AN INVESTIGATION INTO SOME PREDICTING FACTORS OF SCHOOL CONNECTEDNESS AMONG PUBLIC SECONDARY SCHOOL STUDENTS IN IBADAN, OYO STATE, NIGERIA

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Abstract

The purpose of this study was to investigate the influence of some predicting factors (that is school climate, academic self-efficacy and peer bullying/victimization) on the school connectedness among public secondary school students in Ibadan, Oyo State, Nigeria. Two hundred and ninety six students were randomly selected. The independent and dependent variables were measured with relevant standardized instruments. The instruments used were school climate scale, academic self-efficacy scale and multidimensional peer victimization scale. Three research questions were answered in the study. The data obtained were analyzed using multiple regression statistical method. There was significant relationship between the three independent variables (school climate, academic self-efficacy and peer bullying/victimization) on the student connectedness. Also, the independent variables significantly contributed to the prediction of school connectedness among the participants. On the strength of these findings, the need to enhance the school climate, fostering academic self-efficacy training and unrelenting campaign against bullying/victimization were stressed and advocated.

Key words: School Connectedness, School Climate, Academic Self Efficacy, Bullying/Victimization

Introduction

Adolescents spend more time in school than in any other environment. This is because schooling is a period of laying solid foundation for their future endeavours. While many of them might not necessarily use their certificates to secure white-collar jobs, the learning process serves as a means of integrating them into society and making them effective citizens.

Research suggests that feeling connected to one’s school during adolescence promotes concurrent and long-term positive youth development (Resnick, Bearman, Blum, Bauman, Harris & Jones, 1997). The construct of the psychological sense of school membership or school connectedness was first investigated as a critical factor in school retention or dropout (Wehlage, Rutter, Smith, Lesko, & Fernandez, 1989). The construct is also referred to as school engagement, school bonding, and school attachment, which have both similarities and differences (Libbey, 2004). This construct is particularly important for adolescents as they rely less on the family as part of the individuation process and come to rely more on extra familial, relationships such as those found in schools, with friends, and others (Goodenow, 1993).

School connectedness has been found to correlate strongly and positively with students’ academic motivation and with indexes of school performance and adjustment (Hagborg, 1994; Haynes, Emmons & Ben-Avie, 1997; Anderman & Freeman, 2004). Osterman’s (2000) discussion of belonging in schools identifies links between students’ sense of belonging, self-esteem, internal regulation, attitudes toward school, motivation, and achievement. School connectedness has also been found to be connected with variables that are associated with adolescent academic and emotional well-being. Israelashvili (1997) notes that sense of school membership positively predicts expectation of future success. Students’ perception of being accepted and respected by their peers and by school staff are important determinants of their expectations of the future.

Adolescents in public secondary schools in Nigeria are disconnected from their schools. This disconnectedness could be seen in various dimensions of their activities and behaviours. These, among others, include lateness to school, lack of motivation and commitment to their studies, loitering about during the school hour, examination malpractices, poor academic performance, and failure in doing their home works/class assignments. The consequences of these are enormous and dangerous to the development of an individual and society at large. When students are disconnected from their schools, inappropriate and dangerous behaviour is inevitable and this puts them at risk for maladaptive development, like thuggery, examination malpractices, school violence, school dropout, sexual harassment, smoking and other vices. Consequently, there is strong need for preventive interventions...
that increase levels of school connectedness in public secondary school to promote long-term positive development, which includes academic exploit and career success.

Abbott, O'Donnell, Hawkin, Hill, Kostermann, & Catalano (1998), among other researchers, found that the most powerful predictors of school connectedness are related to school climate. This study, therefore, was to examine the influence of school climate, academic self-efficacy and peer bullying/victimization on school connectedness among secondary school students in public schools in Ibadan, Oyo state, Nigeria

Review of related literature

According to Klem & Connell (2004), there is a strong association between the level of school climate and the level of connectedness and academic achievement. Connectedness is enhanced by a healthy and safe school environment and a supportive psychosocial climate. A clean and pleasant physical environment raises expectations for safety and sets the stage for positive and respectful relationships. The psychosocial climate at school is influenced by such factors as policies related to discipline, opportunities for meaningful student participation, and teachers’ classroom management practices. Research indicates that, in schools with a harsh and punitive discipline climate, student connectedness is lower. (Blum, McNeely & Rinehart (2002). Blum, et al. (2002) also discovered that schools with a higher average sense-of-community score (that is composite of students’ perception of caring and supportive interpersonal relationships and their ability to be autonomous) had significantly lower average student drug use and delinquency.

Teachers who promote mutual respect in the classroom foster a sense of safety and connectedness by reducing the threat of being embarrassed or teased. School activity involvement has been demonstrated to have positive effects for adolescent well-being (Eccles & Barber, 1999). In a study of the effect of participation in school activities upon adolescent well-being, Eccles et al. (1999) examined the potential benefits of participation, including better Grade Point Average lower rates of school absenteeism which is an aspect of school connectedness, and lowering of potential risks, including delinquent behaviour. Evidence was found to indicate that participation in school activities was a protective factor in relation to academic performance and involvement in risk behaviours, and effects were maintained even after controlling for social class, gender and academic ability (Eccles et al., 1999). McNeely et al. (2002) also investigated the relationship between student participation and school connectedness, with results to indicate that those who participated in school activities experienced higher overall school connectedness. It is evident that school climate could be a strong predictor of school connectedness among public secondary school students; hence, the need to investigate school connectedness.

Academic self efficacy

The construct of self-efficacy has become a major element of educational research, particularly with regard to its influence on many domains of adolescent development and success (Urdan & Midgley, 2003; Schunk & Meeece, 2005; Usher & Pajares, 2008). The concept is defined as the belief in one’s ability to organize and execute courses of action that are necessary to accomplish a particular task (Bandura, 1977; 1986). Self-efficacy differs from other self-beliefs, such as self-concept or self-esteem, as it pertains to a subjective perception of one’s capabilities rather than actual skills to attain a goal. Simply knowing what it takes to meet a specific goal and possessing the necessary skills to succeed are not enough. One may still not get very far if one lacks belief in one’s ability to carry out a course of action. Furthermore, individuals’ self-efficacy beliefs can vary widely based on specific domains of functioning (Bandura, 1986). For example, a student may have high self-efficacy for writing a term paper and at the same time, have low self-efficacy for communicating the same information in a public presentation.

In the context of school, academic self-efficacy is the belief in one’s ability to manage one’s own educational experiences through academic mastery and self-regulated learning strategies (Bandura et al., 2001). Academic self-efficacy has been identified as an important predictor of many indices of school functioning, including academic achievement, aspirations for example (e.g. Pajares, 2008; Schunk, 2001; Zimmerman, Bandura, & Martinez-Pons, 1992), and school retention (Caprara et al., 2008). Students with higher academic self-efficacy have been shown to work harder (Bandura et al., 2001), demonstrate more persistence with challenging tasks (Pajares, 2008), and develop better goal-setting and time-monitoring strategies than other students (Zimmerman, 2000). Adolescents with a strong
sense of efficacy for learning are also more resilient to setbacks and are better able to resist the adverse influences of low-achieving peers than are those with a weak sense of efficacy (Bandura et al., 1999). Maintenance of high academic self-efficacy can also have positive influence on youth career trajectories and continuing academic performance throughout college (Bandura, 1997; Bandura et al., 2001). While the role of academic self-efficacy may seem most relevant to the scope of educational outcomes, researchers have found this factor to be significantly related to social-emotional health as well. Students with a strong belief in their capacity to manage their educational experiences may engage in coping strategies that decrease their level of distress (Bandura et al., 1996) and increase their pro-social behaviour (Bandura, Caprara, Barbaranelli, Gerbino, & Pastorelli, 2003).

Self-efficacy is grounded in a larger theoretical framework of Social Cognitive Theory, suggesting that human functioning is a result of interactions among individual cognition, emotions, behaviours, and environmental conditions (Bandura, 1977; 1986). Bandura (1977; 1986) hypothesizes that self-efficacy beliefs are created and developed as students interpret information from four sources: mastery experience, vicarious experience, social persuasions, and somatic or emotional states. In the process of mastery experience, adolescents engage in activities, interpret the results of their actions, and then use these interpretations to develop beliefs about their ability to engage in subsequent activities (for example, successfully completing a chemistry problem). In addition to interpreting the results of their actions, adolescents form their self-efficacy beliefs through the vicarious experience of observing others perform.

