_\_\_\_\_ American Indian/ Native American

\_\_\_\_\_ Asian or Asian American, including Chinese, Japanese, and others

\_\_\_\_\_ Black or African American

\_\_\_\_\_ Hispanic or Latino, including Mexican American, Central American, and others

\_\_\_\_\_ More than one ethnic group; parents from two different groups

\_\_\_\_\_ White, Caucasian, Anglo, European American

\_\_\_\_\_ Other, please specify: \_\_\_\_\_

## PART II – ACADEMIC ENGAGEMENT

**Directions:** These questions ask about how you feel about school. Circle the best answer for each statement.

1. I argue with my teacher in class.

- A) Not at all true    B) Not very true    C) Sort of true    D) Very true

2. I try hard to do well in school.

- A) Not at all true    B) Not very true    C) Sort of true    D) Very true

3. When I can't answer a question, I feel frustrated.

- A) Not at all true    B) Not very true    C) Sort of true    D) Very true

4. I enjoy learning new things in class.

- A) Not at all true    B) Not very true    C) Sort of true    D) Very true

5. When we work on something in class, I feel discouraged.

- A) Not at all true    B) Not very true    C) Sort of true    D) Very true

6. I get in trouble for not following classroom rules.

- A) Not at all true    B) Not very true    C) Sort of true    D) Very true

7. In class, I do just enough to get by.

- A) Not at all true    B) Not very true    C) Sort of true    D) Very true

8. Class is fun.

- A) Not at all true    B) Not very true    C) Sort of true    D) Very true

9. When I'm doing work in class, I feel bored.

- A) Not at all true    B) Not very true    C) Sort of true    D) Very true

10. In class, I work as hard as I can.

- A) Not at all true   B) Not very true   C) Sort of true   D) Very true
11. When in class, I annoy my classmates.
- A) Not at all true   B) Not very true   C) Sort of true   D) Very true
12. When I'm in class, I feel bad.
- A) Not at all true   B) Not very true   C) Sort of true   D) Very true
13. When I'm working on my classwork, I feel mad.
- A) Not at all true   B) Not very true   C) Sort of true   D) Very true
14. When I'm in class, I listen very carefully.
- A) Not at all true   B) Not very true   C) Sort of true   D) Very true
15. When I'm in class, I feel worried.
- A) Not at all true   B) Not very true   C) Sort of true   D) Very true
16. When we start something new in class, I feel nervous.
- A) Not at all true   B) Not very true   C) Sort of true   D) Very true
17. When I'm in class, I disrupt the class work of others.
- A) Not at all true   B) Not very true   C) Sort of true   D) Very true
18. When we work on something in class, I get involved.
- A) Not at all true   B) Not very true   C) Sort of true   D) Very true
19. When I get stuck on a problem, it really bothers me.
- A) Not at all true   B) Not very true   C) Sort of true   D) Very true
20. When I'm in class, I think about other things.
- A) Not at all true   B) Not very true   C) Sort of true   D) Very true
21. When we work on something in class, I feel interested.

- A) Not at all true    B) Not very true    C) Sort of true    D) Very true
22. When I'm in class, I talk a lot with my classmates.
- A) Not at all true    B) Not very true    C) Sort of true    D) Very true
23. Class is not all that fun for me.
- A) Not at all true    B) Not very true    C) Sort of true    D) Very true
24. When I'm in class, I just act like I'm working.
- A) Not at all true    B) Not very true    C) Sort of true    D) Very true
25. When I'm in class, I feel good.
- A) Not at all true    B) Not very true    C) Sort of true    D) Very true
26. When I'm in class, I don't sit still and I get out of my seat.
- A) Not at all true    B) Not very true    C) Sort of true    D) Very true
27. When I'm in class, my mind wanders.
- A) Not at all true    B) Not very true    C) Sort of true    D) Very true
28. When I'm in class, I participate in class discussions.
- A) Not at all true    B) Not very true    C) Sort of true    D) Very true
29. When we work on something in class, I feel bored.
- A) Not at all true    B) Not very true    C) Sort of true    D) Very true
30. When my teacher first explains new material, I feel bored.
- A) Not at all true    B) Not very true    C) Sort of true    D) Very true
31. I pay attention in class.
- A) Not at all true    B) Not very true    C) Sort of true    D) Very true
32. When I get stuck on a problem, I feel worried.

