COGNITIVE BEHAVIOURAL THERAPY AND 
MENTORED SELF-HELP INTERVENTIONS IN 
FOSTERING SCHOOL CONNECTEDNESS 
AMONG ACADEMICALLY AT-RISK SCHOOL 
ADOLESCENTS IN EKITI STATE

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Abstract
This study seeks to employ the psychological interventions of Cognitive Behavioural Therapy and Mentored Self-help Interventions in fostering self-esteem and school connectedness in a cohort of academically at-risk school adolescents in Ekiti State.

Based on the findings of the study, it was recommended that schools can build a sense of connectedness among students. This is done by providing a caring and supportive environment, increasing interactions with positive adults, establishing high expectations, and creating multiple opportunities for youth engagement at home, in schools, and in the community. Also, counselling and psychological intervention programmes should be put in place to help guide academically-at-risk -school students to rediscover their potentials, abilities, and capabilities.

A pre-test and post-test control group quasi experimental design with 3x2x2 factorial matrix was adopted for the study. The experimental design and control groups constituted the columns, while the rows comprises of participants, gender, and positive and negative school experiences. The groups were randomly assigned for treatment conditions based on their second terminal academic examination performance of below 50% in three core subject. These subjects are English, Mathematics, and Biology. Furthermore, youth screening survey questionnaire was administered to determine the selection of the participants. The therapies were conducted for eight sessions for one and half hour each. School Connection Scale (Brown and Evans, 2002; Hirsch, 1969; Brown, Leigh, & Barton, 2000) and Psychological Sense of School Membership (PSSM, Goodenow, 1993) were used to obtain data from ninety (90) participants (M=45; F=45) with age
range of 13-19 and mean age of 15 years. Analysis of Covariance and t-test for independent samples were used for data analysis.

The findings revealed that the two therapies were effective in fostering school connectedness of the participants (F (2/77) = 5.13, P<.05) treated than the control group. Cognitive Behaviour Therapy was found to have superior treatment effect over Mentored Self-Help in fostering school connectedness (F (1/46) = 5.32, P<.05). It was recommended that schools can build a sense of connectedness among students by providing a caring and supportive environment, increasing interactions with positive adults, establishing high expectations, and creating multiple opportunities for youth engagement at home, in schools, and in the community.

**Keywords:** Academically at-risk students, Cognitive behavioural therapy, Mentored self-Help, School connectedness

**Introduction and Background**

The alarming increase of academically at-risk students in Nigerian schools is creating new challenges for our educational sector this decade. Academically, these students have failed generally. As such, they cannot contribute to the economic and social development of our society. Most of them may be involved in crime, alcohol, or drugs. However, these students need assistance in getting their lives together to face the daily rigors of attending a modern secondary school. It is well documented that students with poor school connectedness have a more negative life outcomes. Also, they show higher rates of delinquency, substance use, and school dropout. This study seeks to employ the psychological interventions of Cognitive Behavioural Therapy and Mentored Self-help Interventions in fostering self-esteem and school connectedness in a cohort of academically at-risk school adolescents. It was anticipated that the intervention would improve these adolescents’ low self-esteem and school connectedness which are indicators of their academically at-risk status in the secondary schools. The procedure of this study is to identify those academically at-risk because they are performing poorly in their academic work. However, they will be placed under the two treatment categories. Adolescence is a period of rapid and transformative physical, psychological, socio-cultural, and cognitive development. The physical changes of puberty — including growth and maturation of multiple organ systems such as the reproductive organs and brain —lay a biological foundation for the other developmental changes. The adolescent brain is rewired. However, this results in maturation of cognitive abilities in early adolescence. When these new cognitive abilities are combined with life experiences, we often observe development of social judgment, including judgment about risk and safety. The term ‘at-risk’ has
been widely discussed and debated in the latter 20th century by the media, educators, social workers, legislators, economists, sociologists, and other related professionals (Dryfoos, 1990; Lerner, 1999; McWhirter, 1998). It is difficult to specify what constitutes risk. Consequently, it is also difficult to know and predict exactly which youths will engage in risky, problematic behaviour. Scholars have identified several factors as predictors of “at-risk” youth in today’s society. These factors include family relations, neighbourhood characteristics, demographic positioning, school related influences, and peers (Brooks-Gunn, Jeanne, Duncan, Pamela Klebanov and Sealand, 1993; Dryfoos, 1990; Lerner, 1999; McWhirter, 1998).

