

Predicting Internalizing Problems in At-Risk Children and Adolescents

Tawnyea L. Bolme-Lake

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PREDICTING INTERNALIZING PROBLEMS IN
AT-RISK CHILDREN AND ADOLESCENTS

By

Tawnyea L. Bolme-Lake

A Dissertation Presented in Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy

Capella University

August 2007

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Tawnyea L. Bolme-Lake

has been approved

August 2007

WILLIAM CAMERON, Ph.D., Faculty Mentor and Chair

KELLEY CHAPPELL, Ph.D., Committee Member

ANTANAS LEVINSKAS, Ph.D., Committee Member

GARVEY HOUSE, Ph.D. Dean, School of Psychology

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Abstract

Internalizing problems are common among adolescents. Poor outcomes such as academic failure, substance misuse, and adult mental health problems have all been linked to internalizing problems. Although the potential effects are serious, internalizing disorders tend to be under-diagnosed and under-treated. To compound the problem, research in the area of internalizing disorders continues to lag behind that of other disorders. In the last ten years, however, research has indicated that relationships with parents, gender, and self-esteem are factors associated with internalizing disorders. To clarify the relationships between these factors, archival data was collected from an electronic database in a school district in northeastern Minnesota. This database includes the results of the Behavior Assessment System for Children-2; Self-Report of Personality (BASC-2) of children and adolescents who have taken it as a part of a special education evaluation. The BASC-2 is a norm-referenced questionnaire that measures emotions and self-perceptions. Factorial analysis of variance was used to determine whether the degree of internalizing problems differ between relationships with parents, gender, and self-esteem groups, reflected by scores on the Parent Relations, Self-Esteem, and Internalizing Problems scales included in the BASC-2. Further, multiple regression procedures were used to determine if the combination of the quality of relations with parents, gender, and level of self-esteem predicts the degree of internalizing problems experienced by at-risk children and adolescents. Contrary to past studies, results did not show gender significant differences in the degree of internalizing problems reported. Results did, however, indicate that the degree of reported internalizing problems was related to the quality of parent relationships and self-esteem. Specifically, children and adolescents who reported

poor relationships with their parents reported a significantly greater degree of internalizing problems than those who reported average or better relationships with their parents. Likewise, children and adolescents who reported low self-esteem reported a significantly greater degree of internalizing problems than those with average or better self-esteem. In addition, gender, the quality of parent relations, and level of self-esteem showed a predictive relationship with internalizing problems. The implications of these findings, as well as directions for future research were discussed.

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Table of Contents

Acknowledgments	iv
List of Tables	viii
List of Figures	ix
CHAPTER 1. INTRODUCTION	1
Introduction to the Problem	1
Background of the Study	4
Statement of the Problem	4
Purpose of the Study	5
Significance of the Study	6
Nature of the Study	6
Research Questions	6
Definition of Terms	7
Assumptions and Limitations	10
Organization of the Remainder of the Study	12
CHAPTER 2. LITERATURE REVIEW	14
Introduction to the Literature Review	14
Critical Review of the Relevant Literature	14
Rationale for Methodology, Design, and Measurement	22
Chapter Summary	30
CHAPTER 3. METHODOLOGY	32
Restatement of Purpose	32
Research Design	32

Target Population	32
Selection of Documents	33
Definition of Variables	33
Instruments	35
Data Collection and Procedures	36
Research Questions and Hypotheses	37
Data Analysis	39
Expected Findings	40
CHAPTER 4. RESULTS	42
Organization of the Chapter	42
Characteristics of the Sample	42
Tests of Hypotheses 1 – 3	44
Test of Hypothesis 4	56
Summary of Results	64
CHAPTER 5. DISCUSSION	66
Organization of the Chapter	66
Overview of the Results	66
Discussion and Interpretation of Findings	67
Strengths	73
Limitations	74
Recommendations for Future Research	76
Summary and Conclusion	78
REFERENCES	79