A) Not at all true   B) Not very true   C) Sort of true   D) Very true

33. I don't try very hard at school.

A) Not at all true   B) Not very true   C) Sort of true   D) Very true

## Appendix B

Nombre: \_\_\_\_\_

### PARTICIPACIÓN EN EL APRENDIZAJE ACADÉMICO

**Gracias por tu participación en este estudio. Tus respuestas van a ayudar a maestros/as y educadores/as para que ellos comprendan como estudiantes participan en aprendizaje. Por favor contesta cada pregunta con honestidad, tus respuestas serán confidenciales.**

#### Parte I - Información Histórica

¿Cuál es tu sexo? (Escoge uno)    Masculino    Femenino

¿Cuál es tu edad? \_\_\_\_\_

¿En qué grado estás? (Escoge uno)    3<sup>rd</sup>    4<sup>th</sup>    5<sup>th</sup>    6<sup>th</sup>    7<sup>th</sup>

¿Cuál de las siguientes opciones describe mejor su etnicidad? (Marca una solamente)

\_\_\_\_\_ Indio Americano/Nativos Americanos

\_\_\_\_\_ Asiático o Asiático Americano, incluyendo Chino, Japonés y otros

\_\_\_\_\_ Negro o Africano Americano

\_\_\_\_\_ Hispano o Latino, incluyendo Mejicano Americano, Americano Central y otros

\_\_\_\_\_ Más de un grupo étnico; padres de dos grupos diferentes

\_\_\_\_\_ Blanco, Caucásico, Anglo, Americano Europea

\_\_\_\_\_ Otro, específica por favor:

## Parte II- PARTICIPACIÓN EN APRENDIZAJE

**Direcciones:** Estas preguntas se refieren a cómo te sientes en el salón de clase. Pon un círculo alrededor de la mejor respuesta para cada oración.

1. Yo alego con mi maestro/a en mí el salón de clase.

A) Nunca es cierto      B) No es tan cierto      C) Mas o menos cierto      D) Muy cierto

2. Yo pongo mi mejor esfuerzo para aprender en el salón de clase.

A) Nunca es cierto      B) No es tan cierto      C) Mas o menos cierto      D) Muy cierto

3. Cuando no puedo responder a una pregunta, me siento frustrado.

A) Nunca es cierto      B) No es tan cierto      C) Mas o menos cierto      D) Muy cierto

4. Yo disfruto al aprender nuevas cosas en el salón de clase.

A) Nunca es cierto      B) No es tan cierto      C) Mas o menos cierto      D) Muy cierto

5. Cuando trabajamos en algo en el salón de clase, me siento desanimado.

A) Nunca es cierto      B) No es tan cierto      C) Mas o menos cierto      D) Muy cierto

6. Me regañan porque no sigo las reglas de el salón de clase.

A) Nunca es cierto      B) No es tan cierto      C) Mas o menos cierto      D) Muy cierto

7. En el salón de clase, hago lo mínimo para pasar.

A) Nunca es cierto      B) No es tan cierto      C) Mas o menos cierto      D) Muy cierto

8. El salón de clase es divertida.

A) Nunca es cierto      B) No es tan cierto      C) Mas o menos cierto      D) Muy cierto

9. Cuando estoy haciendo trabajo en el salon de clase, me siento aburrido.

A) Nunca es cierto      B) No es tan cierto      C) Mas o menos cierto      D) Muy cierto