For the purpose of this research, the term ‘at risk’ is used to denote a set of presumed cause-and-effect dynamics that places the child or adolescent in danger of negative future events. One of the difficulties in trying to understand at-risk problems is the fragmentation of knowledge about them. School dropout, delinquency and crime, youth violence and cultism, and other major problem behaviours of children and adolescents are often looked at as separate entities. In the real world, they interact and cluster together (Jessor, 1993). However, just as the problems cluster, so do the young people who have these problems. They tend to live in the same neighbourhoods and communities.

Taking cognisance of the diverse nature of adolescent vulnerabilities, risk status, and the dynamics of the relationship between them outlined above, this study will focus on academically at-risk adolescents. Hence, in the context of this study, it is considered as a very important aspect which can be amenable to psychological intervention as contemporary behavioural research has shown.

Cognitive Behavioural Therapy (CBT) is a form of psychotherapy that has had applicability to at-risk youth. It is generally used in the treatment of adults, children, and adolescents with diverse form of psychopathology. Cognitive therapy seeks to help the client overcome difficulties by identifying and changing dysfunctional thinking, behaviour, and emotional responses. This involves clients developing modifying beliefs, identifying and changing dysfunctional thinking, relating to others in different ways, and changing behaviours (Beck, Wright, Newman, Liese, 2001). CBT is a form of psychotherapy that emphasizes the important role of thinking, how we feel, and what we do. The theories of cognitive therapy suggest that negative or unhelpful thoughts & beliefs are a significant factor in the development or exacerbation of depression, anxiety, anger, low self-esteem, self-defeating behaviours, and difficulty with coping. Therefore, being able to identify and challenge these beliefs can assist a person to reduce distress and enhance their ability to cope in everyday life situations.
Another strategy currently employed by behavioural scientists is the Mentored Self-Help. Mentoring is a one-to-one relationship over a prolonged period of time between a youth and an older person who provides consistent support and guidance. The goal of mentoring is to help the mentees gain the skills and confidence to be responsible for their own future, with an increasing emphasis on academic and occupational skills. Mentoring is an act of community-building. It requires believing in and caring about young people—their future and ours. Mentors have always been recognized as some of the most important influences on a young person’s life. The mentor relationship has always been a valuable one which allows a young person to experience new ideas, see a way of living outside his immediate reality, and define him or herself in the context of that relationship. In Western thought, the term mentor has become synonymous with anyone who is a wise teacher, guide, and friend.

However, the word mentor is now widely understood and the formal practice of mentoring was widely acknowledged. Nevertheless, only two decades ago, the community at large was not aware of the term mentoring or how it could be applied to youth development. This realization can be understood in the context of societal growth and change. First, changes in the family structure and community definition in our society have left today’s youth with limited access to adults. Extended families no longer form a core of adult relationships. Additionally, families no longer live near one another in tightly knit communities. Instead, visits to relatives are often done either by car or airplane, and are often limited to special occasions. Furthermore, the urbanization of Nigeria has led to a more crowded and a more dangerous environment for our youth, where neighbors do not frequently have the opportunity or desire to interact with one another simply because they are total strangers. Suffice here to say that changes in society have made it more and more difficult for children to have access to natural and spontaneous adult mentors. A growing body of research on youth development has also pointed to the benefits of providing youth with caring adults to help them navigate the challenges of growing up. The approach of youth development is to help youth become socially, morally, emotionally, physically, and cognitively competent. It concentrates on building strengths rather than working to diminish youth’s deficits or risks. However, numerous studies have demonstrated that one common factor in the lives of emotionally healthy, resilient, well-adjusted individuals is the presence of a caring, nurturing adult while the individual is growing up (Abbott, Meredith, Self-Kelly, & Davis, 1997; McDonald, Erickson, Johnson, & Elder, 2007).