List of Tables

Table 1. Descriptive Statistics of Each Group	43
Table 2. Descriptive Statistics for Internalizing Problems at Each Variable Combination	44
Table 3. Skewness and Kurtosis of Internalizing Problems	46
Table 4. Tests of Normality on the Dependent Variable Internalizing Problems	47
Table 5. Levene's Test of Equality of Error Variances	48
Table 6. Analysis of Variance for Internalizing Problems	54
Table 7. Correlations Between Variables	57
Table 8. Summary of Variables Not Yet Entered Into Regression Model	58
Table 9. Summary of Stepwise Regression Analysis for Variables Predicting Internalizing Problems	62
Table 10. Analysis of Variance, Change in Internalizing Problems	63

List of Figures

Figure 1. Histogram of Mean Internalizing Problems Scores	46
Figure 2. Box Plot of Mean Internalizing Problems Scores by Parent Relations Group	49
Figure 3. Box Plot of Internalizing Problems Scores by Gender Group	50
Figure 4. Box Plot of Internalizing Problems Scores by Self-Esteem Group	51
Figure 5. Results of Analysis of Variance	55
Figure 6. Scatter Plot of Standardized Residuals by Standardized Predicted Values	59
Figure 7. Histogram of Standardized Residuals	60
Figure 8. Plot of Residual Values	61
Figure 9. Visual Depiction of Multiple Regression Results	64

CHAPTER 1. INTRODUCTION

Introduction to the Problem

Mental health conditions can be divided into two broad categories, internalizing disorders and externalizing disorders. This approach to classification is based on the empirical work of Achenbach and colleagues (Achenbach, 1966, 1985; Achenbach & Edelbrock, 1978; Achenbach & McConaughy, 1996). Using multivariate factor analysis, two large groups of conditions were identified. Inner-directed, over-controlled behaviors that cause emotional distress in the self were classified as internalizing disorders. In contrast, behavior disorders that create conflicts within the environment or with others were categorized as externalizing disorders (Reynolds, 1990).

Internalizing disorders such as anxiety and depression are common among children and adolescents. In fact, the estimated prevalence of anxiety disorders in children and adolescents is 13% (U.S. Surgeon General, 1999). In addition, some studies suggest that as many as 20% of adolescents will experience at least one episode of clinically significant depression in their lifetimes (Birmaher et al., 1996; Garber, 2000; Lewinsohn & Essau, 2002). Both of these disorders are included within the cluster of internalizing disorders (Achenbach, 1966, 1985; Achenbach & Edelbrock, 1978; Achenbach & McConaughy, 1996).

Although researchers cite high prevalence rates for these disorders, some argue that statistics actually underestimate their true incidence (Reynolds, 1990). This occurs because these disorders present symptoms that are not always observable (Laurent &

Landau, 1993). In addition, the inner-directed nature of these disorders does not affect others as the outer-directed externalizing disorders tend to, nor do they present behavior management challenges for parents, teachers, or mental health professionals. As a result, internalizing disorders are often overlooked (Reynolds, 1992).

Even when internalizing disorders are diagnosed, research suggests that they are often under-treated. Wu et al. (1999) found that youngsters with externalizing problems are likely to receive services through mental health organizations and schools. In contrast, youngsters with internalizing disorders, such as depression, are more likely to receive services solely in their schools. In other words, children and adolescents with internalizing-type disorders may get less treatment than those with other types of disorders. This discrepancy occurs because externalizing disorders tend to cause more distress in others, causing parents to seek additional support from community agencies (1999).

Untreated internalizing disorders are related to serious problems. Academic failure is one of the problems associated with internalizing disorders (National Association of School Psychologists, 2002; Rapport, Denney, Chung, & Hustace, 2001; Reynolds, 1992). Rapport et al. (2001) conducted a study using a sample of 325 children and adolescents ages 5 - 7. Measures such as intelligence, classroom performance, internalizing behavior, short-term memory, and vigilance were used to examine the relationship between internalizing problems and classroom performance. Results indicated that internalizing behavior, defined in this study as anxiety, depression, and withdrawal, contributed significantly to the prediction of classroom performance "over and above the effects of intelligence" and all other factors (p. 548).

Substance misuse is another problem related to internalizing disorders (Kubik, Lytle, Birnbaum, Murray, & Perry, 2003; Lillehoj, Trudeau, Spoth, & Wickrama, 2004; Loeber, Stouthamer-Loeber, & White, 1999; Wang, Fitzhugh, & Westerfield, 1994). Kubik et al. (2003) surveyed 3,621 12 and 13 year-olds in 16 different middle schools in Minnesota. Information was collected for gender, age, race/ethnicity, depressive symptoms, smoking, alcohol use, and use of marijuana and inhalants. Results showed that in both boys and girls, depressive symptoms were strongly associated with monthly alcohol and inhalant use. Monthly smoking and heavy drinking were associated with depressive symptoms in girls only. This suggests that the association between substance use and internalizing disorders is a concern in young adolescents as well as older adolescents. It also underscores the existence of gender differences.

Internalizing disorders in childhood and adolescence are also associated with mental health problems later in adulthood (Pine, Cohen, Cohen, & Brook, 1999; National Association of School Psychologists, 2003). Pine et al. analyzed a sample of 776 adolescents with depressive symptoms who had psychiatric evaluations completed in 1983, 1985, and 1992. Results showed that adolescent depressive symptoms strongly predicted adult major depression. In fact, adolescents with clinical depression were 2 - 3 times more likely to have at least one major depressive episode as an adult.

Despite the high prevalence of these disorders and the associated detrimental effects, research in the area of internalizing disorders lags behind in comparison to research in the area of externalizing disorders (Compton, Burns, Egger, & Robertson, 2002). This lag is especially evident with respect to the child and adolescent population.

Background of the Study

The 1970s marked the beginning of research on internalizing disorders. During this time, research efforts focused on the nature and treatment of these disorders in adults (Reynolds, 1992). However, it wasn't until the 1980s that the study of internalizing disorders trickled down to the child and adolescent population. Prior to that, children and adolescents with internalizing symptoms were viewed as going through normal, but difficult, developmental stages in their lives. The common belief was they would simply "grow out" of their symptoms (1992). Reynolds argued that this growing attention to child and adolescent internalizing disorders stemmed in part from a rapidly increasing suicide rate among adolescents in the 1950s, 1960s, and 1970s. The publication of the Diagnostic and Statistical Manual of Mental Disorders-III in 1980 also sparked interest in the phenomenon of internalizing disorders of childhood and adolescence (1992).

Statement of the Problem

Since the 1980s, studies have identified that certain factors, such as gender, put some individuals at a higher risk of developing internalizing disorders. Specifically, many studies indicate that girls are far more likely to develop internalizing disorders than boys (Leadbeater, Blatt, & Quinlan, 1995; Crawford, Cohen, Midlarsky, & Brook, 2001; Kubik, et al., 2003; Jose & Ratcliff, 2004; Ronnlund & Karlsson, 2006). Researchers have also identified certain factors that may make some children and adolescents less vulnerable to internalizing disorders. Quality relationships between adolescents and their parents, as well as high self-esteem have been implicated as protective factors against problems in psychological adjustment (Schweitzer, Seth-Smith, & Callan, 1992; Delaney,

1996; Bryne, 2000; Kliewer, Murrelle, & Meja, 2001; Erkolahti, Ilonen, Saarijavi, & Terho, 2003; Marsh, Parada, & Ayotte, 2004; Reid, 2004; Manders, Scholte, Janssens, & De Bruyn, 2006; Margolin, 2006; Ronnlund & Karlsson, 2006).

Although certain risk factors and protective factors have been identified, research has been limited to simple relationships between these variables; no research to date has examined the possible interactions between these factors. In addition, researchers have not explored the potential predictive relationship between this combination of factors and the degree of internalizing problems reported by children and adolescents. This study fills those gaps in the literature.

Purpose of the Study

Given the high prevalence of internalizing disorders, the associated detrimental effects, and the relative lack of research on internalizing disorders in comparison to externalizing disorders, additional research is needed to identify possible factors or combination of factors that put adolescents at a higher risk for developing these disorders. This study examines whether girls experience greater internalizing problems in comparison to boys, and whether the lack of quality relationships with parents and low self-esteem are associated with a high degree of internalizing problems. It will also examine interaction effects. Additionally, it employs multiple regression procedures to determine if any of these factors or combination of factors, have a predictive relationship with internalizing problems.

Significance of the Study

This study identifies the potentially complex interplay between the factors of quality of relations with parents, gender, level of self-esteem, and degree of internalizing problems. It is expected that these findings will be useful in identifying unique interactions between these variables. As a result, a profile of characteristics that put children and adolescents at a higher risk for development of internalizing disorders will be identified. Identification of risk factors may, in turn, help guide interventions for these groups.

Nature of the Study

This study uses a causal-comparative factorial design to examine how the quality of parent relationships, gender, and level of self-esteem are related to internalizing problems in the at-risk population of children and adolescents. Specifically, this study uses archival data to determine whether there are interactions between and among these factors. In addition, this research uses multiple regression procedures to examine whether any of these variables or combination of variables can predict future internalizing problems in at-risk children and adolescents.

Research Questions

1. Is there a statistically significant difference in the degree of internalizing problems between the two Relations with Parents groups (Average/Above Average, At-Risk/Clinically Significant) as measured by the BASC-2?

2. Is there a statistically significant difference in the degree of internalizing problems between the two gender groups (Male, Female) as measured by the BASC-2?
3. Is there a statistically significant difference in the degree of internalizing problems between the two Self-Esteem groups (Average/Above Average, At-Risk/Clinically Significant) as measured by the BASC-2?
4. Does the combination of quality of relations with parents, gender, and level of self-esteem have a predictive relationship with the degree of internalizing problems reported by at-risk children and adolescents?

Definition of Terms

There are several terms related to this study that require further explanation. These terms will be used throughout the remainder of the study as defined in this section.

At-Risk Children and Adolescents

For the purpose of this research, at-risk children and adolescents will refer to youngsters between the ages of 8-18 that either receive special education services as a result of an identified emotional/behavioral disorder or have been referred for a special education evaluation because an emotional/behavioral disorder is suspected. This population is the focus of this study.

At-Risk/Clinically Significant Relations with Parents

According to Reynolds and Kamphaus (2004), T-scores of 31 - 40 on any adaptive measure, such as Parent Relations, are considered At-Risk. Scores that fall within the At-Risk range indicate "the presence of significant problems" or "may signify

potential or developing problems that need to be monitored carefully" (p. 16). Likewise, T-scores of 30 and below are considered Clinically Significant in the area of Relations with Parents and "denote a high level of maladaptive behavior" (p. 16). The At-Risk/Clinically Significant Parent Relations group will consist of children and adolescents who reported problems within the parent-child relationship.

At-Risk/Clinically Significant Self-Esteem

In the area of Self-Esteem, T-scores of 31 - 40 are considered At-Risk on the BASC-2 (Reynolds & Kamphaus, 2004). According to Reynolds and Kamphaus, any adaptive measure, including Self-Esteem, that reflects scores that fall within the At-Risk range indicate "the presence of significant problems" or "may signify potential or developing problems that need to be monitored carefully" (p. 16). Likewise, T-scores 30 and below are considered Clinically Significant. Scores that fall within the Clinically Significant range "denote a high level of maladaptive behavior" (Reynolds & Kamphaus, 2004, p. 16). Therefore, children and adolescents in the At-Risk/Clinically Significant Self-Esteem group represent individuals with low self-esteem.

Average/Above Average Relations with Parents

In the area of Relations with Parents, T-scores of 60 and above are considered High or Very High and indicate very positive relations between the parents and the child or adolescent. T-scores of 41 - 59 are considered Average and reflect average quality relationships between the child or adolescent and his or her parents (Reynolds & Kamphaus, 2004). Thus, the Average/Above Average Parent Relations group consists of youngsters who reported average or better relationships with their parents.

Average/Above Average Self-Esteem

In the area of Self-Esteem, T-scores of 60 and above are considered High and Very High on the BASC-2 and reflect a level of self-esteem that is better than average. Likewise, T-scores of 41 - 59 are considered Average, and reflect an average level of self-esteem (Reynolds & Kamphaus, 2004). Thus, children and adolescents with Average/Above Average Self-Esteem reflect individuals with average or better self-esteem.

Behavior Assessment System for Children; Second Edition (BASC-2)

The BASC-2 is a multi-method, multidimensional assessment tool that evaluates behavior and self-perceptions of children and adolescents (Reynolds & Kamphaus, 2004). This is one of the evaluation tools used in the school district under study when considering the special education eligibility. It is also the tool that was used to measure the quality of relationships with parents, level of self-esteem, as well as the degree of internalizing problems in this study.

Emotional/Behavioral Disorder (EBD)

According to National Association of School Psychologists (2002), EBD refers to "a condition in which behavioral or emotional responses of an individual in school are so different from his/her generally accepted, age-appropriate, ethnic or cultural norms that they adversely affect performance in such areas as self care, social relationships, personal adjustment, academic progress, classroom behavior, or work adjustment" (para. 3). All of the students whose BASC-2 results were used for this study have been evaluated and identified as having an EBD, another disability, or were suspected of having an EBD.

Internalizing Problems

Internalizing disorders are a group of disorders that are described as inner-directed and over-controlled (Reynolds, 1992). The Internalizing Problems composite score on the BASC-2 Self-Report of Personality includes the scales of Atypicality (tendency to behave in a manner considered odd or strange), Locus of Control, Social Stress, Anxiety, Depression, and Sense of Inadequacy. Reynolds and Kamphaus (2004) consider the Internalizing Problems composite on the BASC-2 as a "broad index of inwardly directed distress."

Parent Relationships

In this study, the quality of the relationship between the child or adolescent and the parents was measured using the Relations with Parents scale on the BASC-2. According to Reynolds and Kamphaus (2004), this scale "surveys the individual's perception of being important in the family, the status of the child-parent relationship, and the child's perception of the degree of parental trust and concern" (p. 78).

Self-Esteem

The level of self-esteem was measured in this study using the Self-Esteem scale on the BASC-2. This scale evaluates the adolescent's satisfaction with one's self, physically and globally (Reynolds & Kamphaus, 2004).

Assumptions and Limitations

There are several key assumptions embedded within this study that are worth noting. The first group of assumptions is related to the quantitative philosophy of this study. With regard to ontology, this research assumes a single reality rather than multiple

realities. The epistemology assumes that the researcher and the data are independent entities. The axiology of this study assumes that the researcher's values will not impact the final results. It is also assumed that at least some degree of generalizations will be possible as a result of the study and that causes and effects exist in a linear manner. Finally, this study assumes a deductive method of logic.

The second group of assumptions is related to the use of the BASC-2 as the tool of measurement used in this study. First, it is assumed that the school professionals that administered the BASC-2 as a part of the special education evaluation process followed proper testing and scoring procedures. Second, it is assumed that the students that completed the BASC-2 answered the questions openly and honestly. Third, it is assumed that the demographics of the students that took that BASC-2 in the school district under study roughly match the demographics of the students included in the BASC-2 norm group.

The limitations of this study should also be taken into account when making generalizations from the final results. The first group of limitations is related to the concept of internalizing disorders. Although the distinction between internalizing disorders and externalizing disorders has empirical support (Achenbach, 1966; 1985), it is important to note that not every mental health condition falls neatly into these two categories. Rather, internalizing disorders often have symptoms that overlap with other externalizing disorders (McConaughy & Skiba, 1993). Second, internalizing disorders and externalizing disorders are often co-morbid (1993). Finally, not all researchers agree which specific mental health conditions fall within the category of internalizing disorders (Reynolds, 1992). All of these factors affects the interpretation of the final results.