Evidence from the literature based on school connectedness and academic self-efficacy has revealed that these protective constructs are independently and positively related to numerous indices of healthy adjustment, including academic performance, school retention, and reduced depressive symptoms (Roeser et al., 1996). Furthermore, research and theory have revealed that these constructs are cultivated by similar conditions and social sources of information from the school environment (Karcher, 2003; 2004; Schunk & Meece, 2005; Whitlock, 2006; Usher & Pajares, 2008). Such findings would suggest that school connectedness and academic self-efficacy are significantly linked to adolescent development. However, few studies have actually examined the nature of the relationship between these self-mechanisms of motivation (for example, Roeser et al., 1996; Cunningham et al., 2004; Vieno, Santinello, Pastore, & Perkins, 2007 Uwah et al.2008 ). Some researchers have proposed that relationships between components of school connectedness and academic self-efficacy may be reciprocal ( Uwah et al., 2008). As students’ sense of connectedness and engagement with school increase, they may participate in activities and observations that build their efficacy for managing their own learning and academic performance. Likewise, as students feel more efficacious and successful in accomplishing their goals, school connectedness has a great tendency to be increased.

Roeser and colleagues (Roeser, et al., 1996) tested a mediational model examining the relationship between teacher–student relationships, belonging in school, academic self-beliefs, and academic achievement in early adolescence. Their findings revealed that sense of belonging mediated the association between teacher and student relationships and academic self-efficacy, which, in turn, predicted student performance.

McMahon, Parnes, Keys, & Viola (2008) found support for a model demonstrating the impact of school conditions (social risk and protective factors) on school belonging as well as on the central role of belonging in explaining how school conditions can affect both academic self-efficacy and feelings of depression.

Lastly, Eccles & Roeser (2011) was of the opinion that protective school contextual factors (including teacher support, clear rules, and opportunities for involvement) had a significant and positive impact on the mediator variables of academic self-efficacy and school connectedness. This finding suggests that students with more positive perceptions of the school environment may experience a greater sense of connection to school than others with less perception and also participate in experiences that enhance belief in their own ability to manage their learning process (Ryan & Patrick, 2001; Whitlock, 2006; Usher & Pajares, 2008).

**Peer Bullying and Victimization**

School bullying and peer victimization are major social problems affecting children and adolescents in all parts of the world. The serious consequences of bullying and peer victimization have generated considerable amount of attention from the media and the public, as well as educators, school
officials, researchers, practitioners, and law-makers in recent years (Phillips, 2007). Concerns over ‘bullycide’ (that is, suicide attributed to peer victimization) and school violence have led to an examination of risk factors associated with bullying and its impact on student (Smokowski & Kopasz 2005). Previous studies have investigated the association between bullying behaviour and individual characteristics (like, age, gender, and psychosocial problems), as well as direct relations (for example, family and peer) and the school environment (Espelage & Horne, 2008).

Bullying has detrimental effects on victims’ well-being. First, the association between school bullying and victims’ physical/psychological well-being and academic maladjustment is well documented. (Egan & Perry, 1998; Troop-Gordon & Ladd, 2005). For example, victims of school bullying are more likely to suffer psychological maladjustment, including sadness, depression, loneliness, and low self-esteem. (Egan et al., 1998; Graham, Bellmore, & Juvonen, 2003; and Troop-Gordon et al; 2005 ). In addition, a significant association is found between peer victimization and extreme emotional responses such as suicidal ideation and suicide attempts. (Hawker & Boulton, 2000; Troop-Gordon, et al.; 2005 ).

Lastly, research has shown that, as students’ experiences of overt or covert victimization increase, their sense of connection to school declines (Skues et al., 2005) while risk outcomes pertaining to socio-emotional well-being increase (Nishina & Juvonen, 2005; Graham & Bellmore, 2007; Fleming & Jacobsen, 2009; The focus of this paper was to examine the influence of school climate, academic self-efficacy and peer bullying/victimization on school connectedness among secondary school students in public schools in Ibadan, Oyo state, Nigeria.

Research Questions

The research is anchored to the following questions:

What is the relationship between the independent variables (school climate, academic self-efficacy and peer bullying/victimization) and school connectedness among public secondary school students in Ibadan, Oyo State, Nigeria?

What is the joint contribution of the independent variables (school climate, academic self-efficacy and peer bullying/victimization) to school connectedness among public secondary school students in Ibadan, Oyo state, Nigeria?

What is the relative contribution of each of the independent variables (school climate, academic self-efficacy and peer bullying/victimization) to school connectedness among public secondary school students in Ibadan, Oyo state, Nigeria?

Methodology

Research design

The descriptive survey research design was adopted for the study. The researcher was interested in knowing the influence of the independent variables (school climate, academic self-efficacy and peer bullying/victimization) on the dependent variable (school connectedness)

Purpose of the Study

In this review so far, efforts have been made to examine works done on school climate, academic self-efficacy and peer bullying/victimization and how these could impact on school connectedness. The primary purpose of this study, therefore, was to investigate the significant impact of these three predicting variables on school connectedness among public secondary school students in Ibadan, Oyo State, Nigeria.