Another psychological construct which modern psychologists associate with academically at-risk youth is school connectedness or lack of it. School connectedness is the feeling of belonging and acceptance in an individual’s
school environment (Bonny et al., 2000), and a student’s interest, emotional involvement, and motivation to learn in school (Klem & Connell, 2004). Having a strong sense of connection to school is related to positive outcomes including; increased school success and decreased risky behaviours (Bonny et al., 2000). Despite its widespread appeal, empirical evidence supporting the relationship between school connectedness and adolescent development is limited, and there is little understanding of why some adolescents feel connected while others do not (McNeely, 2002, 2005).

Based on this evidence, this study therefore seeks to find an effective method in fostering school connectedness in at-risk school adolescents using Cognitive Behaviour Therapy and Mentored Self-help Intervention Strategies in order to help them overcome their mal-adaptive behaviours that consistently put them at risk. Hence, in context and content, this study would experimentally determine the efficacy of Cognitive Behaviour Therapy and Mentored Self-Help Intervention in fostering school connectedness among academically at-risk school adolescents in Ado-Ekiti, Ekiti State.

**Purpose of the Study**

The purpose of this study is to employ the psychological interventions of Cognitive Behavioural Therapy and Mentored Self-help Interventions in fostering school connectedness in a cohort of academically at-risk school adolescents. It was anticipated that the intervention would improve adolescents’ low self-esteem and school connectedness, which are indicators of their academically at-risk status in the secondary schools.

**Literature Review**

A growing body of research on youth development has also pointed to the benefits of providing youth with caring adults to help them navigate the challenges of growing up. The approach of youth development is to help youth become socially, morally, emotionally, physically, and cognitively competent. It concentrates on building strengths rather than working to diminish youth’s deficits or risks. Numerous studies have demonstrated that one common factor in the lives of emotionally healthy, resilient, and well-adjusted individuals is the presence of a caring, nurturing adult while the individual is growing up (Abbott, Meredith, Self- Kelly, & Davis, 1997; McDonald, Erickson, Johnson, & Elder, 2007).

Contemporary psychologists stated that there are a number of personality variables that determine human behaviour. One of the major construct is school connectedness which modern psychologists associate with academically at-risk youth or lack of it. School connectedness is the feeling of belonging and acceptance in an individual’s school environment (Bonny et al., 2000), and a student’s interest, emotional involvement, and
motivation to learn in school (Klem & Connell, 2003). Therefore, having a strong sense of connection to school is related to positive outcomes including; increase in school success and decrease in risky behaviours (Bonny et al., 2000). Given the amount of time students spend in the academic setting, it is crucial to provide a supportive environment that fosters a connection between students, their teachers, and their schools. This concept of school connectedness is growing research interest among professionals from many disciplines, including health, education, psychology, and sociology (Blum R., 2004; Libbey H.P, 2004).

Based on this evidence, this study therefore seeks to find an effective method in fostering school connectedness in at-risk school adolescents using Cognitive Behaviour Therapy and Mentored Self-help Intervention Strategies in order to help them overcome their mal-adaptive behaviours that consistently put them at risk.