10. En el salón de clase, yo trabajo lo más duro que puedo.

- A) Nunca es cierto      B) No es tan cierto      C) Mas o menos cierto      D) Muy cierto
11. Cuando estoy en el salón de clase, yo molesto a los otros estudiantes.
- A) Nunca es cierto      B) No es tan cierto      C) Mas o menos cierto      D) Muy cierto
12. Cuando estoy en el salón de clase, me siento mal.
- A) Nunca es cierto      B) No es tan cierto      C) Mas o menos cierto      D) Muy cierto
13. Cuando estoy trabajando en mi trabajo en el salón de clase, me siento enojado.
- A) Nunca es cierto      B) No es tan cierto      C) Mas o menos cierto      D) Muy cierto
14. Cuando estoy en clase, escucho con mucha atención.
- A) Nunca es cierto      B) No es tan cierto      C) Mas o menos cierto      D) Muy cierto
15. Cuando estoy en el salón de clase, me siento preocupado/a.
- A) Nunca es cierto      B) No es tan cierto      C) Mas o menos cierto      D) Muy cierto
16. Cuando empezamos algo nuevo en el salon de clase, me siento nervioso.
- A) Nunca es cierto      B) No es tan cierto      C) Mas o menos cierto      D) Muy cierto
17. Cuando estoy en el salón de clase, yo interrumpo al los otros estudiantes que están trabajando.
- A) Nunca es cierto      B) No es tan cierto      C) Mas o menos cierto      D) Muy cierto
18. Cuando trabajamos en algo en el salón de clase, yo participo.
- A) Nunca es cierto      B) No es tan cierto      C) Mas o menos cierto      D) Muy cierto
19. Cuando me atoro en un problema, realmente me molesta.
- A) Nunca es cierto      B) No es tan cierto      C) Mas o menos cierto      D) Muy cierto
20. Cuando estoy en el salón de clase, pienso en otras cosas.
- A) Nunca es cierto      B) No es tan cierto      C) Mas o menos cierto      D) Muy cierto
21. Cuando trabajamos en algo en el salón de clase, siento que me interesa.

- A) Nunca es cierto      B) No es tan cierto      C) Mas o menos cierto      D) Muy cierto
22. Cuando estoy en el salón de clase, yo hablo mucho con otros estudiantes.
- A) Nunca es cierto      B) No es tan cierto      C) Mas o menos cierto      D) Muy cierto
23. El salón de clase no es divertida para mí.
- A) Nunca es cierto      B) No es tan cierto      C) Mas o menos cierto      D) Muy cierto
24. Cuando estoy en el salón de clase, pretendo que estoy trabajando.
- A) Nunca es cierto      B) No es tan cierto      C) Mas o menos cierto      D) Muy cierto
25. Cuando estoy en el salón de clase, me siento bien.
- A) Nunca es cierto      B) No es tan cierto      C) Mas o menos cierto      D) Muy cierto
26. Cuando estoy en el salon de clase, soy inquieto y no me quedo sentando.
- A) Nunca es cierto      B) No es tan cierto      C) Mas o menos cierto      D) Muy cierto
27. Cuando estoy en el salón de clase, se distrae mi mente.
- A) Nunca es cierto      B) No es tan cierto      C) Mas o menos cierto      D) Muy cierto
28. Cuando estoy en el salón de clase, yo participo en las discusiones de clase.
- A) Nunca es cierto      B) No es tan cierto      C) Mas o menos cierto      D) Muy cierto
29. Cuando trabajamos en algo en el salón de clase, me siento aburrido/a.
- A) Nunca es cierto      B) No es tan cierto      C) Mas o menos cierto      D) Muy cierto
30. Cuando mi maestro primero explica el material nuevo, me siento aburrido.
- A) Nunca es cierto      B) No es tan cierto      C) Mas o menos cierto      D) Muy cierto
31. Yo pongo atención en el salón de clase.
- A) Nunca es cierto      B) No es tan cierto      C) Mas o menos cierto      D) Muy ciert
32. Cuando me atoro en un problema, me siento preocupado.

A) Nunca es cierto      B) No es tan cierto      C) Mas o menos cierto      D) Muy ciert

33. No pongo mi mejor esfuerzo en el salón de clase.

A) Nunca es cierto      B) No es tan cierto      C) Mas o menos cierto      D) Muy cierto

## Appendix C

### REVIEWER CONSENT FORM

The purpose of this study is to have experts in student engagement research review survey items created to measure active behavioral disengagement in the classroom. Your participation in this study is on a volunteer only basis, and you may choose not to participate. Reviewers who decline to participate in this study will not be identified in any way for not participating.

You will be asked to rate if you believe items on the following page adequately measure active behavioral disengagement in the classroom setting. You are asked to do so by completing a short survey and providing additional comments about the items if needed. This survey should take no longer than 20 minutes to complete.

Each reviewer's responses and comments will remain confidential. The principal investigator, Karla Lloyd, will use all responses and recommendations that reviewers provide to modify survey items as needed. Reviewers' responses to the survey will not be shared with anyone outside of the research team, to include Karla Lloyd and faculty advisor Dr. Cecil Robinson. To further ensure confidentiality, all surveys will be secured on a password protected online database used for confidential completion, reporting, and storing of survey instruments.

There are no possible risks for participating in this study. Reviewers have the opportunity to learn about study results by emailing Karla Lloyd. Study results will be available at the end of the 2012-2013 school year.

#### Contact Information:

Contact Karla Lloyd or Dr. Cecil Robinson if you have any questions.  
Karla Lloyd: [klsnipes@crimson.ua.edu](mailto:klsnipes@crimson.ua.edu) , or [karla.snipes@gmail.com](mailto:karla.snipes@gmail.com); 334-467-3272  
Dr. Cecil Robinson: [crobinso@bamaed.ua.edu](mailto:crobinso@bamaed.ua.edu); 205-348-6801

If you have questions about your rights as a person taking part in a research study, wish to make suggestions, or wish to file complaints and concerns, you may call Ms. Tanta Myles, the Research Compliance Officer of the University at (205)-348-8461 or toll-free at 1-877-820-3066. You may also ask questions, make suggestions, or file complaints and concerns through the IRB Outreach Website at [http://osp.ua.edu/site/PRCO\\_Welcome.html](http://osp.ua.edu/site/PRCO_Welcome.html). You may email us at [participantoutreach@bama.ua.edu](mailto:participantoutreach@bama.ua.edu)

#### PARTICIPANT STATEMENT

I have read the form provided concerning the research study. I have had all my questions answered to my satisfaction.

\_\_\_\_\_  
Initial

\_\_\_\_\_  
Date

**Active Behavioral Disaffection:** Active non-compliance to established classroom rules, to include disruptive, oppositional, and uncooperative behaviors that interfere with the flow of instruction and student learning interactions in the classroom environment.

For each item below, please rate if you believe the item adequately measures active behavioral disaffection in the classroom. Also indicate if you would make any changes to the item by circling *No* or *Yes*. If *Yes*, please note what changes you would make. If you have any additional comments, please note them at the end of this document.

1. When I'm in class, I don't sit still and I get out of my seat.

Poor                  Fair                  Good                  Very Good                  Excellent

Changes Needed:                  No

Yes: \_\_\_\_\_  
\_\_\_\_\_

2. When I'm in class, I talk a lot with my classmates.

Poor                  Fair                  Good                  Very Good                  Excellent

Changes Needed:                  No

Yes: \_\_\_\_\_  
\_\_\_\_\_

3. When I'm in class, I disrupt the class work of others.

Poor                  Fair                  Good                  Very Good                  Excellent

Changes Needed:                  No

Yes: \_\_\_\_\_  
\_\_\_\_\_

4. When in class, I annoy my classmates.

Poor                  Fair                  Good                  Very Good                  Excellent

Changes Needed:                  No

Yes: \_\_\_\_\_

\_\_\_\_\_

5. I get in trouble for not following classroom rules.

Poor                  Fair                  Good                  Very Good                  Excellent

Changes Needed:                  No

Yes: \_\_\_\_\_

\_\_\_\_\_

6. I argue with my teacher in class.

Poor                  Fair                  Good                  Very Good                  Excellent

Changes Needed:                  No

Yes: \_\_\_\_\_

\_\_\_\_\_

ADDITIONAL COMMENTS:

\_\_\_\_\_

\_\_\_\_\_

## **Appendix D**

### **STUDENT ENGAGEMENT IN LEARNING**

#### **STUDENT PERMISSION FORM**

You are being asked to participate in research about student engagement in learning at the Parks and Recreation Community Center. You will participate by completing a 33 question survey on student engagement and attending an activity where you will learn about what motivates you in school. The purpose of this study is to find out different ways students engage in learning and how this helps them achieve in school.

#### **PARTICIPATION**

Children may choose not to participate in this study. No child will be identified or penalized in any way for not participating in this study. This study is on a volunteer only basis.

#### **PROCEDURES & TIME COMMITMENT**

Children are asked to complete a short survey on student engagement. Each question asks about how children learn in school. Children will be asked to identify their grade, age, gender, and ethnicity. This survey should take no longer than 20 minutes to complete.

#### **CONFIDENTIALITY**

Each child's response to the survey will remain confidential. Each child's name will be used to obtain their student identification number from their school district. The research team will use student identification numbers to look at student achievement information, to include GPA, school attendance, disciplinary records, and eligibility for free/reduced lunch.

Students' names and identification numbers will not be used to identify them. The researcher, Karla Lloyd, will use computer software to change all names and identification numbers to a random unidentifiable number. The names and identification numbers of students will not be reported in any reports describing the outcome of the study. The student's identification number, name, and responses to the surveys will not be shared with anyone outside of the research team.

The research team, Karla Lloyd and faculty advisor, Dr. Cecil Robinson, will not reveal responses to any teachers, faculty, and/or instructors employed by San Antonio Parks and Recreation, the school district of your child, or The University of Alabama. All responses on the surveys will be used to examine students' student engagement. To further ensure confidentiality, all responses to the surveys will be kept in a locked cabinet in the office of Karla Lloyd. No information collected during the study will be linked to other children participating in the study.

**RISKS AND BENEFITS**

There are no possible risks for participation in this study. Children may benefit from this study and learn more about students' student engagement in school. You will have the opportunity to learn about the results, which will be available at the end of the 2012-2013 school year. Children who return a completed survey and this signed permission form will be able to participate in an activity at the community center where they will learn about student engagement in school.

**CONTACT INFORMATION**

Contact Karla Lloyd or Dr. Cecil Robinson if you have any questions.

Mrs. Karla Lloyd: [klsnipes@crimson.ua.edu](mailto:klsnipes@crimson.ua.edu) , or [karla.snipes@gmail.com](mailto:karla.snipes@gmail.com); 334-467-3272

Dr. Cecil Robinson: [crobinso@bamaed.ua.edu](mailto:crobinso@bamaed.ua.edu); 205-348-6801

If you have questions about your rights as a person taking part in a research study, make suggestions or file complaints and concerns, you may call Ms. Tanta Myles, the Research Compliance Officer of the University at (205)-348-8461 or toll-free at 1-877-820-3066. You may also ask questions, make suggestions, or file complaints and concerns through the IRB Outreach Website at [http://osp.ua.edu/site/PRCO\\_Welcome.html](http://osp.ua.edu/site/PRCO_Welcome.html). You may email us at [participantoutreach@bama.ua.edu](mailto:participantoutreach@bama.ua.edu).

**PARTICIPANT STATEMENT**

The research study and this form have been explained to me by Karla Lloyd. I have had all my questions answered to my satisfaction. I, \_\_\_\_\_, **will** participate in this study by completing the academic engagement survey.

Student (Print Name)	Student Signature	Date

## **Appendix E**

### **PARTICIPACIÓN EN EL APRENDIZAJE DEL ESTUDIANTE ESTUDIANTE PERMISO**

Se le ha pedido que participe en la investigación sobre la participación del estudiante en el aprendizaje en los Parques y Recreación Centro Comunitario. Usted participará por completar una encuesta la pregunta 26 sobre la participación de académicos y asistir a una actividad donde usted aprenderá acerca de lo que motiva a la escuela. El propósito de este estudio es encontrar diferentes maneras en que estudiantes enfocan su aprendizaje y como sus maneras de aprender les ayudan tener éxito académico en la escuela.

#### **PARTICIPACIÓN**

Los niños mismos también pueden elegir no participar en este estudio. Ningún estudiante será identificado o no tendrán penalización alguna por no participar. Este estudio es voluntario.

#### **PROCEDIMIENTOS Y COMPROMISO DE TIEMPO**

Los niños deben completar una breve encuesta sobre la participación académica. Cada pregunta se refiere a cómo los niños aprenden en la escuela. A los niños se les pedirá que identifiquen su grado, su edad, su género y su etnia. Esta encuesta no debería tomar más de 20 minutos para ser completada.

#### **CONFIDENCIAL**

La respuesta de cada niño será confidencial. El nombre de su hijo o hija será usado para obtener su número de identificación de su distrito escolar. El equipo de investigación usará números de identificación de estudiantes para mirar información de desarrollo del estudiante, incluyendo su promedio de grados (GPA), asistencia a la escuela, documentados de disciplina, y elegibilidad para almuerzo gratis o reducido en la escuela (free or reduced lunch).

Nombres de estudiantes y números de identificación no serán usados para identificar a los estudiantes participantes en este estudio. El investigador, Karla Lloyd, va a usar software de computadora para convertir todos los nombres y números de identificación de los estudiantes participantes a números ficticios. Los nombres y números de identificación de los estudiantes no serán reportados en ningún documento describiendo los resultados del estudio. El número de identificación, nombre, y respuestas a las preguntas del estudio no serán compartidos con ninguna persona fuera del equipo del estudio.

El equipo de investigación, Karla Lloyd y su consejero de su universidad, Dr. Cecil Robinson, no revelarán respuestas a ningún maestro, maestra y/o instructor, o empleado del departamento de Parques y Recreación de San Antonio, el distrito escolar de su hijo, o de la Universidad de Alabama. Todas las repuestas de estas investigaciones serán usadas para examinar como los estudiantes aprenden. Para obtener más confidencialidad, todas las respuestas de la investigación quedaran guardadas en un gabinete cerrado con llave en la oficina de Karla Lloyd. Ninguna información recopilada durante este estudio será relacionada con niños participando en este estudio.

### **RIESGOS Y BENEFICIOS**

No hay posibilidad de ningún riesgo o peligro por participación en este estudio. Niños podrán beneficiarse por este estudio y podrán conocer más sobre participación en el aprendizaje en la escuela. Tendrán la oportunidad de conocer información sobre los resultados del estudio, los cuales estarán disponibles al fin del año escolar de 2012-13. Los niños que regresan una encuesta completa y esta forma de permiso firmada podrán participar en una actividad en el centro comunitario donde aprenderán acerca de la participación académica en la escuela.

### **INFORMACIÓN DE CONTACTO**

Si tienen preguntas se puede poner en contacto con Karla Lloyd o Dr. Cecil Robinson.

Sra. Karla Lloyd: [klsnipes@crimson.ua.edu](mailto:klsnipes@crimson.ua.edu), or [karla.snipes@gmail.com](mailto:karla.snipes@gmail.com); 334-467-3272

Dr. Cecil Robinson: [crobinso@bamaed.ua.edu](mailto:crobinso@bamaed.ua.edu); 205-348-6801

Si tienen preguntas sobre sus derechos por participar en este estudio, para dar sugerencias o quejas, pueden llamar a Ms. Tanta Myles de la Oficial de Consentimiento de Estudios de Investigación en la Universidad al (205) 348-8461 o al número sin costo 1-877-820-3066. También se puede hacer preguntas, hacer sugerencias, o presentar quejas y expresar dudas en el sitio web IRB Outreach Website en [http://osp.ua.edu/site/PRCO\\_Welcome.html](http://osp.ua.edu/site/PRCO_Welcome.html). Se puede mandar correos electrónica a [participantoutreach@bama.ua.edu](mailto:participantoutreach@bama.ua.edu).

### **DECLARACIÓN DE PARTICIPANTE**

El estudio de investigación y de esta forma han explicado a mí por Karla Lloyd. Todas mis preguntas han recibido respuestas a mi satisfacción. Yo, \_\_\_\_\_, va a participar en este estudio completando el cuestionario sobre como participa en aprendizaje de academia para esta investigación.

\_\_\_\_\_  
Estudiante (Nombre letrado)

\_\_\_\_\_  
Firma de estudiante

\_\_\_\_\_  
Fecha

## Appendix F

August 8, 2013

Office for Research  
Institutional Review Board for the  
Protection of Human Subjects

Karla Lloyd  
ESPRMC  
College of Education  
The University of Alabama



Re: IRB # 12-OR-312-R1 "Academic Engagement: Reexamining Behavioral Disaffection within the Self-System Model of Motivational Development"

Dear Ms. Lloyd:

The University of Alabama Institutional Review Board has granted approval for your renewal application.

Your renewal application has been given expedited approval according to 45 CFR part 46. Approval has been given under expedited review category 7 as outlined below:

*(7) Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.*

Your application will expire on August 7, 2014. If your research will continue beyond this date, complete the relevant portions of the IRB Renewal Application. If you wish to modify the application, complete the Modification of an Approved Protocol Form. Changes in this study cannot be initiated without IRB approval, except when necessary to eliminate apparent immediate hazards to participants. When the study closes, complete the appropriate portions of the IRB Study Closure Form.

Should you need to submit any further correspondence regarding this proposal, please include the above application number.

Good luck with your research.

Sincerely,



558 Rose Administration Building  
Box 870177  
Tuscaloosa, Alabama 35487-0177  
(205) 348-3461  
fax (205) 348-7139  
url: <http://irb.ua.edu>

Carpantato T. Myles, MSM, CIM  
Director & Research Compliance Officer  
Office for Research Compliance  
The University of Alabama



**San Antonio Independent School District**  
141 Lavaca Street • San Antonio, Texas 78210  
Telephone (210) 554-8480 • Fax (210) 299-5600

*Human Resources Department*

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**DR. SYLVESTER PEREZ**  
Interim Superintendent

August 29, 2012

The University of Alabama  
Office for Research Compliance  
Attn: Jeanelle Graham, MPH, CHES  
358 Rose Administration Building  
801 University Boulevard  
Box 876127  
Tuscaloosa, AL 35487

**Re: Karla Lloyd Open Records Request**

Dear Ms. Graham:

I have been working with Ms. Lloyd on an Open Records Request where she has requested the following information:

- Public student directory information
- Student demographics data
- Procedures explaining the rules and process for releasing information.

The above information has been released to Ms. Lloyd and if our department can be of any assistance in the future please do not hesitate to contact our office. Let me know if you have any questions or concerns.

Best regards,

**John Norman**  
Policies, Procedures and Public Information  
Office: (210) 554-8480  
Fax: (210) 299-5588  
E-mail: [jnorman1@saisd.net](mailto:jnorman1@saisd.net)

## Appendix G

Table 3

*Internal Consistency Reliabilities, Means, and Standard Deviations of EvsD – Student Report*

<i>Construct</i>	<i>Skinner, et al., 2009</i>					
	<i>Fall (October)</i>			<i>Spring (May)</i>		
	<i>α</i>	<i>M</i>	<i>SD</i>	<i>α</i>	<i>M</i>	<i>SD</i>
Behavioral Engagement	.61	3.39	.54	.72	3.34	.58
Behavioral Disaffection (Passive)	.71	1.84	.69	.78	1.85	.71
Emotional Engagement	.76	3.12	.58	.82	3.03	.62
Emotional Disaffection	.83	1.88	.61	.85	1.86	.60
Engagement vs. Disaffection	.88	3.20	.47	.92	3.16	.51

## Appendix H

Table 3.2  
Reliabilities, Means, and Standard Deviations of Piloted EvsD (N = 18)

<i>Construct</i>	<i>Pilot</i>		
	<i>α</i>	<i>M</i>	<i>SD</i>
Behavioral Engagement	.68	3.39	.54
Behavioral Disaffection (Passive)	.63	2.72	.70
Behavioral Disaffection (Active)	.74	2.88	.75
Behavioral Disaffection (Passive & Active)	.81	2.81	.65
Emotional Engagement	.71	3.10	.68
Emotional Disaffection	.79	2.66	.59
Emotional Disaffection (Worry)	.65	2.75	.83
Emotional Disaffection (Frustration)	.52	2.12	.53
Emotional Disaffection (Boredom)	.78	2.48	.94
Engagement vs. Disaffection	.90	2.89	.50