Participants

A total of two hundred and ninety six public secondary school students ( Males =185, (62.5%) Females = 111, (37.5%)) were randomly selected from ten public secondary schools in Ibadan, Oyo State Nigeria. The age of the respondents ranged between 11 and 21 years, with a mean age of 15.4 and SD of 3.7
Instrumentation

Academic self-efficacy was measured using the Generalized Self-Efficacy Scale. The Generalized Self-Efficacy Scale by Schwarzer & Jerusalem (1995) was adapted for use in this study. The scale comprised 10 items. The 10 items were scored as follows: 1 = Not at all true, 2 = Hardly true, 3 = Moderately true, 4 = Exactly true. The points scored on all items were summed up to give participant’s score on the scale. The items were coded because there were both negative and positive statements which should be reversed. Scores on the scale ranged between 10 and 40. The test-retest reliability coefficient was 0.77.

In order to examine the school climate, teacher support, peer support, student autonomy and clarity and consistency in school rules were examined. These four dimensions were assessed through subscales of the Perceived School Climate Scale (1993) developed by the Center for Prevention Research and Development (CPRD) (Felner et al., 1997). The questionnaire was based on the classroom Environment Scale (Trickett and Moos 1973), a widely used and well-validated measure. Changes to the Classroom Environment Scale involved rewording items to eliminate double negatives and providing more familiar language for colloquial terms. The Perceived School Climate Scale has been found to be a valid and reliable measure of school climate (Brand et al. 1994, 2003). The internal consistency of the scale was re-established by this study and it returned a Cronbach coefficient alpha of 0.78.

Peer bullying/Victimization Scale. The adapted version of the Multidimensional Peer Victimization Scale was used to collect data for this study. This scale consisted of the items designed to elicit information on the experiences they had of being hurt by their mates or friends in school. Multidimensional Peer Victimization Scale (MPVS) was developed and validated by Mynard & Joseph (2000). The items in the original MPVS were intended to find out the extent to which students were victimized by their peers. The original 16 items by the authors were adapted and validated. The items covered four aspects of peer victimization, namely, physical victimization, verbal victimization, social manipulation and attack on property. The instrument was administered to all the students. The students were required to indicate how often they were victimized over a range of 0-2, (0= Not at all, 1= Once, 2= More than once). The items were found to possess satisfactory internal reliability with values of 0.85, 0.78, 0.77 and 0.73 for physical, verbal, social victimization and attack on property subscales, respectively Mynard & Joseph (2000). Scores of each of the respondents on the total scale have a possible range of 0-40 and possible range of 0-10 on each of the four subscales. Scores between 0-18 indicate a low level of victimization; 19-26 indicate moderate level of victimization, while scores between 27-40 show a high level of victimization

Procedure

Copies of the questionnaires were administered to participants in their schools following the approval of the school authorities. The administration of the instruments took three weeks.

Data Analysis

Data were analysed using Pearson Product Moment Correlation (PPMC) and multiple regression to examine the predictive effects of school climate, academic self-efficacy and peer bullying/victimization and how these could impact on school connectedness. All analyses were determined at a significant level of 0.05.

Results

Table 1. Table showing the Mean, Standard Deviation and Correlation among the variables.

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>N</th>
<th>School Connectedness</th>
<th>School Climate</th>
<th>Academic Self-Efficacy</th>
<th>Peer Bullying /Victimization</th>
</tr>
</thead>
<tbody>
<tr>
<td>School Connectedness</td>
<td>92.69</td>
<td>16.06</td>
<td>296</td>
<td>1.00</td>
<td>.173</td>
<td>.368</td>
<td>.607</td>
</tr>
<tr>
<td>School Climate</td>
<td>50.85</td>
<td>5.93</td>
<td>296</td>
<td>.173</td>
<td>1.00</td>
<td>.029</td>
<td>.303</td>
</tr>
<tr>
<td>Academic Self-Efficacy</td>
<td>28.83</td>
<td>5.81</td>
<td>296</td>
<td>.368</td>
<td>.029</td>
<td>1.000</td>
<td>.347</td>
</tr>
<tr>
<td>Peer Bullying /Victimization</td>
<td>65.13</td>
<td>9.68</td>
<td>296</td>
<td>.607</td>
<td>.303</td>
<td>.347</td>
<td>1.000</td>
</tr>
</tbody>
</table>


Table 2. Joint contribution of the independent variables to academic achievement of the students

<table>
<thead>
<tr>
<th>R</th>
<th>Multiple R</th>
<th>Multiple R² adjusted</th>
<th>Standard Error Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>.630</td>
<td>.397</td>
<td>.391</td>
<td>12.5379</td>
</tr>
</tbody>
</table>

Analysis of variance

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of square</th>
<th>DF</th>
<th>Mean square</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>2913.112</td>
<td>3</td>
<td>9937.704</td>
<td>63.218</td>
<td>.000</td>
</tr>
<tr>
<td>Residual</td>
<td>45273.148</td>
<td>292</td>
<td>157.198</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>75086.260</td>
<td>295</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3. Relative contribution of the independent variables to academic achievement of the students

<table>
<thead>
<tr>
<th>Variables</th>
<th>Unstandardised Coefficients B</th>
<th>Std. Error</th>
<th>Standardised Coefficients (beta)</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>19.176</td>
<td>7.524</td>
<td>2.549</td>
<td>.011</td>
<td></td>
</tr>
<tr>
<td>School climate</td>
<td>.644</td>
<td>.130</td>
<td>.003</td>
<td>4.341</td>
<td>.002</td>
</tr>
<tr>
<td>Academic self-efficacy</td>
<td>.496</td>
<td>.135</td>
<td>.179</td>
<td>3.658</td>
<td>.000</td>
</tr>
<tr>
<td>Peer bullying/victimization</td>
<td>.903</td>
<td>.85</td>
<td>.544</td>
<td>10.598</td>
<td>.000</td>
</tr>
</tbody>
</table>

Table 3 shows for each independent variable, the unstandardised regression weight (β), the standard error of estimate (SEβ), the standardized coefficient, the t-ratio and level at which the T-ratio is significant. Peer bullying made the highest contribution to the criterion variable. (β = .544, t = 10.598, P<.05). This was followed by academic self-efficacy (β = .179, t = 3.66, P<.05) and school climate (β = .003, t = .065, P< .05). The contribution of peer bullying/victimization to the prediction of the school connectedness was not a surprise. This is because consequences of bullying and peer victimization are detrimental to students well-being, which, if not checked, could lead to academic disengagement, which leads to school disconnectedness. This assertion was corroborated by Egan & Perry (1998) and Nansel, et al. (2001). This is because students’ sense of connectedness and engagement could increase if they possess high academic self-efficacy. As students feel more efficacious and successful in accomplishing their goals, school connectedness has a great tendency to be increased.

Again, self-efficacy beliefs determine an individual’s resiliency to adversity and vulnerability to stress and depression Bandura, et al. (2003).This could translate to the fact, that when students experience higher academic self-efficacy, to be strongly connected to school would not be a problem; otherwise, disconnection from school is inevitable.

The finding that school climate also predicted school connectedness was in agreement with Abbott et al.(1998) and Klem & Connell (2004). A warm, loving, caring, positive and welcoming school climate is a prerequisite to student connectedness; in a harsh and punitive climate, student connectedness is lower. It can then be deduced that school climate is a sine qua non to school connectedness.

Implication and Recommendations

The study has shown that there is a positive relationship between academic self-efficacy, peer bullying and victimization and school connectedness among public secondary school students in Ibadan, Oyo State, Nigeria. Akin to this is the fact that the independent variables examined in this study have proven, beyond reasonable doubts to be determinants of school connectedness among public secondary school students in Ibadan, Oyo state. In view of this, it is hereby recommended that school supports, like caring and loving attitude, that address the cognitive, social and emotional needs of the students school be encouraged within the school setting. Also, morale and academic self-efficacy of the students should be worked upon by all stakeholders in the school setting. This is because students with self-confidence in their abilities tend to persist and make extra effort even when faced with difficult challenges unlike the low self-efficacy individuals who give up more easily even when they possess the required skills or knowledge which would lead to being disconnected from the school. Peer bullying/victimization should be discouraged among students in order to forestall its negative effects.
on academic, emotional, social development and psychological well-being of the students. Unrelenting campaign against bullying/victimization should be the concern of school administrators, school counselors, social workers and other stakeholders in the school setting. Perpetrators of bullying/victimization school also be disciplined according to the laid-down principles.

Limitations and future directions

The study is not without its limitations. Firstly, the study is only limited to three factors namely, school climate, academic self-efficacy and peer bullying/victimization. Other factors that were not included in this study could be considered. Another limitation is the fact that the study was carried out among public school students. Considering private school students could lead to better results.

References


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