School connectedness could be facilitated by academic engagement, fair discipline, extra-curricular activities, school enjoyment, satisfactory peer relations, safety, and teacher’s support (Libbey 2004). Adolescents that experience school connectedness display a sense of wellbeing and happiness (Allen and Bowles 2012) which seems to protect them against substance abuse, school absenteeism, early sexual initiation, and violence (Davis-Alldritt 2012). Research has shown that school connectedness is related to age. In reviewing research findings on school connectedness, Whitlock (2006) stated that contrary to gender, the relationship between age and school connectedness is quite consistent and persistent. Thus, the older the youth are, the less connected they feel to school. A research conducted a year later also lent support to the report made by News (2004).

Research findings have shown that there might be gender dimension to students’ connectedness. For instance, Bonny et al. (2000) found that boys reported feeling more connected to their school than girls. However, a more recent study on the campus connectedness of university students by Summers et al. (2007), contrasts with this later finding. They reported that female students showed more connected feelings than males. These conflicting findings were noted by Whitlock (2003) who observes that researches on the relationship between gender and school connectedness have been most inconsistent.

School connectedness also seems to capture partly different aspects for males and females. Previous studies have shown that indicators of poor school connectedness among females includes; feelings of their parents not engaging in their schoolwork, low satisfaction with the school, and poor affiliation to the school. Among males, poor school connectedness reflects not feeling safe at school, feelings of their parents not being ready to help with their school problems, and feelings of being treated unfairly at school.
(Anderson et al., 2004). Moreover, studies have demonstrated that female students feel less connected to school than male students (Bonny et al., 2000; McNeely et al., 2002).

Other authors (Maddox and Prinz, 2003; Loukas et al., 2009) also noted that the influence of school connectedness on students’ adjustment varies with regard to gender. However, school connectedness was significantly (positively or negatively) related to depression with respect to both genders, anxiety in girls, and the general behaviour of boys. This is in line with the finding that school connectedness enhances wellbeing, happiness (Allen and Bowles, 2012), and academic achievement (Chhuon and Wallace, 2014).

Research Hypotheses
1. There is no significant difference in the School Connectedness of the participants exposed to the two treatment group and control groups.
2. There is no significant difference in the School Connectedness of the participants exposed to the treatment group.

Methodology
This study is a pre-test and post-test control group quasi-experimental design. The factorial matrix adopted was 3 x 2 x 2. The target population for the study comprised adolescents in Ado and Ikere-Ekiti, Ekiti State, Nigeria. Ado and Ikere-Ekiti are two out of the 16 Local Government Areas (LGAs) in Ekiti State. Three public secondary schools were randomly selected for the study.

A total number of 90 adolescents were randomly selected on the basis of stratified sampling technique. This method involves the division of the sampling frame into homogeneous group in order to ensure that the sample is truly representative. The division was done in such a manner that the units in each stratum are homogeneous with the main characteristic of the interval. Homogeneity can be seen in terms of student’s population, teacher’s characteristic, assessable location, and availability of useful school facilities such as adequate playground, school library, laboratory, and ventilated classrooms for all teaching and learning activities.

The following instruments were used in the study:
1. The School Connection Scale
2. Survey of School Experiences and Participation in Extracurricular Activities

School Connection Scale
Brown and Evans (2002) conceptualized the School Connection Scale (SCS) as an overarching measure with four components: commitment,
power, belonging, and belief in rules. It was developed with four subscales. The first subscale “power,” measures perceived power within the school context, reflecting the students’ ability to influence the context. The second subscale measures “belief,” or the perceived view of the validity of the institution (Brown, Leigh, & Barton, 2000). The third subscale measures “commitment,” or the students’ view of the school as an important tool in fulfilling the goals of an individual. Finally, the fourth subscale “belonging,” measures the social or emotional attachment to others within the school context. Students were asked to rate 21 questions on a 4-point scale namely; “strongly agree,” “agree,” “disagree,” and “strongly disagree.” A total score was obtained by summing all responses. Higher scores indicate students’ perceived connectedness to the school environment. Brown et al. (2000) tested the internal reliability of responding, and obtained a coefficient alpha of .86 at initial assessment which indicates that the instrument is reliable.

School connectedness was also assessed by the Psychological Sense of School Membership (PSSM). The PSSM is an 18-item scale developed for use with adolescent students (Goodenow, 1993). Items on the PSSM are responded to using a 5-point Likert-type format, with choices ranging from not at all true (0) to completely true (4). However, the internal consistency reliability (Cronbach’s alpha) for the PSSM is considered acceptable for an attitude scale and ranges from .77 to .88 (Goodenow, 1993).

Data was analysed using Analysis of Covariance (ANCOVA) to ascertain the efficacy of the treatments on the experimental groups. In addition, t-test was also used as post-hoc to find the differences between groups, and to pinpoint what happened in the data to account for the statistical significance.

A systematic three phase procedures was adopted for the study. It consisted of pre-treatment phase, treatment, and evaluation.

**Results**

**Hypothesis One**

There is no significant difference in the School Connectedness of the participants exposed to the two treatment groups and the control group.

Table 1.1 Main and interaction effects of the experimental groups and control group on school connectedness

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sum of squares</th>
<th>Df</th>
<th>Mean square</th>
<th>F</th>
<th>Sig. of F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covariates</td>
<td>31.902</td>
<td>1</td>
<td>21.902</td>
<td>0.37</td>
<td>.546</td>
<td>NS</td>
</tr>
<tr>
<td>Main effects</td>
<td>752.764</td>
<td>1</td>
<td>545.691</td>
<td>2.82</td>
<td>.092</td>
<td>NS</td>
</tr>
<tr>
<td>Treatment groups</td>
<td>562.848</td>
<td>2</td>
<td>339.924</td>
<td>5.13</td>
<td>.051</td>
<td>&lt;.05</td>
</tr>
<tr>
<td>Gender</td>
<td>1162.620</td>
<td>1</td>
<td>290.655</td>
<td>2.136</td>
<td>.076</td>
<td>NS</td>
</tr>
<tr>
<td>Schl. Exp.</td>
<td>3.425</td>
<td>1</td>
<td>3.425</td>
<td>.024</td>
<td>.567</td>
<td>NS</td>
</tr>
<tr>
<td>2-way interaction</td>
<td>480.753</td>
<td>5</td>
<td>85.979</td>
<td>.867</td>
<td>.643</td>
<td>NS</td>
</tr>
</tbody>
</table>
Table 1.1 shows that there was significant main treatment effect of the experimental groups and control group on school connectedness of the participants; \( F(2/77) = 5.13, P<.05 \). The result did not show interactive effects of the treatment on school connectedness of the study participants.

Table 1.2: Pair Wise Comparison of the Treatment Effects

<table>
<thead>
<tr>
<th></th>
<th>CBT</th>
<th>(a)</th>
<th>(b)</th>
<th></th>
<th>MSHI</th>
<th>(c)</th>
<th>(d)</th>
<th></th>
<th>Control</th>
<th>(e)</th>
<th>(f)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>51.093</td>
<td>49.243</td>
<td></td>
<td></td>
<td>34.202</td>
<td>31.102</td>
<td></td>
<td></td>
<td>21.318</td>
<td>22.493</td>
</tr>
</tbody>
</table>

Table 1.2 shows that the two treatment groups enhanced and improved school connectedness better when compared with control groups. This implies that the two treatments were effective and therefore fostered school connectedness among the participants.

The result as shown on tables 1.1 and 1.2 revealed a significant difference in the school connectedness of those treated than the control group. This implies that the school connectedness of the participants exposed to Cognitive-Behaviour Therapy and Mentored Self-Help Intervention improved significantly in comparison with the non-treatment group. This findings corroborate previous studies that provide evidence for the efficiency of cognitive behaviour therapy in fostering school connectedness (Little, 2005; Lipsey, Chapman and Landenberger, 2001). Also, McLaughlin and Vacha (1992), Wilson, Lipsey, and Derzon (2003), and Wood and O'Malley (1996) had proved that CBT is efficacious in fostering school connectedness in academically at-risk school adolescents. It was not surprising that Mentored Self-Help Intervention was found to be effective in improving self-esteem. It is well documented that low connectedness to school has been found to predict adolescent depression, risk taking, underachievement, and alienation from peers, teachers, and parents (Bonny, Britto, Klostermann, Hornung, & Slap, 2000; Karcher, 2002; Kuperminc, Blatt, & Leadbeater, 1997).
Hypothesis Two

There is no significant difference in the School Connectedness of the participants exposed to the treatment groups.

Table 1.3 ANCOVA summary of the Treatment Effects and Control

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sum of squares</th>
<th>DF</th>
<th>Mean Squares</th>
<th>F</th>
<th>Sig</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment</td>
<td>470.85</td>
<td>1</td>
<td>285.27</td>
<td>19.89</td>
<td>0.000</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>Groups</td>
<td>3.425</td>
<td>1</td>
<td>3.425</td>
<td>0.32</td>
<td>0.768</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>Interaction</td>
<td>31.97</td>
<td>1</td>
<td>11.95</td>
<td>1.23</td>
<td>0.654</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>Residual</td>
<td>4544.712</td>
<td>46</td>
<td>8.91</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>56908.32</td>
<td>49</td>
<td>343.221</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1.3 shows that there was significant effect of the treatment groups in enhancing school connectedness; \( F(1/46) = 19.89, P<.05 \). This implies that the two treatment groups were effective on the school connectedness of the participants.

Table 1.4 Pair Wise Comparison of the Treatment Effects on School Connectedness

<table>
<thead>
<tr>
<th></th>
<th>CBT</th>
<th>(a)</th>
<th>(b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>52.251</td>
<td>48.218</td>
</tr>
<tr>
<td>2</td>
<td>MSHI</td>
<td>(c)</td>
<td>(d)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>34.141</td>
<td>33.335</td>
</tr>
</tbody>
</table>

Table 1.4 shows that CBT training was better than MSHI on the treatment of School Connectedness of the participants. This was evident in their pair wise comparison.

The result as indicated on tables 1.3 and 1.4 show significant difference in school connectedness based on the type of treatment the group received. School connectedness of participants in CBT group improved significantly better than those treated with Mentored Self-Help Intervention (MSHI). This corroborates Wigtli and Wigtli (1991) findings that when effective group counselling with problem students is employed in schools, the participants are better able to deal with some of their dysfunctional thinking and behaviours before these factors become disciplinary problems for them.

Research has shown that the use of CBT techniques with school age populations has been effective in reducing anxiety, increasing frustration tolerance, improving academic performance, reducing depression, improving self-concept and coping capabilities, and increasing rational thinking skills (Bernard & Joyce, 1984).

Recommendations

The study provides reasonable information that can be applied to managing the poor school performance of academically at-risk school adolescents so that they can complete their secondary school
education, and to become beneficial to themselves and to the Nigerian society at large.

Based on the findings of this study, the following recommendations were made:

Specifically, schools can build a sense of connectedness among students by providing a caring and supportive environment, increasing interactions with positive adults, establishing high expectations, and creating multiple opportunities for youth engagement at home, in school, and in the community.

The family, society, and others should take time to appreciate and understand the academic and developmental challenges faced and experienced by academically at-risk school adolescents as to device appropriate measures to help them overcome their challenges and adjust well.

In addition, academically at-risk students should not be labelled or stigmatized as failures, but should be encouraged and re-enforced positively to overcome their academic at-risk nature and function optimally in school to attain good academic performance.

Specifically for teachers, certain teaching techniques such as cooperative learning, praising students, and using icebreakers in the classroom increases the likelihood that a student will connect to school and enhance academic performance. Ultimately, increasing interactions with positive adults and establishing an environment that is warm and responsive to youth tends to promote healthy child and adolescent development.

References:


