MODERATION OF THE RELATION BETWEEN DISTRESS AND HELP-SEEKING INTENTIONS: AN APPLICATION OF HOPE THEORY

A Dissertation

Presented to

The Graduate Faculty of The University of Akron

In Partial Fulfillment

of the Requirements for the Degree

Doctor of Philosophy

Rachel Anne Uffelman

May, 2005
MODERATION OF THE RELATION BETWEEN DISTRESS AND HELP-SEEKING INTENTIONS: AN APPLICATION OF HOPE THEORY

Rachel Anne Uffelman

Dissertation

Approved:

Advisor
Susan I. Hardin, Ph.D.

Co-Advisor
Linda M. Subich, Ph.D.

Committee Member
Nicole J. Borges, Ph.D.

Committee Member
Sandra Perosa, Ph.D.

Committee Member
James R. Rogers, Ph.D.

Accepted:

Department Chair
Linda M. Subich, Ph.D.

Dean of the College
Roger B. Creel, Ph.D.

Dean of the Graduate School
George R. Newkome, Ph.D.

Date
ABSTRACT

Theories of psychological help-seeking consistently suggest that personal traits influence the process of help-seeking. Research on help-seeking intentions indicates that positive attitude toward help-seeking and having sought help in the past are also related to greater intentions to seek help in the future. The role of distress in predicting help-seeking intentions is somewhat less clear, with research inconsistently supporting the relation between heightened distress and intentions to seek psychological help.

The present research attempted to clarify the relation between distress and help-seeking intentions by introducing hope as defined by Hope Theory (Snyder et al., 1991) as a personal trait that may serve to moderate this relation. This cognitive theory of motivation addresses the thought processes underlying goal-directed behavior, suggesting that hope is comprised of agency and pathways thinking. It was hypothesized that distressed individuals with higher trait hope would report greater intentions to seek psychological help than distressed individuals with low levels of trait hope. It was also hypothesized that this moderating relationship would remain after accounting for the effects of attitude toward help-seeking and past help-seeking behavior.

A final sample of 188 undergraduate students identified their most troubling problem and completed measures of distress, attitudes toward help-seeking, and trait
hope. Participants also reported their intentions to engage in four increasingly committed steps in the help-seeking process, and provided information about their past help-seeking experiences. Results indicated that Agency (the perceived ability to initiate and sustain movement toward a goal), but not Pathways or Hope Scale total scores, moderated the relation between distress and help-seeking intentions. When help-seeking attitudes and past help-seeking were included, Hope Scale total scores and Agency scores both moderated the distress – intentions relation. However, these relations were in the opposite direction as hypothesized. Distressed individuals with low amounts of trait hope or hope or agency reported stronger intentions to seek help than distressed individuals with high levels of agency. Low-distress persons were similar in their intentions to seek help, regardless of their level of trait hope. Limitations of the study, implications for theory and practice, and suggestions for future research are discussed.
ACKNOWLEDGMENTS

Although I have not always done so consistently during this long and rigorous journey of being trained as a psychologist, I need to thank God my heavenly Father first and foremost. He has richly blessed me with the tools I need to be successful in life and in this field, and I hope that I will be able to return this gift in kind to others through my work.

God’s most generous gift to me is my family. Without parents who instilled in me the value of hard work and trust in my own abilities, and showed me unconditional love and support, I could not even have taken the first step toward the goal of becoming a psychologist. Equally priceless has been the stress relief provided by my three siblings through hours of laughter and well-timed votes of confidence. I am thankful for grandparents who demonstrated through their actions that faith and commitment are rewarded with success. I have also been blessed to have a wonderful network of friends. In particular, Rebekah, my friend of over ten years, has been my tireless cheerleader, my often-needed reality check, and my own personal psychologist. I am grateful for every one of these people and I feel so blessed to have each of them in my life.

I also thank the faculty for their role in shaping me into the new professional I am today. Sue’s keen listening abilities, clever analogies, and insightful metaphors have helped me to understand this field and my own experiences in new ways. Linda’s patient coaching of my critical thinking has equipped me with one of the most valuable tools I
will take with me into my work. The remainder of the faculty taught me to balance both skepticism and open-mindedness. With equal parts challenge and support, I was motivated to attempt things that I never would have dared otherwise.

One of my undergraduate professors once told me that the best learning in graduate school comes from discussions over dinner with fellow trainees, and this has been uncannily true. I have been incredibly supported by my fellow trainees as we have traveled together down this long and winding road. My cohort has truly had an interesting journey together, full of successes and losses. These three special people – Becky, Nate, and Kimberly – began as my classmates, became my collaborators and friends, and have been my mentors in so many ways. I am thrilled to call them my colleagues. I cannot imagine my internship experience without the fun and encouragement provided by my fellow interns, Deborah and Don. I do not think it was chance that I had the opportunity to work, study, and grow with each of these people, and I am grateful for all I have learned from them.

Perhaps the most important thing I have learned throughout my training is that one’s learning is never finished. Transitions are, by definition, both endings and beginnings, and the end of my formal training provides me with endless opportunities to continue learning and growing. I am grateful for the solid base of family, friends, and colleagues who I know will continue to stand alongside me as I step into this new phase of my professional and personal life.
# TABLE OF CONTENTS

<p>| LIST OF TABLES | ..........................................................x |
| LIST OF FIGURES | ..........................................................xi |
| CHAPTER | |
| I. INTRODUCTION | ..........................................................1 |
| Review of Help-Seeking Theory and Research | ..........................................................1 |
| Hope Theory | ..........................................................5 |
| Summary and Statement of Purpose | ..........................................................7 |
| II. REVIEW OF THE LITERATURE | ..........................................................9 |
| Psychological Help-Seeking Definition and Models | ..........................................................9 |
| Help-Seeking Intentions Research | ..........................................................13 |
| Hope Theory | ..........................................................50 |
| Hope and Help-Seeking | ..........................................................59 |
| Summary and Hypotheses | ..........................................................67 |
| III. METHOD | ..........................................................72 |
| Participants | ..........................................................72 |
| Instruments | ..........................................................73 |
| Procedure | ..........................................................84 |
| Statistical Analyses | ..........................................................85 |</p>
<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Descriptive Statistics for Independent and Dependent Variables</td>
<td>95</td>
</tr>
<tr>
<td>2</td>
<td>Means on Independent Variables Comparing Participants Currently Not Receiving and Receiving Psychological Treatment</td>
<td>97</td>
</tr>
<tr>
<td>3</td>
<td>Intercorrelations Among Independent and Dependent Variables</td>
<td>99</td>
</tr>
<tr>
<td>4</td>
<td>Hierarchical Regression Analyses Predicting Intentions From Global Distress and Hope</td>
<td>103</td>
</tr>
<tr>
<td>5</td>
<td>Hierarchical Regression Analyses Predicting Intentions From Problem Severity and Hope</td>
<td>105</td>
</tr>
<tr>
<td>6</td>
<td>Hierarchical Regression Analyses Predicting Intentions From Help-Seeking Attitudes, Previous Help-Seeking, Global Distress and Hope</td>
<td>109</td>
</tr>
<tr>
<td>7</td>
<td>Hierarchical Regression Analyses Predicting Intentions From Help-Seeking Attitudes, Previous Help-Seeking, Problem Severity and Hope</td>
<td>112</td>
</tr>
<tr>
<td>8</td>
<td>Hierarchical Regression Analyses Predicting Intentions From Help-Seeking Attitudes, Helpfulness of Past Help-Seeking, Global Distress and Hope</td>
<td>117</td>
</tr>
<tr>
<td>9</td>
<td>Hierarchical Regression Analyses Predicting Intentions From Help-Seeking Attitudes, Helpfulness of Past Help-Seeking, Problem Severity, and Hope</td>
<td>119</td>
</tr>
</tbody>
</table>
## LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Hypothesized relation between distress and intentions to seek help, with moderation by hope</td>
<td>7</td>
</tr>
<tr>
<td>2.1</td>
<td>Hypothesized roles of distress, prior help-seeking, help-seeking attitudes, and hope-distress interaction in predicting help-seeking intentions</td>
<td>69</td>
</tr>
<tr>
<td>4.1</td>
<td>Observed relation between distress and intentions to seek help, with moderation by agency</td>
<td>107</td>
</tr>
<tr>
<td>4.2</td>
<td>Observed relation between distress and intentions to seek help, with moderation by hope, after accounting for help-seeking attitudes and helpfulness of past help-seeking</td>
<td>113</td>
</tr>
<tr>
<td>4.3</td>
<td>Observed relation between distress and intentions to seek help, with moderation by agency, after accounting for help-seeking attitudes and helpfulness of past help-seeking</td>
<td>114</td>
</tr>
</tbody>
</table>
CHAPTER I
INTRODUCTION

This chapter provides an overview of the present study on predictors of intentions to seek help for psychological problems. The Theory of Reasoned Action (Ajzen & Fishbein, 1980) is offered as a justification for continued attention to help-seeking intentions. A review of themes in the extant research on help-seeking intentions is then reviewed, followed by delineation of several shortcomings of previous studies. Next, dispositional hope as conceptualized by Hope Theory (Snyder et al., 1991) is offered as an individual differences variable that has the potential to augment our understanding of help-seeking intentions. The chapter closes with a summary and a statement of the purpose of the current study.

Review of Help-Seeking Theory and Research

The process by which individuals seek help for psychological problems has been a focus of inquiry in the literature for several decades. A great deal of research has examined the help-seeking process, resulting in a multitude of help-seeking correlates and predictors. Research on help-seeking can generally be divided into three categories, based on the aspect of the help-seeking studied: attitudes, intentions, or behaviors. Research on help-seeking attitudes has sought to identify those personal and situational characteristics that are related to favorable attitudes toward seeking psychological help. Research on help-seeking intentions has attempted to determine the conditions under
which individuals report that they are willing or likely, or have intentions to seek help for psychological problems. Research on help-seeking behaviors has taken many methodological forms, including large epidemiological studies (e.g., Koenen, Goodwin, Struening, Hellman, & Guardino, 2003; Rabinowitz, Gross, & Feldman, 1999; Vessey & Howard, 1993), retrospective self-reports of help-seeking behavior (e.g., Carter & Fasullo, 1982; Greenley & Mechanic, 1976; Oliver, Reed, Katz, & Haugh, 1999), longitudinal studies (e.g., Sharp & Kirk, 1974) and attempts to differentiate help-seekers from those who have not sought help (e.g., Clary & Fristad, 1987; Goodman, Sewell, & Jampol, 1984; Simoni & Adelman, 1991; Subich & Coursol, 1985).

These three categories of help-seeking research correspond to the main constructs in the Theory of Reasoned Action (TRA; Ajzen & Fishbein, 1980). The TRA is concerned with the prediction of volitional behavior, and proposes that any given action can be understood as the product of one’s attitude toward the behavior and intentions to perform the behavior. According to the TRA, intentions mediate the relation between attitudes and behaviors and are “immediate determinants” (p. 5) of behavior (Ajzen & Fishbein, 1980). Furthermore, Ajzen (1988) provided empirical data supporting the strong correspondence of intentions to engage in a variety of behaviors and subsequent performance of these behaviors. Based on the strong theoretical and empirical link between intentions and behaviors, it appears that our understanding of psychological help-seeking could be furthered by continued examination of help-seeking intentions. Highlights of research on help-seeking intentions, the focus of the present study, are summarized next.
Several themes can be drawn from the extant research on help-seeking intentions. First, past help-seeking behavior is a reliable predictor of current intentions to seek help (Carlton & Deane, 2000; Ciarrochi, Deane, Wilson, & Rickwood, 2002; Deane, Skogstad, & Williams, 1999; Deane & Todd, 1996; Halgin, Weaver, Edell, & Spencer, 1987; Meissen, Warren, & Kendall, 1996). Second, attitudes about psychological help-seeking have emerged as a robust predictor of help-seeking intentions (Bayer & Peay, 1997; Carlton & Deane, 2000; Cepeda-Benito & Short, 1998; Cramer, 1999; Deane et al., 1999; Deane & Todd, 1996; Kelly & Achter, 1995), as would be expected based on the TRA.

Finally, level of distress appears to be related to intentions to seek help (Carlton & Deane, 2000; Cepeda-Benito & Short, 1998; Cramer, 1999; Deane & Chamberlain, 1994; Deane et al., 1999; Deane & Todd, 1996; Deane, Wilson, & Ciarrochi, 2001; Halgin et al., 1987; Kelly & Achter, 1995). However, the exact nature of this relation remains unresolved. As seems logical, the results of several studies suggest that greater distress is related to stronger intentions to seek help (e.g., Cepeda-Benito & Short, 1998; Cramer, 1999; Deane & Chamberlain, 1994; Halgin et al., 1987). On the other hand, Deane et al. (2001) found that individuals reporting the highest levels of suicidal ideation reported the weakest intentions to seek help from a variety of sources, and were more likely to report that they would not seek help at all, as compared with individuals reporting lower levels of suicidal ideation. This study raises the possibility that, for some problems, when distress is high, help-seeking intentions are suppressed. Still other studies have concluded that distress is not meaningfully related to help-seeking intentions (e.g., Carlton & Deane, 2000; Deane et al., 1999; Deane & Todd, 1996; Kelly
& Achter, 1995). Evidently, the relation between distress and help-seeking intentions warrants further examination.

In summary, research on help-seeking intentions clearly supports help-seeking attitudes and prior help-seeking behavior as related to intentions to seek psychological help. Also, level of distress appears to be related to help-seeking intentions, but the exact nature of this relation is uncertain. However, several shortcomings of previous research on help-seeking intentions should be addressed in future studies of help-seeking intentions.

First, research on intentions has not consistently included measures of help-seeking attitudes, distress, and previous help-seeking, despite compelling evidence that these variables are related to help-seeking intentions. Second, help-seeking intentions themselves have been operationalized in at least four different ways, representing varying degrees of specificity and immediacy of intentions. As a result, most studies of help-seeking intentions have measured respondents’ intentions to seek help under hypothetical circumstances or for problems that are not currently of concern; only one identified study (Halgin et al., 1987) tapped intentions to seek help for a specific problem that was currently of concern.

Finally, it seems possible that some internal or trait-level characteristic acts in combination with other known predictors of intentions, such as attitudes and distress, to motivate help-seeking. This suggestion is consistent with various models of help-seeking, each of which asserts that predisposing personal characteristics are influential factors in the help-seeking process (Pescosolido & Boyer, 1999). In other words, it could be that individuals possessing some trait react to psychological distress differently.
than do persons who possess lower levels of the trait. Hope, as defined by Hope Theory (Snyder et al., 1991) is offered as a personal characteristic that may moderate the distress-intentions relation.

**Hope Theory**

Hope Theory (Snyder et al., 1991), a member of the positive psychology family (Snyder, Rand, & Sigmon, 2002), is a cognitive theory of motivation that attempts to capture the process by which goal-directed behavior is undertaken. According to this theory, hope is comprised of two components: pathways and agency. Pathways are the means by which goals are achieved, or the routes to the desired outcome. Pathways thinking, therefore, is one’s perceived ability to generate viable routes to one’s identified goals. Agency is the motivational component of hope, propelling the individual along the identified pathways to the goal. Agentic thinking, therefore, is one’s perceived ability to initiate and sustain movement toward a goal. According to Hope Theory, pathways and agency are distinct constructs, yet they are additive, reciprocal, and positively related. Together, pathways and agency comprise hope (Snyder et al., 1991).

Hope Theory has been applied, theoretically and empirically, to the study a variety of behaviors and mental health outcomes. It has also been suggested that hope may be related to the process of psychological help-seeking (Snyder, Ilardi, Michael, & Cheavens, 2000). According to these authors, for distressed individuals who possess higher levels of hope, therapy may represent a viable route (pathway) to alleviating discomfort. Furthermore, individuals higher in hope should demonstrate a greater propensity to take action to alleviate distress by seeking psychological help, due to their
increased motivation to work toward their desired outcome (agency). Research has demonstrated that persons higher in hope are less likely to use avoidant coping strategies than those lower in hope (Chang, 1998). Also, a small number of studies (e.g., Ciarrochi & Deane, 2001; Ciarrochi et al., 2001; Deane et al., 2001) on help-seeking intentions have included a measure of hopelessness, and results generally indicate that hopelessness is related to lower intentions to seek help. Yet, it cannot be assumed that the opposite relationship, that high hope is related to high intentions to seek help, would be true. A primary reason is that, in these studies, hopelessness was measured using the Beck Hopelessness Scale (BHS; Beck, Weissman, Lester, & Trexler, 1974), which is not an operationalization of hope as framed by Hope Theory. Thus, it cannot be assumed that low scores on the BHS equate to high levels of hope as defined in Hope Theory.

Based on the theoretical framework provided by Hope Theory and relevant research findings, it seems reasonable to suggest that higher hope individuals will demonstrate increased intentions to seek help when faced with psychological problems than will low-hope persons. However, the relation between hope (as conceptualized in Hope Theory) and help-seeking intentions has to date not been empirically examined. The present study sought to examine this question, and furthermore suggested that hope may aid in understanding the discrepant results regarding the relation between distress and intentions to seek help. Specifically, it was proposed that hope moderates the relation between distress and intentions, such that for those high in hope, higher distress is related to greater intentions to seek help; and for those low in hope, level of distress is
related to intentions to seek help to a lesser degree. This proposed relation is demonstrated in Figure 1.1.

![Figure 1.1](image)

**Figure 1.1.** Hypothesized relation between distress and intentions to seek help, with moderation by hope.

**Summary and Statement of Purpose**

The present study sought to further our understanding of psychological help-seeking intentions by addressing several shortcomings of previous research, and by introducing the hope construct as an individual differences variable that is a possible correlate of help-seeking intentions. Help-seeking intentions were examined because theory and empirical data suggest that intentions are direct precursors to actual behaviors (Ajzen & Fishbein, 1980; Ajzen, 1988) and in answer to calls to move beyond examination of correlates to help-seeking attitudes (e.g., Fischer & Farina, 1995). Given equivocal conclusions about the role of distress in predicting help-seeking intentions, the possibility that some other variable combines with distress to motivate help-seeking was investigated. Frazier, Tix, and Barron (2004) asserted that
research in counseling psychology can be advanced by moving beyond basic questions of correlational relationships to examine possible moderators and mediators of observed effects. To that end, the present study examined the possibility that hope moderates the relation between distress and help-seeking intentions. Furthermore, the ability of the hope-distress interaction to predict intentions to seek help, beyond that which is explained by other known predictors of help-seeking intentions (i.e., help-seeking attitudes, past help-seeking, and distress) was explored. The results of this study have the potential to inform how mental health services are marketed and further clarify how individuals in distress enter the mental health treatment system.
CHAPTER II
REVIEW OF THE LITERATURE

This chapter opens with a brief review of existing models of psychological help-seeking, followed by an examination of research on help-seeking intentions. A review and critique of extant help-seeking intentions research is then offered, along with suggestions for future research. Next, Hope Theory (Snyder et al., 1991) is presented, and hope is discussed as a dispositional variable with the potential to add to our understanding of help-seeking intentions. Relevant research on the hope construct is then reviewed, and applications of Hope Theory to the study of help-seeking research are discussed. The chapter closes with a summary of specific hypotheses for the current study.

Psychological Help-Seeking Definition and Models

The topic of psychological help-seeking, or how individuals come to seek assistance for psychological problems, has been a focus of inquiry in the mental health professions for several decades. It can be conceptualized as a coping mechanism (Wills & DePaulo, 1991) aimed at alleviating emotional discomfort by voluntarily making contact with formal or informal system(s) of care (Pescosolido & Boyer, 1999). Psychological help-seeking is a complex process involving characteristics of the help-seeker, the type of help sought, the context, and the potential helper (Wills & DePaulo, 1991).
Several models of help-seeking behavior, originating from various disciplines, have been advanced. A popular model of help-seeking is Fischer, Winer, and Abramowitz’s (1983) five-stage process, which synthesized help-seeking models from the current literature at the time of its development. In the first stage of Fischer et al.’s (1983) model, the individual recognizes the existence of a problem that is currently causing, or will in the future cause, harmful personal consequences. Furthermore, the problem is acknowledged by the individual to be psychological in nature. In the second stage, the individual generates options for addressing the issue. Here, the individual contemplates various alternatives, which can include doing nothing, attempting self-corrective measures, looking to others, such as a family member, friend, or clergy member for informal assistance, consulting a professional, or some combination of these. During this stage, several possibilities may be tested and found to be unsatisfactory before psychological help-seeking is considered. Alternatively, the individual may perceive help-seeking to be the most effective option and choose it initially, or may be persuaded by others to consider seeking help when other alternatives fail to produce change (Fischer et al., 1983).

In the third stage, the individual forms an intention to seek help, which is informed by a cost-benefit analysis of the various aspects of the help-seeking process, including therapist or agency factors (e.g., monetary expense and perceived effectiveness of therapy), social factors (e.g., persuasion and stigma), and personal factors (e.g., tolerability of the problem and beliefs about accepting help). Fischer et al. (1983) suggested that some precipitating event, such as a marked worsening of the problem or increased resources to engage in therapy, must take place in order to
mobilize the individual to take help-seeking action. Occurring in the fourth stage, it is hypothesized that such an event will not propel the individual to seek help in the absence of an already-formed intention to do so (developed in stage three). The final stage, overt help-seeking, may result in a meeting with a therapist, or may be thwarted by various barriers (e.g., lack of knowledge of resources, or unavailability of appointments).

Pescosolido and Boyer (1999) provided a review of five additional major help-seeking models, the majority of which were derived largely in the context of medical help-seeking. An early conceptualization was the sociobehavioral Model (SBM; Andersen, 1968; Andersen & Newman, 1973). The SBM proposed that individuals first identify some perceived need for help. Predisposing social, personal, and cultural characteristics (e.g., gender, age, socioeconomic status, and other demographic and individual differences variables) are also included in the model. Enabling resources, such as availability of appropriate help and financial resources, combine with need and predisposing characteristics to influence individuals’ use of health services. In the SBM, these conditions all are considered within the larger context of the evolving health care system (Pescosolido & Boyer, 1999). The health belief model (HBM; Rosenstock, 1966) includes constructs similar to those identified in the SBM, but the HBM places emphasis on predisposing characteristics of the individual which may promote help-seeking behavior (Pescosolido & Boyer, 1999). In particular, the HBM examines individuals’ general and specific health beliefs (e.g., concern about health, willingness to seek help, perceived susceptibility to disease), prior health care experiences, and sociodemographic factors.
Pescosolido and Boyer (1999) also discussed two more recent models of help-seeking, which they characterized as “dynamic” and “process-oriented” (p. 404), because they focus more directly on the use of health services as a socially embedded process. An example of this type of model is the help-seeking decision-making model (HDM; Goldsmith, Jackson, and Hough, 1988). In this five-stage model, psychiatric symptoms occur, followed by recognition of the need for help. Next, services and particular types of providers are accessed, and then decisions are made about continuing, changing, or ceasing care. An important aspect of the HDM is the authors’ contention that predisposing and enabling characteristics are influential in each stage (Pescosolido & Boyer, 1999). A more complex process is described in the network-episode model (Pescosolido, 1992). The model begins with the episode base for the individual, which includes one’s personal health background, characteristics of the current distressing event, and sociodemographic and predisposing characteristics. The individual draws upon his/her social support network, including socially influenced help-seeking attitudes and beliefs. This system interacts with the individual’s illness career, or past key experiences with the (mental) health care system, as well as characteristics of the treatment system itself, to predict present help-seeking tendencies.

Pescosolido and Boyer (1999) commented that these models of help-seeking have each evolved over time, often incorporating key elements from the other approaches. One important commonality among all of the models is the inclusion of predisposing factors, such as personality traits, previous experiences, and dispositions, which influence help-seeking behavior. Sociodemographic characteristics (e.g., age, gender, race, socioeconomic status) are implicated in each model, and each assumes that
awareness of distress or symptoms precipitates the help-seeking process. Other
dimensions of individual difference are also deemed important in many of the models.
These include, for example, health beliefs and beliefs about help-seeking in the HBM
(Rosenstock, 1966) and the SBM (Andersen, 1968). As is discussed later in this
chapter, hope may be one such predisposing individual characteristic that influences the
decision to seek help.

Help-Seeking Intentions Research

In addition to theoretical models of the help-seeking process, a large body of
empirical literature has attempted to further our understanding of this phenomenon.
Research on this topic has addressed many aspects of the help-seeking process, and has
evolved in complexity and focus. Early empirical investigations sought to identify the
demographic characteristics of help-seekers (e.g., Fischer & Cohen, 1972; Fischer &
Turner, 1970; Surgenor, 1985; Wolkon, Moriwaki, & Williams, 1973). Recent research
has attempted to determine, through advanced statistical analyses, how several internal
and external variables together may better capture the multifaceted nature of the help-
seeking process (e.g., Cramer, 1999). The net result of this body of literature is the
enumeration of a multitude of correlates of and antecedents to help-seeking tendencies.

Help-seeking research generally can be divided into studies investigating one of
the following three aspects of the help-seeking process: attitudes about help-seeking;
help-seeking willingness, likelihood, or intentions; and help-seeking behaviors or
service utilization. Whereas help-seeking attitudes and behaviors have been
operationalized consistently in the literature, measurement of help-seeking intentions
has varied widely, as is discussed in the following sections. The body of help-seeking
research is vast, rendering an in-depth examination of each aspect beyond the scope of this review. Because the present study focuses on help-seeking intentions, a review of the intentions research is offered next, followed by a discussion of problematic issues within the body of intentions research and recommendations for future investigations.

A large body of research has examined the conditions under which potential clients report that they are willing, likely, or intend to seek help. Subtle differences seem to exist among these three terms. Use of the words “likelihood” or “willingness” implies that the individual is reporting his/her probability of seeking help under imagined circumstances or hypothetical future conditions. Help-seeking intentions refer to self-reported hypothetical behaviors, rather than actual observed help-seeking actions or attitudes toward help-seeking in general. “Intentions” are close approximations of behavior (Ajzen & Fishbein, 1980), and differ from willingness and likelihood in that they represent individuals’ current actual help-seeking plans, rather than hypothetical tendencies under imagined conditions.

Despite these slight differences in terminology, studies on help-seeking willingness, likelihood, and intentions, herein collectively referred to as help-seeking intentions research, are reviewed as a group next. In fact, the majority of studies purporting to examine help-seeking intentions have actually assessed help-seeking willingness or likelihood. A review of the help-seeking intentions literature reveals that three constructs have repeatedly emerged in the literature as being statistically related to intentions to seek help: previous help-seeking behavior, help-seeking attitudes, and distress.
Previous help-seeking behavior and help-seeking intentions. Individuals’ history of help-seeking behavior has consistently been related to current help-seeking intentions. In an early study investigating the influence of previous help-seeking, Halgin et al. (1987) surveyed a sample of 429 undergraduate students about their past use of professional psychological services and their current intentions to seek psychological help. Previous help-seeking was measured by one item asking whether participants had sought professional psychological help in the past, and 63 participants indicated that they had done so. Current help-seeking intentions were also measured with a single item, “I intend to seek professional psychological help within the next month,” and participants responded using a seven-point Likert scale, ranging from -3 (highly unlikely) to +3 (highly likely). Participants reported their current level of depressive symptoms using the Beck Depression Inventory (BDI; Beck, Ward, Mendelsohn, Mock, & Erbaugh, 1961), and a score of 12 or greater (on a scale from 0 to 63) was defined as “depressed.” Participants were then divided into groups based on the severity of their depressive symptoms and whether they had sought help in the past, resulting in three groups: non-depressed non-seekers, depressed non-seekers, and depressed seekers.

Effects of group membership on current intentions to seek help (and other dependent variables not pertinent to the current discussion) were analyzed using multivariate analysis of variance (MANOVA). Results indicated a significant main effect for group, Wilk’s $\lambda = .66, F (6, 184) = 7.04, p < .0001$. A post hoc ANOVA predicting help-seeking intentions from group membership was significant, $F (2,199) = 21.43, p < .001$. The strongest intentions to seek professional psychological help within
the next month were found among depressed participants who had previously sought psychological help ($M = 1.17, SD = 1.69$). Depressed non-seekers reported the next strongest intentions to seek help ($M = 0.80, SD = 1.90$), followed by non-depressed non-seekers ($M = -1.82, SD = 1.40$). The depressed seekers’ reported help-seeking intentions were significantly greater than those of participants who had no history of seeking professional psychological help. In other words, those who had sought help in the past reported greater intentions to seek help than those who had no such help-seeking history. This study provided initial evidence that past help-seeking is positively related to current intentions to seek help, and a strength of the study is its measurement of short-term intentions to seek help among currently distressed individuals.

In a study that focused on the roles of help-seeking attitudes, distress, and treatment fearfulness in relation to help-seeking intentions, Deane and Todd (1996) compared intentions to seek help between college students in New Zealand who had previously sought mental health services and those with no prior help-seeking history. Help-seeking intentions were measured by two items (one for each of two problem types) asking, “If you did have [a personal-emotional problem or suicidal thoughts], how likely is it that you would seek professional psychological help from a psychologist or counselor?” Both items were rated on a nine-point Likert scale (1 = extremely unlikely, 9 = extremely likely).

Of the 107 participants, 42 indicated that they had previously received services from a psychologist or counselor. For the personal-emotional item, students with previous help-seeking behavior reported that they would be significantly more likely to seek help than those with no prior mental health service history ($t = 2.30, p < .01$, one-
tailed). However, there was no difference between the two groups’ intentions to seek help for suicidal thoughts \( (t = .20, ns) \). These results suggest that, at least for some psychological problems, having previous therapy experience allows college students to view help-seeking as a viable option for dealing with psychological distress. Deane and Todd (1996) suggested that the lack of an effect for previous help-seeking in the case of suicidal thoughts may be due to a ceiling effect, with all participants reporting relatively high intentions to seek help for suicidal thoughts (prior help-seekers’ \( M = 6.63, SD = 2.67; \) prior non-seekers’ \( M = 6.53, SD = 2.52; \) both on 1 to 9 scale). One drawback of this study is the method by which help-seeking intentions were operationalized. Respondents indicated their likelihood of seeking help in the hypothetical event that they experienced psychological problems, rather than considering current level of distress and relating this to current help-seeking intentions. Therefore, the external validity of the findings is limited by the study’s analogue design.

Two studies (Bringle & Byers, 1997; Meissen et al., 1996) examined the influence of past help-seeking on intentions to seek specialized types of mental health treatment. First, Meissen et al. (1996) examined the influence of past use of psychological services on college students’ willingness to attend a self-help group. Phone interviews were conducted with 270 college students, and participants indicated their likelihood of attending a self-help group for 16 common problems using a four-point Likert scale \( (1 = \text{definitely no}, 4 = \text{definitely yes}) \). Participants also indicated whether they had ever participated in a self-help group or individual therapy, and were divided into four groups based on their responses: those who had been in a self-help group only, those who had been in individual therapy only, those who had been in both a self-help group
and individual therapy, and those who had been in neither form of treatment. ANOVA was utilized to examine the effects of prior help-seeking on the mean rating of intentions to seek help across the 16 problems, and reached significance, \( F(3,266) = 5.97, p < .05 \). The strongest intentions to seek help from a self-help group were observed among students who had previously attended either a self-help group or both individual therapy and a self-help group, and these groups’ help-seeking intentions were not significantly different from one another. Contrary to hypothesis, the weakest reported intentions to seek help from a self-help group were observed among those students who had previously attended individual therapy only, and this groups’ help-seeking intentions were significantly different than those of students who had attended a self-help group in the past (either alone or along with individual therapy). Furthermore, intentions to attend a self-help group were not significantly different between those students who had attended individual therapy only and those with no help-seeking history. Meissen et al. (1996) interpreted these findings to mean that, for intentions to attend a self-help group, prior participation in individual therapy alone is not enough to raise intentions; rather, prior help-seeking experience must include use of a self-help group to strengthen likelihood of future self-help group attendance.

Three important limitations of this study should be noted, as they likely influence the interpretation of the findings. First, the list of 16 problems may not have been representative of the problems most currently experienced by college students, and therefore respondents may have had difficulty estimating their help-seeking intentions in the various scenarios. Second, summing intentions across the 16 problems may have obscured differences in help-seeking intentions for different types of problems. The
third limitation concerns the measurement of help-seeking intentions. Respondents were asked to report their likelihood of seeking help in the imagined situation of experiencing 16 different problems. However, it is unknown which, if any, of the stimulus problems were currently being experienced by the respondents, so their reported intentions must be considered hypothetical. Despite these limitations, this study lends support to the notion that past help-seeking is related to future intentions to seek help.

In a second study of help-seeking intentions for specialized mental health services, Bringle and Byers (1997) studied married individuals (N = 222) from a combined university and community sample in terms of their self-reported likelihood of seeking marriage counseling for 20 common relationship concerns. Likelihood of seeking marriage counseling for each of the problems was rated on a seven-point Likert scale ranging (1 = highly unlikely, 7 = highly likely). Respondents also reported their history of marriage counseling using a yes/no response format. Hierarchical regression analysis was used to explore the influence of prior marriage counseling, help-seeking attitudes, and perceptions of subjective norms about help-seeking on likelihood of seeking help. Relevant to the current discussion is the relationship between past help-seeking and reported likelihood of seeking counseling should a relationship problem arise. Past help-seeking (yes or no, dummy-coded) was entered alone in the first step of the regression, and mean likelihood score across all 20 problems served as the dependent variable. There was a significant relationship in the first step between past help-seeking and intention to seek help, such that previous participation in marriage counseling was positively related to intentions to seek marriage counseling in the future, $r = .19, p <$
Thus, as with intentions to seek help through self-help group attendance (Meissen et al., 1996), it appears that past participation in marriage counseling is positively related to intentions to seek similar help in the future. Yet this study is also limited in its operationalization of help-seeking intentions in the same manner as Meissen et al. (1996), as respondents rated their estimated likelihood of seeking help in the future, but were not reporting their current actual help-seeking intentions.

Carlton and Deane (2000) examined intentions to seek help for “personal-emotional problems” and “suicidal thoughts” among 221 high school students in New Zealand. Again, previous help-seeking was operationalized using one item with a yes/no response format. Intentions to seek help for the two problem categories were measured with one item each, which asked how likely the respondent would be to seek professional psychological help in the event that he/she experienced each type of problem. These two items were scored on a nine-point Likert scale from extremely unlikely to extremely likely. Also measured were current level of distress, attitudes toward psychological help-seeking, fears about treatment, and suicidal ideation.

Two hierarchical regression analyses were performed, one predicting likelihood of seeking help for personal-emotional problems and one for likelihood of seeking help for suicidal thoughts, and in each case, prior help-seeking (yes or no, dummy-coded) was entered in one step along with all other variables. For the regression predicting personal-emotional problems, prior help-seeking did not emerge as a significant predictor of help-seeking intentions ($p > .05$). On the other hand, for the regression predicting intentions to seek help for suicidal thoughts, having sought psychological help in the past was a unique significant predictor of intentions to seek help for suicidal
thinking, $\beta = -.20, p < .05$, but this relation was in the opposite direction as hypothesized, with past help-seeking being related to lower intentions to seek help for suicidal thoughts. Past help-seeking uniquely accounted for 4% of the variance in help-seeking intentions. It should be noted that all three significant predictors of intentions to seek help for suicidal thoughts (prior help-seeking, attitudes toward help-seeking, and degree of suicidal ideation) evidenced inverse relations to help-seeking intentions. The authors suggested that this general trend to report lower likelihood of seeking help for suicidal thoughts has to do with the cognitive rigidity and limited problem-solving often associated with suicidal thinking (Carlton & Deane, 2000). However, this explanation remains empirically unexamined. As with the two previous studies (Bringle & Byers, 1997; Meissen et al., 1996), short-term help-seeking intentions were not measured; rather, respondents rated their likelihood of seeking help in the hypothetical case of experiencing either of the two problems considered. Also, the terminology used to describe the problem types, “personal-emotional problem” and “suicidal thoughts,” may have been unclear or confusing to respondents. It seems possible that respondents do not distinguish between these types of problems, but rather seem them as overlapping conceptually.

More recently, researchers have examined Surgenor’s (1985) suggestion that it is the quality of previous contact with mental health services that influences future help-seeking intentions (Ciarrochi et al., 2002; Deane et al., 1999). As such, these studies have assessed the degree to which past therapy was seen as useful, in addition to mere participation in therapy. For example, Deane et al. (1999) studied the relation between perceived usefulness of past mental health services and intentions to seek help for
personal-emotional problems and suicidal thoughts among 111 male prison inmates in New Zealand, 73 of whom reported receiving mental health services in the past. Likelihood of seeking help was operationalized as in Carlton and Deane (2000). Respondents used a five-point Likert scale to rate the helpfulness of prior contact (ranging from extremely unhelpful to extremely helpful). Scores on the helpfulness rating were dichotomized by a mean split, and participants were divided into three groups (no prior help-seeking, prior unhelpful contact, or prior helpful contact) on the basis of these ratings.

Two ANOVAs were conducted, with likelihood of seeking help for personal problems and suicidal thoughts each serving as the dependent variable in one analysis. In each analysis, group membership based on past help-seeking served as the independent variable. For personal-emotional problems, the ANOVA was significant, $F (2,100) = 4.77, p < .05$, and post-hoc paired $t$-tests indicated that those who rated their prior contact as helpful reported significantly higher likelihood of seeking help than those who perceived their prior contact to be unhelpful and those with no prior contact. The results for suicidal thoughts paralleled those for personal-emotional problem, with one exception. Specifically, the ANOVA was significant, $F (2,101) = 3.56, p < .05$, and post-hoc paired $t$-tests suggested that those inmates who had helpful previous mental health care experiences reported that they would be more likely to seek help for suicidal thoughts than those inmates who perceived their prior help-seeking as unhelpful. However, in the case of suicidal thoughts, inmates who had no prior contact with the mental health care system were not significantly different from the two groups of inmates who had previously sought help. In summary, the highest likelihood of seeking
help for both personal problems and suicidal thoughts was observed among inmates with prior help-seeking that was perceived to be helpful.

These results are notable in light of Deane et al.’s (1999) additional analyses comparing help-seeking intentions of inmates who had received psychological help in the past to those who had not. For both personal-emotional problems and suicidal thoughts, t-tests indicated that the groups were not significantly different in their reported likelihood of seeking psychological help (p’s > .05), which suggests that perceived helpfulness of past services is more salient that participation in services per se. However, a concerning limitation in the design of this study is that the authors apparently conducted five ANOVAs without adjusting the critical p-value to control for experiment-wise Type I error; a more powerful test of their hypotheses would have been to conduct a single MANOVA with five dependent variables, and explore univariate relationships post hoc. Alternatively, the authors could have conducted multiple regression rather than ANOVAs, which required prior help-seeking usefulness ratings to be dichotomized to form two groups of respondents. Indeed, the method of dichotomizing these scores raises questions about the meaning of the results, in that the sample was split into those who rated their previous therapy as unhelpful (1 or 2 on five-point scale) and those who rated it as neutral or helpful (3, 4, or 5 on five-point scale). Nevertheless, this study provided preliminary evidence that perceived usefulness of past help-seeking, rather than merely having sought help, may be the critical factor that generates intentions to seek help in the future.

Additional evidence that prior help-seeking usefulness is related to help-seeking intentions was provided by Ciarrochi et al. (2002), as one aspect of their study of
emotional competence and intentions to seek help among students from a private Christian high school in Australia (N = 137). Using the General Help-Seeking Questionnaire (GHSQ; Deane et al., 2001), students indicated whether they had previously sought help from a mental health professional, and if so, rated the usefulness of this experience on a five-point Likert scale (not at all useful to extremely useful). They also reported their likelihood of seeking help from ten different help sources: boyfriend/girlfriend, friend, parent, other relative, mental health professional, doctor, teacher, pastor/priest, youth group leader, or help line. For each help source, participants rated on a seven-point Likert scale their willingness to seek help for two types of problems: personal-emotional problem and suicidal thoughts.

For the subset of 38 students who reported that they had seen a mental health professional in the past, perceived usefulness of past therapy was correlated with intention to seek help (summed across the two problem types), $r = .55, p < .01$, such that viewing past help-seeking experiences as useful was related to greater likelihood of seeking help from a variety of help sources in the future. An important limitation of this study, similar to that noted for the other studies (Bringle & Byers, 1997; Carlton & Deane, 2000; Meissen et al., 1996), is that the GHSQ measures hypothetical intentions to seek help if one ever experiences psychological problems, rather than actual current help-seeking intentions. Although this result may be limited in its generalizability to other populations due to the characteristics of the sample, it lends tentative support to Surgenor’s (1985) suggestion that perceived helpfulness of past help-seeking is related to positive intentions to seek professional psychological help in the future.
The results of these investigations (Bringle & Byers, 1997; Carlton & Deane, 2000; Deane & Todd, 1996; Halgin et al., 1997; Meissen et al., 1996) support the notion that previous exposure to mental health services may facilitate a willingness to engage in future help-seeking from a similar help-source, should mental health concerns arise. Furthermore, two recent studies (Ciarrochi et al., 2002; Deane et al., 1999) suggest that this relation may be due to the perception that past therapy was useful. Thus, across a variety of populations, types of psychological services, and operationalizations of help-seeking intentions, it appears that past help-seeking behaviors consistently are predictive of intentions to seek help in the future. Based on the results of Ciarrochi et al. (2002) and Deane et al. (1999), that prison inmates and Christian high school students who judged their prior help-seeking to have been useful reported greater intentions to seek help than persons who judged prior mental health services to be unhelpful, it seems that future research should continue to assess perceptions of prior help-seeking and attempt to replicate this finding in other populations.

*Attitude toward help-seeking and help-seeking intentions.* Another “robust finding” (Cepeda-Benito & Short, 1998; p. 63) concerns the relation between help-seeking attitudes and intentions. Attitudes have reliably emerged as a strong predictor of help-seeking intentions in a variety of studies, with individuals who hold positive attitudes toward help-seeking consistently reporting greater intentions to seek help than those holding negative help-seeking attitudes (Bayer & Peay, 1997; Carlton & Deane, 2000; Cepeda-Benito & Short, 1998; Cramer, 1999; Deane et al., 1999; Deane & Todd, 1996; Kelly & Achter, 1995). Research on help-seeking attitudes has been aided by the development of the Attitudes Toward Seeking Professional Psychological Help Scale.
(ATSPPHS; Fischer & Turner, 1970) and this measure, in its various forms, is widely used in the study of help-seeking attitudes. The ATSPPHS items tap respondents’ recognition of need for psychological help, stigma tolerance, interpersonal openness, and confidence in mental health practitioners. Put another way, the ATSPPHS measures the extent to which problems have been identified as psychological in nature, the degree of comfort with the idea of help-seeking, and whether mental health treatment is viewed as potentially helpful.

Kelly and Achter (1995) used the ATSPPHS to assess help-seeking attitudes among a sample of 260 college students. Intentions to seek help were measured using the Intentions to Seek Counseling Inventory (ISCI; Cash, Begley, McCown, & Weise, 1975), which presents 17 problems common to a college student population. Respondents rate on a six-point Likert scale (very unlikely to very likely) their likelihood of seeking help if they had each problem, and these ratings are summed across all 17 problems. Zero-order correlations revealed that help-seeking attitude scores and intentions to seek help were positively related, $r = .36, p < .05$. Furthermore, ATSPPHS scores were entered into a multiple regression along with scores on measures of self-concealment, depression, perceived social support, and gender. Together, these five variables accounted for 20% of the variance in help-seeking intentions, and ATSPPHS scores emerged as a significant predictor, $\beta = .40, p < .001$. However, the fact that all five variables, representing personality characteristics, attitudes, and distress, were entered in one block is a weakness of this method, as unique contributions to help-seeking intentions may be obscured.

26
Cepeda-Benito and Short (1998) likewise examined the relation between help-seeking attitudes and intentions within their study of self-concealment tendencies and likelihood of help-seeking. Using the ATSPPHS (Fischer & Turner, 1970) and ISCI (Cash et al., 1975), 732 college students reported their help-seeking attitudes and intentions. Participants also completed measures of distress, fears about psychotherapy, perceived social support, and self-concealing tendencies. Preliminary zero-order correlation analysis indicated that ATSPPHS and ISCI scores were positively related, $r = .35$ (however, the authors failed to report level of significance). Next, ISCI responses were analyzed using principal-axis factor analysis with direct oblimin rotation in order to arrive at categories of problems from the original list of 17. A three-factor solution was determined, and the factors were named Psychological and Interpersonal Concerns, Academic Concerns, and Drug Use Concerns. Help-seeking likelihood scores were then calculated for these three subscales, summing help-seeking ratings across the problems comprising each factor. Separate multiple regressions were conducted predicting intentions to seek help for each of these three problem types from help-seeking attitudes, distress, fears about psychotherapy, perceived social support, and self-concealing tendencies scores. For each regression, these five predictor variables were entered as one block. Relevant to the current discussion, attitudes toward help-seeking emerged as a significant predictor of likelihood of seeking help for all three problem types (Psychological and Interpersonal Concerns $\beta = .41, p < .0001$; Academic Concerns $\beta = .17$; Drug Use Concerns $\beta = .17$, all $p$’s < .0001). Thus, help-seeking attitudes again emerged as being significantly related to help-seeking intentions.
Reinforcing the conclusions reached in these two studies regarding help-seeking attitudes and intentions, Cramer (1999) reanalyzed data from the Kelly and Achter (1995) and Cepeda-Benito and Short (1998) samples using path modeling. Although the focus of this study was to clarify inconsistent conclusions in the previous two studies regarding the role of self-concealment tendencies and help-seeking intentions, the help-seeking attitudes—intentions link was also explored. Five constructs were included in the analyses: perceived social support, self-concealment tendencies, distress/depression, help-seeking attitudes, and help-seeking intentions. Hypothesized models were tested for the Kelly and Achter (1995) and Cepeda-Benito and Short (1998) data sets separately, and one model was determined to provide the best fit to both data sets. For the Kelly and Achter (1995) sample, the model provided a good fit to the data, $\chi^2(3) = 4.5, p < .001$; for the Cepeda-Benito and Short (1998) sample, the same model also provided a good fit to the data, $\chi^2(3) = 14.9, p < .001$. In this best-fitting model, attitudes and distress emerged as proximal predictors of help-seeking intentions, and attitudes served to mediate the relation between self-concealment tendencies to help-seeking intentions. The loadings for the direct path between help-seeking attitudes and intentions were .37 for the Kelly and Achter (1995) sample and .35 for the Cepeda-Benito and Short (1998) sample. Thus, result of this data reanalysis corroborates the conclusion that attitudes and intentions are related, and suggested that level of distress is also an important factor in the help-seeking process.

Three studies (Deane & Todd, 1996; Deane et al., 1999; Carlton & Deane, 2000), discussed earlier in relation to previous help-seeking and help-seeking intentions, also support the notion that help-seeking attitudes and intentions are related. As described
earlier, Deane and Todd (1996) examined intentions to seek help for a personal-emotional problem and suicidal thoughts among college students in New Zealand (N = 107). Help-seeking attitudes were assessed using the ATSPPHS (Fischer & Turner, 1970), and one item assessed likelihood of seeking professional psychological help for the each of the two problem types. ATSPPHS scores were correlated with intentions to seek help for a personal-emotional problem, \( r = .68, p < .005 \), and for suicidal thoughts, \( r = .38, p < .005 \), indicating that students with more positive attitudes toward seeking help reported a greater likelihood of seeking help than students with less favorable help-seeking attitudes, but that this relation was stronger for individuals experiencing a personal-emotional problem. Multiple regression analysis reiterated this relation. For both problems, scores on measures of distress, help-seeking attitudes, fear of treatment, and gender were regressed on the corresponding help-seeking likelihood rating. For personal-emotional problems, unique predictive effects were obtained for gender and ATSPPHS scores, \( \beta = .76, t = 8.11, p < .0001 \). For suicidal thoughts, only ATSPPHS scores emerged as a unique predictor of help-seeking intentions, \( \beta = .42, t = 3.44, p < .001 \).

Virtually identical results were obtained by Deane et al. (1999), who, as described earlier, investigated help-seeking intentions among male prison inmates in New Zealand. Multiple regression analyses were calculated in the same way as by Deane and Todd (1996), with the exception that gender was not included. For the regressions predicting both personal-emotional problem and suicidal thoughts, only ATSPPHS scores contributed independently to help-seeking intentions, \( \beta = .54, t = 5.64, p < .0001 \) and \( \beta = .44, t = 4.23, p < .0001 \), respectively. These results suggest that, even when
considered alongside other theoretically relevant constructs, college students’ and prison inmates’ help-seeking attitudes emerge as significant predictors of their intentions to seek help for two types of problems. Likewise, Carlton and Deane (2000) conducted two multiple regression analyses, with intentions to seek help for personal-emotional problems and suicidal thoughts each serving as the dependent variable in one analysis. For each regression, six independent variables were entered in one step: gender, past help-seeking, help-seeking attitudes, fears about treatment, distress, and suicidal ideation. Only help-seeking attitudes contributed independently to intentions to seek help for a personal-emotional problem, β = .44, p < .001. Prior help-seeking, suicidal ideation, and help-seeking attitudes all accounted for unique variance in intentions to seek help for suicidal thoughts; for help-seeking attitudes, β = .30, p < .001. However, it should be noted that the entire group of six predictors accounted for only 22% and 23% of the variance in intentions to seek help for personal-emotional problem and suicidal thoughts, respectively.

Finally, Bayer and Peay (1997) investigated help-seeking attitudes and intentions, framing their study within Ajzen and Fishbein’s (1980) Theory of Reasoned Action (TRA), which posits that attitudes about a behavior are direct predictors of intentions to engage in that behavior. In this study, attitudes toward seeking mental health services were measured with three seven-point semantic differential rating scales (good-bad, harmful-beneficial, and wise-foolish), and these three ratings were summed to create one score of attitudes toward help-seeking. Intentions were operationalized by one seven-point semantic differential (likely-unlikely) rating scale regarding seeking help from a mental health professional if experiencing a “persistent personal problem.”
Participants (N = 142) were adults recruited from the waiting room of a physician’s office in Australia. Zero-order correlation indicated that attitudes were positively related to intentions, $r = .57, p < .001$, as predicted, indicating a strong relation between favorable help-seeking attitudes and intentions to seek help. As has been previously noted, a limitation of this study is its analogue design. Yet these findings are valuable as they provide evidence of the attitudes-intentions relation using a measure other than the ATSPPHS.

Clearly, attitudes toward help-seeking have been demonstrated to relate positively to intentions to seek help for psychological problems. A limitation shared by these seven studies (Bayer & Peay, 1997; Carlton & Deane, 1999; Cepeda-Benito & Short, 1998; Deane & Todd, 1996; Deane et al., 1999; Cramer, 1999; Kelly & Achter, 1995) concerns the measurement of help-seeking intentions. Three studies (Cepeda-Benito & Short, 1998; Cramer, 1999; Kelly & Achter, 1995) operationalized help-seeking intentions using the ISCI (Cash et al., 1975). The ISCI assesses intentions to seek help if one is experiencing 17 different problems. As noted above, this method is limited in its external validity, as participants are reporting their perceived tendencies under hypothetical conditions. The remaining four studies also measured anticipated help-seeking likelihood under hypothetical circumstances. Thus, each of these studies is analogue in design. No study relating help-seeking attitudes to actual intentions to seek help could be identified in the literature. The implications of this research method are discussed later in this chapter.

Distress and help-seeking intentions. A final variable that has frequently been studied in the help-seeking literature is psychological distress (Carlton & Deane, 2000).
It seems logical to assume that, as one experiences more acute levels of distress, intentions to seek help would also increase, and this assumption has been empirically examined. In these studies, distress has been assessed in at least three different ways, representing varying levels of specificity. One common operationalization is the Hopkins Symptom Checklist-21 (HSCL-21; Green, Walkey, McCormick, & Taylor, 1988), which measures general psychological distress, somatic distress, and performance difficulty over the past seven days. Other studies have focused on one type of distress, depression, and have assessed current depressive symptomology using the Beck Depression Inventory (BDI; Beck et al., 1961). Finally, one study (Deane et al., 2001) examined level of suicidal ideation as it relates to help-seeking intentions, and suicidal ideation was operationalized with the Suicidal Ideation Questionnaire (Suicidal Ideation Questionnaire (SIQ; Reynolds, 1987), a self-report measure of suicidal thoughts occurring over the previous month. Consequently, these studies have produced mixed conclusions regarding the relation of distress and help-seeking intentions, and this literature is reviewed next.

In an early study, Halgin et al. (1987) utilized the Beck Depression Inventory (BDI; Beck et al., 1961) to operationalize distress. As discussed earlier, college students (N = 429) completed a decision measure, based on Ajzen and Fishbein’s (1980) Theory of Reasoned Action, which included one item assessing intentions to seek professional psychological help within the next month. Students also completed the BDI, and were divided into three groups on the basis of their scores and past help-seeking behavior: depressed seekers (BDI score of 12 or greater with previous help-seeking history), depressed non-seekers (BDI score of 12 or greater without previous
help-seeking history), and non-depressed non-seekers. Effects of group membership on help-seeking intentions (and other dependent variables not pertinent to the current discussion) were analyzed using multivariate analysis of variance (MANOVA). Results indicated that the strongest intentions to seek professional psychological help within the next month were found among depressed participants who had previously sought psychological help ($M = 1.17$, $SD = 1.69$). Depressed non-seekers reported the next strongest intentions to seek help ($M = 0.80$, $SD = 1.90$), followed by non-depressed non-seekers ($M = -1.82$, $SD = 1.40$). Examination of the mean intention ratings for the three groups suggests that it is level of depression that drives this pattern of results. Specifically, regardless of prior help-seeking status, those in the depressed group reported that they were more likely than not to seek psychological help in the next month. On the other hand, when holding depression status constant, prior help-seeking status was not consistently related to intentions to seek help in the next month. This study provided initial evidence that individuals currently in distress are more likely to intend to seek help in the near future than those who are not currently distressed. As previously noted, a strength of this study is its measurement of short-term intentions to seek help among currently distressed individuals. Another advantage of this study is its use of a norm-based measure of depression, which allowed for comparisons between clinical and nonclinical groups, rather than a more restricted range of nonclinical respondents. Yet, these findings are limited by the fact that only one manifestation of distress, namely depressive symptoms, was assessed. Thus, it cannot be assumed that individuals experiencing other types of distress would demonstrate similar help-seeking intentions.
Kelly and Achter (1995) utilized the updated BDI (Beck & Steer, 1987) to measure depressive symptomology. As previously described, college students (N = 260) reported their intentions to seek help for 17 common problems using the Intentions to Seek Counseling Inventory (ISCI; Cash et al., 1975). Respondents rated on a six-point Likert scale (very unlikely to very likely) their likelihood of seeking help if they had each problem, and these ratings were summed across all 17 problems to arrive at a single help-seeking intentions score. Although zero-order correlations indicated that level of depression and help-seeking intentions were positively related, \( r = .18, p < .05 \), when BDI scores were entered into a multiple regression analysis with four other variables (self-concealment tendency, perceived social support, gender, and help-seeking attitudes), no significant predictive effects were found for distress. Only help-seeking attitudes and self-concealment emerged as significantly related to intentions. Kelly and Achter (1995) interpreted this finding to indicate that, in this sample, the tendency to avoid disclosing sensitive personal information was more salient to the decision to seek help than degree of distress being experienced. However, one shortcoming of the methodology used by Kelly and Achter (1995) is that several independent variables were simultaneously entered into a single regression step, so multicollinearity among these variables may have obscured their relations with the dependent variable.

In a recent series of studies, Deane and his colleagues have examined level of distress and intentions to seek help among college students (Deane & Chamberlain, 1994; Deane & Todd, 1996), high school students (Carlton & Deane, 2000), and male prisoners (Deane et al., 1999) in New Zealand and Australia. In each of these studies,
distress was measured by the HSCL-21 (Green et al., 1988). The HSCL-21 is a 21-item version of the 58-item Hopkins Symptom Checklist (Derogatis, Lipman, Rickles, Uhlenhuth, & Covi, 1974), and measures three aspects of psychological distress over the past seven days. The three factors are general (psychological) feelings of distress, somatic distress, and performance difficulty.

As previously discussed, Deane and Chamberlain (1994) investigated New Zealand college students’ (N = 263) distress and treatment fears in relation to help-seeking likelihood. Help-seeking likelihood was measured with a single Likert scale item through which respondents rated their likelihood of seeking help for a personal problem. Together with the three components of treatment fearfulness, greater distress was predictive of higher self-reported likelihood of seeking help, $\beta = .17, p < .01$. However, these variables together accounted for only 10% of the variance in help-seeking intentions. Nonetheless, these results echo those of Halgin et al. (1987), providing further support for the notion that increased distress is related to greater help-seeking intentions.

Deane and Todd (1996) also utilized a sample of New Zealand university students (N = 107), who completed the HSCL-21, the ATSPPHS, and a measure of treatment fearfulness. These constructs were used to predict help-seeking intentions for two types of problems, personal – emotional and suicidal thoughts, each of which was measured with a single item. To explore further the predictive utility of these variables, multiple regression analyses were conducted for each of the two intentions items, using distress, help-seeking attitudes, treatment fearfulness, and gender to predict intentions. The four variables, entered in a single step, together accounted for 50% and 16% of the variance
in intentions to seek help for personal – emotional problems and suicidal thoughts, respectively. However, in each case, distress as measured by the HSCL-21 failed to emerge as a significant unique predictor of intentions beyond that which was accounted for by the other predictors. In fact, for personal-emotion problem, help-seeking attitudes (as measured by the ATSPPHS) and gender demonstrated unique predictive power; for suicidal thoughts, only ATSPPHS scores accounted for unique variance in help-seeking intentions.

On the basis of these results, Deane and Todd (1996) suggested that level of distress might not be the most meaningful determinant of help-seeking intentions. One potential reason for the absence of a relation between distress and help-seeking intentions in the Deane and Todd (1996) study is the use of a nonclinical sample. Scores on the HSCL-21 can range from 21 (no distress) to 84 (extreme distress); mean scores for participants in the Deane and Todd (1996) study were 33.24 ($SD = 8.59$) for those who had previously sought help and 33.10 ($SD = 7.34$) for those who had not previously sought help, representing a fairly low level of distress. Thus, it is possible that individuals in this sample were not currently at a critical level of distress, and therefore were not sufficiently motivated to seek help. Whether participants in the Deane and Chamberlain (1994) study exhibited higher levels of distress as compared with the Deane and Todd (1996) sample, thus accounting for the significant relation between distress and help-seeking intentions in the former study, cannot be determined because mean HSCL-21 scores were not reported by Deane and Chamberlain (1994). A notable characteristic of the Deane and Todd (1996) study is that the sample’s mean age was 40 ($SD = 11.43$) years. Thus, these results may be more indicative of adults’ help-
seeking intentions than those of other studies using college student samples. However, this difference in sample age may be another explanation for the disparity in results between this study and the Deane and Chamberlain (1994). Also, as previously noted, multicollinearity may be an issue when several variables that could be related to one another are entered into one regression step.

Deane et al. (1999) also used the HSCL-21 to measure psychological distress. In their sample of 111 male prisoners in New Zealand, mean distress scores, with possible scores ranging from 21 to 84, were 39.48 ($SD = 12.26$) for prisoners with no prior mental health contact, 39.59 ($SD = 10.94$) for prisoners with prior mental health contact that was rated as unhelpful, and 39.60 ($SD = 11.87$) for those with helpful prior contact. Help-seeking intentions were measured with two items, as in the Deane and Todd (1996) study. Two multiple regression analyses, one for the personal – emotional help-seeking intentions and one for suicidal thoughts intentions, were conducted, with distress, help-seeking attitudes, and treatment fearfulness entered in one step as predictors. These variables accounted for 34% and 24% of the variance in intentions to seek help for personal – emotional problems and suicidal thoughts, respectively. In both cases, only help-seeking attitudes emerged as significant predictors of intentions, although again, multicollinearity among the independent variables is a concern. Hence, these results are consistent with the conclusion offered by Deane and Todd (1996) that level of distress is not meaningfully related to help-seeking intentions beyond that which can be attributed to help-seeking attitudes.

Carlton and Deane (2000) employed a similar methodology in their study of 306 New Zealand college students, and arrived at a similar pattern of results. In addition to
the ATSPPHS, HSCL-21, TAPS (a measure of treatment fearfulness; Kushner & Sher, 1989), and two intentions items, participants also completed the Suicidal Ideation Questionnaire (SIQ; Reynolds, 1987), a 30-item self-report measure of suicidal thoughts occurring over the previous month. Distress, help-seeking attitudes, treatment fearfulness, and suicidal ideation together accounted for 22% and 23% of the variance in intentions to seek help for personal – emotional problems and suicidal thoughts, respectively. Identical to the pattern of results described by Deane et al. (1999), only ATSPPHS scores (help-seeking attitudes) were significantly predictive of help-seeking intentions for the two types of problems. However, for both these studies (Carlton & Deane, 2000; Deane et al., 1999), since the independent variables were entered in one step, it could be that the relation between distress and intentions was statistically obscured due to multicollinearity.

A final study of help-seeking intentions that operationalized distress using the HSCL-21 was reported by Cepeda-Benito and Short (1998). As described earlier, college students (N = 732) reported via the ISCI (Cash et al., 1975) their intentions to seek help for 17 different problems which were categorized (via factor analysis) into three problem factors: psychological and interpersonal concerns, academic concerns, and drug use concerns. Three multiple regression analyses were conducted, with intentions to seek help for each of the three problem categories serving as the dependent variable in each analysis. Eight independent variables (distress as measured by the three HSCL-21 subscales and measures of help-seeking attitudes, fears of psychotherapy, social support, self-concealment, and the social support x self-concealment interaction) were entered in a single step. Results relevant to the
relationship between distress and help-seeking intentions are as follows. For intentions to seek help for psychological and interpersonal concerns, one HSCL-21 subscale, general psychological distress, accounted for unique variance in help-seeking intentions, $\beta = .20, p < .001$. For academic concerns, the performance subscale of the HSCL-21 accounted for unique variance in intentions to seek help, $\beta = .21, p < .001$. Finally, for drug use concerns, none of the HSCL-21 subscales emerges as uniquely related to help-seeking intentions. Thus, for psychological-interpersonal concerns and academic concerns, as the relevant aspect of distress increases, intentions to seek help also increase. That distress was unrelated to intentions to seek help for drug concerns is not surprising for two reasons. First, seeking treatment for drug use may involve a greater stigma and undesirable consequences (e.g., loss of employment) than seeking help for other types of problems, such that even those individuals in great distress may avoid seeking help. Also, it is possible that the HSCL-21 subscales do not relate directly to distress due to drug use, whereas for psychological-interpersonal concerns and academic concerns, a corresponding subscale of the HSCL-21 assesses distress in that life domain.

As previously noted, Cramer (1999) reanalyzed the data from the Kelly and Achter (1995) and Cepeda-Benito and Short (1998) samples using path analysis, providing a more complex view of how several variables together influence self-reported likelihood of engaging in help-seeking. Despite the fact that distress was operationalized differently in these two studies (BDI vs. HSCL-21), Cramer (1999) concluded that the same model provided the best fit to both data sets. Distress/depression emerged as a direct predictor of intentions to seek help, such that
higher self-reported likelihood of seeking help was related to heightened distress. The loadings for the direct path between distress and help-seeking intentions were .20 and .23 for the Kelly and Achter (1995) and Cepeda-Benito and Short (1998) samples, respectively. These results suggest that heightened level of distress, measured either generally or specifically, is related to increased help-seeking intentions among college students. However, it should be noted that these path loadings were weaker than those for the relation between help-seeking attitudes and intentions, suggesting, for these two college student samples at least, that help-seeking attitudes are more salient predictors of intentions to seek help than is distress. In other words, it seems that heightened distress, in the absence of favorable attitudes toward seeking psychological help, is not sufficient to activate intentions to seek help.

Finally, Deane et al. (2001) examined Australian college students’ (N = 302) willingness to seek help from several different help sources for three types of problems (suicidal thoughts, personal–emotional problems, and anxiety–depression). The effect of emotional competence (defined as the ability to perceive and manage emotions in a socially acceptable way), on intentions was also examined. Also, help-seeking intentions were more thoroughly examined than in previous studies, using the General Help-Seeking Questionnaire (GHSQ). The GHSQ, developed by Deane et al. (2001) for use in this study, consisted of 18 intentions items and four additional items. Respondents rated on a seven-point Likert scale (1 = extremely unlikely, 7 = extremely likely) their likelihood of seeking help from six different sources (friend, parent, other relative, mental health professional, telephone help line, and doctor/general practitioner) for three types of problems (personal – emotional, anxiety – depression, and suicidal
thoughts). Another item allowed respondents to indicate that they would not seek help
from any source for each problem type. Three additional items asked respondents about
the quality of their past help-seeking experiences.

Responses to the intentions ratings for the 14 personal-emotional and anxiety-
depression items (six help sources plus two “would not seek help” items) were
subjected to an exploratory principal components analysis to determine whether the
ratings for help sources could be combined. It was determined that responses to the
“parent” and “other relative” items loaded on a single factor, so these were collapsed
into a single item named “family.” The other help source factors were named “friend,”
“mental health professionals,” “physical health professionals,” “telephone help line,”
and “would not seek help.” A second principal components analysis indicated that the
items for personal-emotional problems and anxiety-depression could be combined into
one scale. Consequently, help-seeking intention ratings for two problem types, suicidal
thoughts and other problems, were created. In this study, one type of distress, level of
suicidal ideation, was operationalized by the Suicidal Ideation Questionnaire (SIQ;
Reynolds, 1987). Other variables measured were hopelessness (Beck Hopelessness
Scale; Beck et al., 1974), quality of prior help-seeking (GHSQ), and gender.

Two general linear model MANCOVAs were conducted (allowing use of the
continuous versions of the independent variables), one with the six “suicidal thoughts”
intentions ratings as the dependent variables and one with the six other problems
intentions ratings as the dependent variables. In each analysis, suicidal ideation, as
measured by the SIQ, was the independent variable used to predict help-seeking
intentions; hopelessness, quality of prior help-seeking, and gender were entered as
covariates. Results indicated that, after controlling for gender, hopelessness, and quality of prior help-seeking, suicidal ideation was related to help-seeking intentions to seek help for suicidal thoughts, Wilk’s $\lambda = .94, p < .05$. However, suicidal ideation was not related to intentions to seek help for personal-emotional problems, Wilk’s $\lambda = .97, ns$. Univariate follow-up analyses relating suicidal ideation to intentions to seek help from each of the help sources for suicidal thoughts were conducted. Level of suicidal ideation was inversely related to intentions to seek help from a mental health professional, $\beta = -.80, p < .001$, and telephone help line, $\beta = -.54, p < .05$. Furthermore, suicidal ideation was positively related to intentions to seek no help at all, $\beta = .57, p < .05$.

These analyses were repeated after dichotomizing scores on the SIQ so as to compare respondents at high levels of suicidal ideation (equivalent to a sample of suicide attempters; Reynolds, 1987) with the remainder of the sample. The pattern of results was identical, suggesting that strong suicidal ideation inhibits intentions to seek professional psychological help. Deane et al. (2001) suggested that, at clinically high levels, suicidal ideation suppresses rational thought processes that might otherwise lead to greater intentions to seek help when experiencing psychological distress. However, another possibility is that suicidal ideation is not an appropriate operationalization of distress. Indeed, it is not surprising that degree of suicidal ideation was unrelated to intentions to seek help for problems other than suicidal ideation. It seems that a more general method of assessing distress would capture variations in individuals’ experiences of distress, and maximize the meaningfulness of results. A notable
limitation of this study is that the sample consisted of 77% women, which calls into question the generalizability of the findings to the population at large.

In summary, the results provided by the series of studies described provide somewhat mixed conclusions about the role of distress in influencing help-seeking intentions. The discussion that follows explores possible reasons for these inconsistent results, critiquing the studies as a group. Themes of other research on help-seeking intentions are first reviewed, and the section concludes with suggestions for future research.

Summary and critique of help-seeking intentions research and suggestions for future research. Research on help-seeking intentions has yielded a few consistent themes. Having previously sought help is predictive of intentions to seek help in the future, and it seems that viewing past help-seeking as helpful may drive this relation. Likewise, help-seeking attitudes have consistently emerged as powerful predictors of help-seeking intentions, with more positive attitudes corresponding to a greater reported likelihood of seeking help. Finally, although the exact nature of the relation remains unclear, level of subjective distress appears to be relevant to help-seeking intentions and warrants further examination. The following discussion explores potential reasons for the conflicting results in past studies. Also, limitations within help-seeking intentions research in general are discussed, and suggestions for future research are offered.

An important question that remains unresolved in the empirical literature concerns the relation of distress to help-seeking intentions. Although the results of four studies (Cepeda-Benito & Short, 1998; Cramer, 1999; Deane & Chamberlain, 1994; Halgin et al., 1987) support the notion that greater distress is related to greater intentions to seek
help, another four studies (Carlton & Deane, 2000; Deane et al., 1999; Deane & Todd, 1996; Kelly & Achter, 1995) indicated no significant relation between distress and intentions, beyond that which could be attributed to other variables. Moreover, one study (Deane et al., 2001) suggested that higher distress level (defined as stronger suicidal ideation) was in fact related to weaker help-seeking intentions. Several possible explanations can be offered to explain these mixed conclusions regarding the distress-intentions relation.

The first possibility is that methodological differences might be responsible for the inconsistency in findings. First, although most of these studies have utilized college student samples, these samples have varied in their degree of current distress. In studies that utilized the HSCL-21 (on which scores can range from 21 to 84), reported means for sample subgroups ranged from 33.10 ($SD = 7.34$) for college students with no prior help-seeking (Deane & Todd, 1996) to 39.60 ($SD = 11.87$) for male prisoners with prior help-seeking deemed helpful. Deane and Chamberlain (1994) reported HSCL-21 scores ranging from 21 to 61 in their sample of college students. In studies utilizing the BDI (with possible scores ranging from 0 to 63) to assess level of depression among college students, reported mean scores were 8.10 ($SD = 7.47$) (Kelly & Achter, 1995); 1.31 ($SD = 1.10$) for a subgroup of nondepressed students, and 17.37 ($SD = 5.47$) for a subgroup of depressed students (Halgin et al., 1987). It should be noted that this latter level of depression corresponds to the “minimal” to “mild” categorizations in the BDI clinical scoring norms (Beck et al., 1961). Therefore, it is possible that samples that fail to reach a meaningful threshold of distress differ in some important way as compared with samples that more closely approximate a clinical population. Stated differently, it could
be that individuals must reach a certain level of discomfort before help-seeking is considered.

A second methodological difference concerns differences in the measurement of distress. At least three different operationalizations of distress have been employed in studies of distress and help-seeking intentions. The HSCL-21 (Green et al., 1988) assesses distress in three domains: general (psychological) feelings of distress, somatic distress, and performance difficulty. Thus, the HSCL-21 is a broad measure of current distress across various life domains, and has been utilized in a variety of studies (Carlton & Deane, 2000; Cepeda-Benito & Short, 1998; Deane et al., 1999; Deane & Chamberlain, 1994; Deane & Todd, 1996). Other studies have utilized the BDI (Beck et al., 1961; Beck & Steer, 1987), which measures level of depressive symptomology. Studies using the BDI to measure distress (e.g., Halgin et al., 1987; Kelly & Achter, 1995) therefore are assessing only one possible manifestation of psychological distress, namely depression. Indeed, it is quite possible that in such studies, the relation between distress and help-seeking intentions is obscured due to the narrow definition of distress. In other words, it is possible that participants reported intentions to seek help for problems other than depression, thus inflating the observed relation between “distress” (depression) and help-seeking intentions. Finally, two studies (Carlton & Deane, 2000; Deane et al., 2001) utilized the SIQ (Reynolds, 1987) to assess an even more specific aspect of distress, suicidal ideation, which carries the same concerns as use of the BDI.

A third issue concerns the measurement of help-seeking intentions themselves. One aspect of this problem lies in the unclear distinctions among the likelihood, willingness, and intentions constructs. These constructs have frequently been treated
interchangeably in studies of help-seeking, despite the possibility that these terms may not be understood by research participants as equivalent. Furthermore, help-seeking intentions themselves have been measured in at least four different ways. Unlike help-seeking attitudes, which are routinely measured using Fischer and Turner’s (1970) ATSPPHS, studies of intentions have used a variety of instruments representing varying levels of specificity, thoroughness, and immediacy. Specificity refers to how precisely problems, and therefore intentions to seek help for various problems, are defined. For example, the GHSQ (Deane et al., 2001) utilizes broad categories of problems (e.g., personal-emotional); the ISCI (Cash et al., 1975) lists specific presenting concerns (e.g., depression, weight control, academic procrastination). Thoroughness denotes the degree to which measurement of intentions to seek help for all possible problem types is achieved. Deane and Chamberlain (1994) and Bayer and Peay (1997), for example, measured intentions to seek help for only one problem; Kelly and Achter (1995), on the other hand, used the ISCI to assess intentions to seek help for 17 different problems. One problem with measuring intentions to seek help for a provided list of problems (either broad categories or specific issues) is that the problems may not be relevant to the sample, and/or may not generalize to other populations. Thus, this method is limited in its external validity. Immediacy concerns the degree to which actual intentions to seek help in the immediate future are measured. In the vast majority of studies, respondents have rated their likelihood of help-seeking intentions “if” experiencing psychological problems. Only one study (Halgin et al., 1987) has measured participants’ current intentions to seek help in the next month.
The Intentions to Seek Counseling Inventory (ISCI; Cash et al., 1975) was used in three of the studies reviewed here (Cepeda-Benito & Short, 1998; Cramer, 1999; Kelly & Achter, 1994). As stated earlier, the ISCI consists of 17 presenting problems common to a college student population. Respondents rate on a Likert scale (1 = very unlikely, 7 = very likely) their likelihood of seeking help if they had each problem. The ISCI, then, is both thorough and specific in its inclusion of a variety of detailed problems. However, the ISCI lacks immediacy, as it asks respondents about their intentions “if” they were experiencing each problem. Thus, the ISCI is suited only to analogue research, and results derived from the use of this measure should be interpreted with this in mind.

Four studies (Carlton & Deane, 2000; Deane & Chamberlain, 1994; Deane et al., 1999; Deane & Todd, 1996) used a measure similar to the Halgin et al. (1987) method. In these studies, intentions were measured with two items, using a nine-point Likert scale: “If you did have (a personal – emotional problem/suicidal thoughts), how likely is it that you would seek professional psychological help from a psychologist or counselor?” In the case of Deane and Chamberlain (1994), only the item for personal – emotional problems was used. This method offers a limited degree of specificity, but lacks immediacy and thoroughness.

As described earlier, Deane et al. (2001) developed the General Help-Seeking Questionnaire (GHSQ), which assesses intentions to seek help from six sources (three professional and three non-professional) for three categories of problems (personal – emotional, anxiety – depression, and suicidal thoughts). In another study with adolescents (Ciarrochi et al., 2002), 10 help sources were included. This measure
differs from previous methods since it assesses intentions to seek assistance from a variety of sources. However, its use of three broad categories of problems lacks the specificity offered by the ISCI and also is deficient in immediacy, asking respondents about their intentions “if” they were experiencing each type of problem.

A final operationalization of intentions is based on a method developed by Halgin et al. (1987). Participants rate their likelihood of seeking help on a Likert scale using a single item, “I intend to seek professional psychological help within the next month.” This method offers immediacy, since it refers to intentions to seek help within a brief time frame and implies current and actual, rather than hypothetical, intentions. However, the Halgin et al. (1987) method lacks both specificity, failing to delineate the reason for help-seeking, and thoroughness, as intentions are measured by only one item. This lack of specificity is concerning, since the Halgin et al. (1987) study related degree of depressive symptomology, a rather specific form of distress, to broadly defined intentions to seek help. Thus, as previously noted, it is possible that some respondents intended to seek help for problems other than depression, resulting in an inflated estimate of the relation between distress and help-seeking intentions.

A final hypothesis regarding the unclear role of distress is that some other variable moderates the distress—help-seeking relation. Given the variety of findings regarding the nature of this relation, it seems plausible that, for some individuals or under certain circumstances, distress relates differently to help-seeking intentions. Indeed, findings from a variety of studies suggest that distress alone is not sufficient to produce help-seeking behavior. For example, Vessey and Howard (1993) determined that in several large epidemiologic samples, presence of a psychiatric diagnosis was not related to a
greater likelihood of having received therapy. This suggestion is also consistent with the various models of help-seeking discussed earlier in this chapter, each of which asserts that predisposing personal characteristics are influential factors in the help-seeking process. In other words, theory and research, along with anecdotal evidence, suggest that the presence of distress is a necessary, but not sufficient, condition for producing help-seeking. This raises the question of what characteristic may propel some distressed individuals to seek counseling, when others do not. This type of effect, known as moderation (Frazier et al., 2004), appears worthy of further investigation.

In summary, methodological dissimilarities, including varying ways of measuring help-seeking intentions and distress, may be responsible for the inconsistent results regarding the influence of distress on help-seeking intentions. Based on these identified shortcomings in the extant literature, further examination of the role of distress in fostering help-seeking intentions is warranted. To do so, limitations of prior help-seeking intentions research must be addressed. The present study improved upon the previous help-seeking intentions literature by utilizing a measure of intentions that is specific, thorough, and immediate. This was accomplished by replicating a method used by Young (2003). The Problem Stimulus Survey (PSS; Young, 2003) lists a variety of common presenting problems and serves to focus participants on the one problem that is most distressing to them at present. Participants focused on this problem as they responded to a measure of their current actual help-seeking intentions, using the Intentions to Seek Professional Psychological Help Scale (ISPPHS; Young, 2003). The ISPPHS is comprised of four items describing an increasing level of commitment to seek help: intentions to (1) gather information about mental health
services, (2) contact a mental health professional, (3) schedule an appointment, and (4) keep the appointment. Thus, respondents’ actual short-term intentions to seek professional psychological help for a currently distressing problem were evaluated.

Second, distress was operationalized differently than in previous studies. The OQ-45.2 (Lambert et al., 1996) was used because it is a broad measure of distress across various life domains, and assesses dissatisfaction in various life domains in addition to measuring symptoms of clinical diagnoses. As such, this measure may capture the experiences of college students more accurately than the does HSCL-21, which emphasizes psychiatric symptoms.

Third, the present study explored the possibility that the relation between distress and help-seeking intentions is moderated by another variable. This hypothesis was proposed as a means of explaining discrepancies in the literature regarding the relation of distress and help-seeking. To address this issue, Hope Theory (Snyder et al., 1991) was offered as a framework for advancing our understanding of how distressed individuals form an intention to seek psychological help. Hope Theory and its applications are reviewed in the following section, leading into a discussion of the application of Hope Theory to the study of help-seeking intentions.

Hope Theory

One paradigm that appears to be useful in further understanding the help-seeking process is that of Hope Theory (Snyder et al., 1991; Snyder, 1994, 2000; Snyder, Michael, & Cheavens, 1999). This cognitive theory of motivation, a member of the positive psychology family (Snyder et al., 2002), addresses the thought processes
underlying goal-directed behaviors (Snyder et al., 1991; Snyder, 2000), and as such, seems well-suited to an investigation of intentions to engage in help-seeking behavior.

Hope Theory is essentially a paradigm for understanding how people think about goals (Snyder et al., 1999). Hope Theory posits that, having identified a goal or desired outcome, individuals must generate one or more viable routes to the goal along with a perceived ability to progress along these routes. These components are referred to as pathways thinking and agency thinking, respectively, and together comprise hope. Thus, according to this theory, hope is defined as “a cognitive set that is based on a reciprocally derived sense of successful (a) agency (goal directed determination) and (b) pathways (planning of ways to meet goals)” (Snyder et al., 1991, p. 571).

Goals, in Hope Theory terms, are desirable outcomes with sufficient value to occupy conscious thought (Snyder, 2000). Although the likelihood of attaining the goal may be uncertain to some degree, there should be a reasonable probability that it can be met. Goals can be short- or long-term and can reflect subgoals of more complex goals (Snyder et al., 2000). Pathways are the causal sequences or methods that result in the achievement of a goal; pathways thinking is one’s perceived ability to generate such pathways. Pathways thinking also refers to one’s perceived ability to generate alternative routes to the goal should initial attempts become blocked. Agency represents a motivational component that propels the individual along the identified pathways; agency thinking represents one’s perceived ability to begin and sustain movement along the pathways. Agentic thinking also provides the determination to identify a variety of courses to the goal and the impetus to develop new routes when goal pursuits are blocked. Agency and pathways are additive, reciprocal, and positively
related, yet remain distinct constructs. Together, agency and pathways comprise hope (Snyder et al., 1991). Hope Theory also addresses barriers to the accomplishment of goals. Barriers are defined as facts, situations, characteristics, or events that impede progress along a pathway toward an identified goal. According to the theory, persons high in hope are able to develop multiple or alternate pathways as a method of addressing barriers.

Although Snyder’s conceptualization of hope differs from other emotion-based models of hope (e.g., Stotland, 1969) because of its focus on cognitions, it does not ignore the importance of emotions in the experiences of individuals. Consistent with cognitive theory (e.g., Beck, 1976), Hope Theory assumes that emotions are sequelae of individuals’ cognitive appraisals (Snyder et al., 1991). More specifically, positive emotions result from successful pursuit of goals, and negative emotions are produced when goal-directed behavior is impeded. Moreover, agency and pathways thinking generate positive emotions by fostering the expectation that the desired outcome was achieved.

Furthermore, hope is conceptualized in this theory as a trait-level characteristic. Snyder et al. (2000) hypothesize that one’s learning history from infancy forms the foundation of this trait. As infants learn what items and actions are temporally related, the concept of causality develops. Over time, this sense of causality matures into pathways thinking, in that children learn that certain behaviors (pathways) lead to particular outcomes (goals). As infants begin to identify themselves as the instigators of a causal chain of events, agency develops. In other words, children learn that their actions have the ability to create outcomes, and this realization leads to a motivation
(agency) to shape outcomes in a way that is desirable to the child (goals). These pathways and agency thoughts iterate throughout childhood: successfully reaching goals results in positive emotions, which serve to reinforce pathways and agency thinking. To the extent that pathways and agency are utilized successfully to attain goals over time, trait hope is established. Viewed as a trait, hope is seen as cross-situational in nature. As such, hope fosters a generalized tendency to construe situations in a consistent manner, and provides a basis for planned behavior (Snyder, 1995).

Therefore, it is reasonable to speculate that individuals’ levels of trait hope influence their behavior across a wide variety of situations, including seeking help in the face of psychological distress.

Hope Theory bears similarities to several other motivation-related concepts or models, yet it is presented as a distinct approach. Snyder (2000) provided comparisons between several comparable models and hope. Two constructs with which hope shares conceptual overlap are optimism and self-efficacy. Similar to hope, optimism, as defined by both Scheier and Carver (1985, 1987) and Seligman (1991), is a cross-situational, cognition-based trait. Scheier and Carver (1985, 1987) defined optimism as a unidimensional generalized positive outcome expectancy. Thus, agency thoughts are implied in this definition of optimism, but not specifically addressed, and pathways are not captured by this definition (Snyder, 2000). In comparison, Hope Theory is more complex in that it involves two components, and therefore may be more comprehensive in offering a framework for how goals are acted on. In other words, a person high in optimism has the (perhaps unfounded) belief that “things will work out” (i.e., the goal was met), but a person with high hope has specific cognitions about how this will take
place and feels motivated to take action toward this outcome. Persons high in hope, then, maximize their positive potential while maintaining realistic appraisals about the likelihood of desired outcomes.

Seligman’s (1991) definition of optimism also differs from hope, in that hope describes the cognitive processes by which people achieve positive goals, whereas optimism, as defined by Seligman, is viewed as an attributional strategy by which people cognitively distance themselves from possible negative outcomes. This conceptualization focuses on dissociating oneself from past undesirable outcomes. In this way, it is different from Hope Theory, which attends to the means by which future favorable outcomes are pursued. Also, Hope Theory posits that past failures form an important part of how future pathways are identified, so high hope persons do not cognitively distance themselves from negative outcomes as do persons high in optimism.

Hope Theory likewise bears resemblance to Bandura’s Self-Efficacy Theory (1977, 1982, 1986, 1989), but these two constructs can be distinguished based on key differences. Self-Efficacy Theory posits that two sets of expectancies are implicit in goal-directed behavior. Outcome expectancies refer to one’s belief that a particular behavior will produce a particular desired outcome. Self-efficacy expectancies refer to confidence in one’s own ability to undertake such behavior. In Hope Theory terms, outcome expectancies are similar to pathways thinking and self-efficacy expectancies correspond to agency thinking (Snyder, 2000). Bandura has consistently emphasized the importance of efficacy expectancies over outcome expectancies and asserted that these are situation-specific (Snyder, 1995). Thus, self-efficacy theory differs from
Hope Theory, which posits that agency and pathways are iterative, are equally necessary in producing goal achievement. However, the most salient difference between self-efficacy and hope is that hope is a generalized trait appearing across a variety of settings, while self-efficacy is specific to a particular task or situation. In summary, then, optimism theory emphasizes outcome expectancies (which parallel pathways thinking), whereas Self-Efficacy Theory emphasizes efficacy expectancies (which parallel agency thinking); Hope Theory considers both to be equally relevant and reciprocally influential, and assumes that focusing on either portion alone lessens the ability to account for goal-directed accomplishments. Several researchers have empirically examined Hope Theory. Research on the hope construct and applications of hope are reviewed next.

*Hope Theory research.* Several research findings support the construct validity of hope in comparison to optimism and self-efficacy. Research on the role of hope in other psychological processes has been aided by the development of the Hope Scale (Snyder et al., 1991). This brief self-report measure operationalizes the pathways and agency components of hope as conceptualized by Hope Theory. The Hope Scale has been demonstrated to exhibit strong psychometric characteristics and has been frequently employed in psychological research in its short existence.

For example, Snyder et al. (1991) conducted a series of analyses aimed at supporting the discriminant utility of the Hope Scale, a self-report measure that operationalizes the hope construct. Of particular interest to the current discussion, the ability of hope to predict variance in several desirable outcome variables beyond that accounted for by optimism and negative affectivity was examined. Hierarchical
multiple regression demonstrated that hope was predictive of problem-focused coping, $R^2 = .02$, even after removing variance accounted for by two measures of negative affectivity and two measures of generalized positive outcome expectancies, or optimism. It should be noted that hope scores accounted for a similar amount of variance (2%) in coping as did the two measures of negative affectivity together (2%), and each measure of optimism (2% and 0%). Furthermore, when hope scores were entered first, neither the optimism measures nor the negative affectivity measures were able to significantly augment the prediction of problem-focused coping. Likewise, using number of overall mental health symptoms as the criterion variable, hope scores accounted for variance (5%) beyond that which was accounted for by negative life stress (which accounted for 10% of the variance), locus of control (4%), positive life stress (0%), and optimism (3%); when hope was entered first, only negative life stress was able to augment the prediction of mental health symptoms. Thus, hope appears to be a consistent and unique predictor of key psychological outcome variables.

Providing additional evidence, in a study of 204 college students, Magaletta and Oliver (1999) examined the interrelations among measures of self-efficacy (Self-Efficacy Scale; Sherer et al., 1982), optimism (Life Orientation Test; Scheier & Carver, 1985), mental and physical well-being (General Well-Being Questionnaire; Wheeler & White, 1991), and hope (Hope Scale; Snyder et al., 1991). Hope was correlated with self-efficacy, $r = .59, p < .001$; optimism, $r = .55, p < .001$; and general well-being, $r = .60, p < .001$. This suggests that hope overlaps with, but is not identical to, these constructs. In addition, agency and self-efficacy were found to correlate positively, as would be expected based on their conceptual overlap. Maximum likelihood factor
analysis of the Hope Scale, Self-Efficacy Scale, and Life Orientation Test items also supported the distinctiveness of the hope construct and independence of the pathways and optimism constructs. A four-factor solution was reached, with the self-efficacy, optimism, pathways, and agency items consistently loading on separate factors (Magaletta & Oliver, 1999).

Magaletta and Oliver (1999) also tested, via hierarchical multiple regression, the Hope Scale’s ability to predict unique variance in general well-being beyond the Self-Efficacy Scale and Life Orientation Test. Entered in the third step of the regression, Hope Scale total scores significantly predicted an additional 3% of the variance in General Well-Being Questionnaire scores. Despite the modest amount of variance explained, these analyses provide evidence of the distinctiveness of the hope construct.

Drach-Zahavy and Somech (2002) also provided evidence of the distinctiveness of the hope construct, in their study of the process by which hope translates into the ability to cope with health problems. Israeli college students identified a recent physiological or emotional health problem, then completed the Hope Scale and measures of resource allocation and constructive thinking. Constructive thinking, defined as a set of cognitive productive and counter-productive habitual thoughts affecting the ability to solve everyday problems while minimizing stress, is a precursor of effective coping (Epstein & Meier, 1989). Resource allocation is the ability to focus attention on coping strategies and away from distracting thoughts. The relation of hope and constructive thinking to resources allocation was examined. Also, items from the measures operationalizing these constructs were subjected to a content analysis to help determine whether they measure different constructs.
The first notable result was that content analysis of the constructive thinking and hope measures indicated only slight overlap in content, lending support to the notion of hope and constructive thinking as independent constructs. Similarly, the hope and resource allocation measures demonstrated no content overlap. Path analysis was utilized to examine how the components of hope and the components of coping each relate to the components of resource allocation. The resulting model was judged to provide a good fit to the data (GFI = 0.99, AGFI = 0.89). These results indicated that the two components of hope, pathways and agency thinking, related to different aspects of coping. Specifically, self-reported agency was most strongly related to the various components of constructive thinking. Conversely, pathways thinking was more predictive of the components of resource allocation. This pattern of results provides initial insight into the process by which hope influences the coping process, and suggests that hope is related positively to, but not redundant with, allocation of attentional resources and coping efforts.

In summary, a conceptual analysis (Snyder, 2000) of the associations between hope and several other motivation-related constructs suggests that Hope Theory provides a more comprehensive conceptualization of an individual differences variable explicating the pursuit of goals. Moreover, relevant research findings have provided initial support to this contention, and suggest that hope could be an important variable to examine in relation to a variety of desirable outcomes. For example, a number of studies have examined the role of hope in relation to a variety of psychological and health-related outcomes. Although an in-depth presentation of these findings is beyond the scope of this review, two general conclusions can be drawn from the body of
research on hope. First, hope is clearly related to a variety of goal-directed behaviors, psychological processes, and physical and mental health outcomes. Overwhelming evidence suggests that higher hope individuals accrue a variety of benefits, including higher academic achievement (Snyder et al., 2002), higher athletic achievement (Curry, Snyder, Cook, Ruby, & Rehm, 1997), lower academic anxiety (Onwuegbuzie, 1998; Onwuegbuzie & Snyder, 2000), better academic and personal life satisfaction (Chang, 1998), lower levels of depression and dysphoria (Chang & DeSimone, 2001; Kwon, 2000, 2002), lower levels of PTSD symptomology (Crowson, Frueh, & Snyder, 2001), better adjustment to injury and chronic illness (Barnum, Snyder, Rapoff, Mani, & Thompson, 1998; Elliott, Witty, Herrick, & Hoffman, 1991; Jackson, Taylor, Palmatier, Elliott, & Elliot, 1998; Lewis & Kliwer, 1996), superior coping with chronic stress (Horton & Wallander, 2001; Kashdan et al., 2002; Sherwin et al., 1992), and better perceived ability to cope with cancer diagnosis (Irving, Snyder, & Crowson, 1998), with no negative consequences of hope identified to date. Second, a consistent pattern of results among these studies is that hope provides additional power to explain variance in outcomes beyond that which is attributable to other individual differences, such as coping, problem-solving, optimism, and self-efficacy.

**Hope and Help-Seeking**

It has also been posited that psychological help-seeking itself may be understood within the hope paradigm. Snyder et al. (2000) suggested that the decision to seek therapy may be conceptualized as the result of identifying therapy as a pathway to the desired outcome of improved emotional functioning or alleviating distress. In other words, for individuals higher in hope, the belief that therapy might be helpful in
reducing distress represents the belief in a viable route to the goal of getting better. Furthermore, the decision to seek therapy indicates a “new determination” (Snyder et al., 1999, p. 184) to achieve the goal of alleviating distress, which is in essence a manifestation of agency. Thus, the person who seeks therapy demonstrates both pathways and agency thinking, or hope.

This view is consistent with Fischer et al.’s (1983) model, which alludes to both pathways and agency thinking. Specifically, pathways thinking is reflected in Fischer et al.’s (1983) second stage, when potential clients consider various alternatives for addressing the identified problem. The fourth stage, in which a precipitating event mobilizes the individual to act on the intention to seek help, is reminiscent of agency thinking, in that the individual’s motivation to take action to alleviate distress is generated at this point. Although Fischer et al. (1983) characterized this precipitating event mainly as an external force, it could be that some internal factor, such as hope, mobilizes intentions to seek help. Lastly, in Fischer et al.’s (1983) final stage of overt help-seeking, the individual may again draw on the components of hope in dealing with barriers to accessing the desired helping services. Although this model alludes to the components of hope, the degree to which levels of trait hope may influence the formation of intentions remains unexamined. Hope, as a predisposing personal characteristic, also fits into other models of help-seeking, as extant models have consistently noted the importance of personal characteristics in each stage of the help-seeking process. As previously noted, each of these conceptualizations assumes that distress is present and acknowledged by the individual, but also that distress alone is insufficient to produce help-seeking.
This assumption also fits within the Hope Theory framework, which posits that when faced with a problem (in this case, psychological distress), individuals higher in hope have a greater ability to generate and act upon strategies for alleviating distress, such as seeking professional psychological help. Applied to help-seeking, Hope Theory would posit that when distressed, persons higher in hope would report greater intentions to behave in ways that are likely to alleviate distress, including seeking professional psychological help. This hypothesis also is compatible with previous research suggesting that intentions to seek help decrease as suicidal ideation increases (Deane et al., 2001), in that increased suicidality may be a manifestation of low hope. The intersection of hope and help-seeking has been examined empirically in a small number of studies. Although no study to date has directly examined this relation using hope as operationalized by Snyder and his colleagues (Snyder et al., 1991; Snyder, 1994, 2000; Snyder et al., 1999), three studies have examined some operationalization of hope in relation to help-seeking, and these are reviewed next.

Three studies have examined the relation between hopelessness, as operationalized by the Beck Hopelessness Scale (BHS; Beck et al., 1974), and help-seeking intentions. Deane et al. (2001) studied help-seeking intentions from the perspective of help-negation, which refers to the tendency to not seek help from any source. The effect of hopelessness on help-negation was examined in a sample of Australian undergraduates (N = 302). As discussed earlier, results indicated that individuals reporting higher levels of current suicidal ideation also evidenced weaker help-seeking intentions for a variety of help sources. Zero-order correlations indicated that hopelessness was positively correlated with the intention not to seek help for
suicidal thoughts, $r = .21, p < .001$, and other personal problems, $r = .27, p < .001$. Also, hopelessness was negatively correlated with intentions to seek help from all five different help-sources for suicidal thoughts (correlations ranged from $- .14, p < .05$ for telephone help line to $- .23, p < .001$ for both family and friend). For other problems, hopelessness was also related to help-negation, but was only significantly correlated with lowered intentions to seek help from family, $r = -.34, p < .001$, or a friend, $r = -.23, p < .001$. Hopelessness was not significantly correlated with intentions to seek help from a mental health professional, telephone help line, or physical health professional. Thus, hopelessness was related to the tendency to report decreased likelihood of seeking help, for some sources, but was unrelated to professional help-seeking intentions.

Another study discussed earlier also has bearing on the relation between hope and help-seeking. Ciarrochi and Deane (2001) explored the role of emotional competence in relation to help-seeking intentions in a sample of 300 Australian college students. Also included in this study was a measure of hopelessness (BHS; Beck et al., 1974), which was used as a covariate, along with gender and prior help-seeking, in an ANCOVA predicting help-seeking intentions from emotional competence. This ANCOVA was significant, $F(1,291) = 13.6, p < .01$. Hopelessness as a covariate accounted for significant variance in intentions to seek help, such that those highest in hopelessness reported the least willingness to seek help for both emotional problems and suicidal thoughts. Thus, these results corroborated the conclusion offered by Deane et al. (2001).

Ciarrochi et al. (2002) offered a final study of the relation between hopelessness and help-seeking intentions. In a sample of 137 Australian high school students, BHS
(Beck et al., 1974) scores were negatively correlated with intentions to seek help for emotional problems from parents, \( r = -.25 \), other family members, \( r = -.25 \), teachers, \( r = -.19 \), pastors, \( r = -.21 \), and youth workers, \( r = -.18 \) (all \( p \)'s < .05). Furthermore, higher hopelessness was associated with the intention to seek help from no one, \( r = .32, p < .05 \). For suicidal thoughts, greater hopelessness was associated with lower intentions to seek help from parents, \( r = -.28 \), other family members, \( r = -.18 \), doctors, \( r = -.19 \), teachers, \( r = -.27 \), pastors, \( r = -.23 \), and youth workers, \( r = -.21 \) (all \( p \)'s < .05). Again, greater hopelessness was associated with lowered self-reported intentions to seek help from various sources for two major types of presenting problems.

The results of these three studies (Ciarrochi & Deane, 2001; Ciarrochi et al., 2002; Deane et al., 2001) seem to suggest that, for some problems, hopelessness is related to help-seeking intentions, such that increased hopelessness is associated with lowered intentions to seek help from some sources for some problems. A possible corollary of this finding is that high hope would be related to increased intentions to seek help. However, the exact nature of the hope – help-seeking relation remains unclear for several reasons. First, Deane et al. (2001) and Ciarrochi et al. (2002) reported only zero-order correlation coefficients between hopelessness and help-seeking items; exact results of Deane et al.’s (2001) covariate analyses were not provided.

Second, as previously noted, hopelessness as measured by the BHS cannot be assumed to be equivalent to the opposite of hope as conceptualized by Snyder et al. (1991). The BHS has been characterized as a measure of pessimism (Beck et al., 1974), and items assess attitudes about the future and agreement with pessimistic statements. Hopelessness, as defined by the BHS, is a system of cognitive schemas characterized by
negative expectations about oneself and one’s future life (Beck et al., 1974). Although this definition bears slight resemblance to hope as defined by Snyder and his colleagues (Snyder et al., 1991, Snyder, 2000) in terms of its emphasis on cognitions, Beck’s hopelessness appears to be more closely related to the converse of optimism than to hope as characterized by Hope Theory. As discussed earlier, optimism is a unidimensional construct representing positive expectations about the future, but it does not address one’s perceived ability to influence future outcomes. Similarly, BHS items do not assess individuals’ thoughts about their ability to affect their own future.

Third, the BHS is a unidimensional measure of negative expectations, whereas hope is comprised of two distinct, yet interrelated, components. Therefore, although these studies of hopelessness and help-seeking may provide some initial insight into the relation between hope and help-seeking intentions, it cannot be assumed that the results of these studies capture the essence of the help-seeking – hope (as defined in Hope Theory) connection.

Fourth, only one of the studies (Deane et al., 2001) relating hopelessness to intentions has included some measure of distress; in this case, the SIQ was used to assess suicidal ideation, one very specific type of distress, and Deane et al. (2001) entered hopelessness as a covariate in their analyses. Thus, based on extant studies of hopelessness, distress, and help-seeking intentions, it is unknown whether distress and hopelessness interact to influence intentions. Therefore, the moderation hypothesis remains unexamined. An additional concern in these three studies is that no measure of help-seeking attitudes was included, despite the well-established relation between attitudes and intentions. As a result, it is possible that the relation between hopelessness
and help-seeking intentions is redundant with the influence of attitudes on help-seeking intentions; however, this question remains unexamined. A final limitation of these studies is that help-seeking intentions were operationalized as respondents’ self-reported hypothetical likelihood of seeking help from six help sources for three types of problems. As noted earlier, this method of assessing intentions lacks immediacy to the respondent, creating ambiguity in terms of how these results should be interpreted.

Another investigation relating to this discussion of the influence of hope on help-seeking was included in Snyder et al.’s (1991) validation of the Hope Scale. This measure, which was shown to demonstrate strong psychometric properties, was administered to several samples of undergraduates and individuals in psychological treatment (both inpatients and outpatients). Mean Hope Scale scores were significantly lower for individuals in treatment as compared with undergraduates (all $p$s < .001). On the surface, these results seem to suggest that lower hope is related to psychological help-seeking. However, this inference is based on several assumptions that cannot be verified. First, this conclusion assumes that none of the undergraduates (the “nonclinical” sample) were receiving treatment for psychological problems. Second, this presumes that all of the individuals seeking treatment sought it willingly. Finally, this conclusion is based on a comparison of individuals presumably in distress (those receiving treatment) with a sample of individuals whose level of distress is unknown (undergraduates). It is possible that those individuals who were not in treatment were experiencing a level of distress equal to or greater than that which was experienced by individuals in treatment. More useful would be a direct examination of the influence of
level of hope on individuals’ help-seeking intentions, exploring how trait hope interacts with distress.

Finally, two findings about the characteristics of persons high in hope relate to the role of hope in the help-seeking process. A premise of Hope Theory is that more hopeful persons are more knowledgeable about resources in the environment, which aids in the pursuit of goals. Research supports this notion as it relates to coping with cancer (Irving et al., 1998). In this study, college women were divided into low- and high-hope groups, based on a median split of Hope Scale scores. Participants were then asked to list as many ways as they could think of to prevent getting cancer and to cope with cancer, if diagnosed. High-hope women generated significantly more strategies for preventing and dealing with cancer than did low-hope women, and this relation remained even after variance due to grade point average, knowledge about cancer, experience with cancer, and positive and negative affectivity were statistically removed \( (R^2 = .09, \ p < .001 \) for cancer prevention; \( R^2 = .03, \ p < .05 \) for cancer coping). To the extent that this finding can be generalized to individuals coping with psychological distress, it would follow that high-hope individuals would be more cognizant of available resources for dealing with psychological distress. Based on this, they should be more likely than low-hope individuals to report a variety of planned behaviors to alleviate distress, including intentions to seek psychological help.

A second relevant finding was reported by (Chang, 1998), who compared problem coping styles of high- and low-hope college students \( (N = 211) \). Participants were divided into high and low hope groups on the basis of a median split of Hope Scale scores, and the groups’ mean scores on the subscales of the Coping Strategies Inventory
(CSI; Tobin, Holroyd, Reynolds, & Wigal, 1989) were compared. Results indicated that these groups were significantly different in terms of their mean scores on the avoidant coping style subscale of the CSI, $t (1, 209) = -4.67, p < .001$, such that low-hope individuals were more likely to use avoidant coping than were high-hope students. Extrapolating from this finding to the question of hope and psychological help-seeking, we would expect distressed individuals low in hope to report weaker intentions to seek help, since help-seeking represents directly addressing, rather than avoiding, the problem.

These several studies (Chang, 1998; Ciarrochi & Deane, 2001; Ciarrochi et al., 2002; Deane et al., 2001; Irving et al., 1998; Snyder et al., 1991) provide preliminary indication that hope may be related in some way to help-seeking intentions. However, the exact way in which hope relates to the help-seeking process has yet to be directly examined. As described earlier, it seems possible that hope, which attempts to explain how people go about making changes and achieving goals, has bearing on the relationship between distress and help-seeking intentions. Specifically, it is suggested that help-seeking is a manifestation of high hope in situations of psychological distress. It is herein proposed that hope moderates the distress—help-seeking relation, such that for those individuals high in hope, intentions to seek help will increase as distress increases; for those low in hope, intentions to seek help was related to a lesser degree to distress.

**Summary and Hypotheses**

In summary, our understanding of the process by which individuals seek help for psychological problems has been limited by problems in the measurement of intentions.
and, in some cases, overly-specific operationalizations of distress. The present study sought to extend our understanding of the help-seeking process by further examining predictors of help-seeking intentions. Because extant research and the Theory of Reasoned Action (Ajzen & Fishbein, 1980) indicate that intentions correspond strongly with actual behaviors, this study will focus on help-seeking intentions. The construct of hope is advanced as an internal trait that may provide a useful and more comprehensive framework for understanding the formation of help-seeking intentions, and it is suggested that hope moderates the relation between distress and intentions to seek help.

Shortcomings of previous studies were addressed by using a multi-item measure of intentions that has been utilized in previous research. This method required participants to focus on a problem that is currently of concern as they reported their current help-seeking intentions. Although this method most likely resulted in a wide variety of stimulus problems (thus reducing internal validity), its external validity was augmented as participants reported their immediate intentions to seek help for a specific problem of current concern (emphasizing specificity and immediacy). Perceived helpfulness of past help-seeking was also measured, as previous research has supported that this is positively related to intentions to seek help in the future.

Figure 2.1 represents the hypothesized relations among distress, hope, perceived helpfulness of prior help-seeking, help-seeking attitudes, and help-seeking intentions. As can be seen, based on the body of research on help-seeking intentions, it was expected that attitudes toward help-seeking, distress, and perceived helpfulness of prior help-seeking would be related to intentions to seek help. Furthermore, it was proposed that hope moderates the distress-intentions relationship, and that this interaction
accounts for variance in help-seeking intentions beyond that which is accounted for by the main effects of help-seeking attitudes, past help-seeking helpfulness, and distress.

![Diagram of hypothesized roles](image)

Figure 2.1. Hypothesized roles of distress, prior help-seeking, help-seeking attitudes, and hope-distress interaction in predicting help-seeking intentions.

Initial exploration of the data served to affirm relations previously demonstrated in the literature among help-seeking history, attitudes and intentions. Furthermore, the relation between level of distress and help-seeking intentions was examined in the current sample. Thus,

**Hypothesis 1**: Past help-seeking, perceived helpfulness of past help-seeking, help-seeking attitudes, and level of distress are positively related to intentions to seek professional psychological help.

An additional purpose of this study is to extend the current literature by examining the possibility that hope moderates the relation between distress and help-seeking intentions. Thus,
Hypothesis 2: Hope moderates the relation between distress and intentions to seek professional psychological help in the next month, such that individuals high in distress have greater intentions to seek help, and that the strength of this relationship increases for individuals high in hope.

Hypothesis 2a: Agency moderates the relation between distress and intentions to seek professional psychological help in the next month, such that individuals high in distress have greater intentions to seek help, and that the strength of this relationship increases for individuals high in agency.

Hypothesis 2b: Pathways thinking moderates the relation between distress and intentions to seek professional psychological help in the next month, such that individuals high in distress have greater intentions to seek help, and that the strength of this relationship increases for individuals high in pathways.

It is furthermore suggested that hope moderates the relation between distress and help-seeking intentions, even after controlling for past help-seeking and help-seeking attitudes. Thus,

Hypothesis 3: The hope x distress interaction accounts for variance in help-seeking intentions beyond that which is accounted for by past help-seeking, help-seeking attitudes, and distress such that individuals high in distress have greater intentions to seek help, and that the strength of this relationship increases for individuals high in hope.

Hypothesis 3a: The agency x distress interaction accounts for variance in help-seeking intentions beyond that which is accounted for by past help-seeking, help-seeking attitudes, and distress such that individuals high in distress have greater intentions to seek help, and that the strength of this relationship increases for individuals high in agency.

Hypothesis 3b: The pathways x distress interaction accounts for variance in help-seeking intentions beyond that which is accounted for by past help-seeking, help-seeking attitudes, and distress such that individuals high in distress have greater intentions to seek help, and that the strength of this relationship increases for individuals high in pathways.

Among individuals who have sought psychological help in the past, it is suggested that hope moderates the relation between distress and help-seeking intentions, beyond
the effects of perceived helpfulness of past mental health services and help-seeking attitudes. Therefore,

**Hypothesis 4**: The hope x distress interaction accounts for variance in help-seeking intentions beyond that which is accounted for by perceived helpfulness of past help-seeking, help-seeking attitudes, and distress, such that individuals high in distress have greater intentions to seek help, and that the strength of this relationship increases for individuals high in hope.

**Hypothesis 4a**: The agency x distress interaction accounts for variance in help-seeking intentions beyond that which is accounted for by perceived helpfulness of past help-seeking, help-seeking attitudes, and distress, such that individuals high in distress have greater intentions to seek help, and that the strength of this relationship increases for individuals high in agency.

**Hypothesis 4b**: The pathways x distress interaction accounts for variance in help-seeking intentions beyond that which is accounted for by perceived helpfulness of past help-seeking, help-seeking attitudes, and distress, such that individuals high in distress have greater intentions to seek help, and that the strength of this relationship increases for individuals high in pathways.
CHAPTER III
METHOD

Participants

Participants were undergraduate students from a large Midwestern state university who were recruited from introductory and upper level psychology courses. Participants received extra course credit in exchange for their participation. A power analysis, conducted in advance, was calculated to determine the number of participants necessary for the zero-order correlations and multiple regressions that were used to test the hypotheses. Previous research findings were examined to determine the amount of variance in help-seeking intentions that is commonly explained by each of the variables being studied in the current investigation. These relations were used to estimate the amount of variance in intentions expected to be explained by the independent variables in the current study.

For the regression analysis testing Hypothesis 4 (the most stringent statistical test) it was expected that help-seeking attitudes, prior help-seeking behavior together would account for 20% of the variance in intentions, that distress would account for an additional 10% of the variance in intentions, and the distress x hope interaction would explain an additional 5% of the variance in intentions. Together, it was expected that the variables included in this study would account for approximately 35% of the variance in help-seeking intentions. Power analysis suggested that, with alpha set at .05
for a two-tailed test, a sample size of 140 would be needed to detect the expected relations with power of at least .80.

Instruments

*Attitudes Toward Seeking Professional Psychological Help Scale.* The Attitudes Toward Seeking Professional Psychological Help Scale (ATSPPHS; Fischer & Turner, 1970) was used to assess help-seeking attitudes. The ATSPPHS (Appendix A) is a 29-item scale measuring general attitudes toward seeking psychological assistance for psychological problems, and it has been widely utilized in studies of psychological help-seeking. Validated using data from a large college student sample (N = 960; Fischer & Turner, 1970), the ATSPPHS contains items such as “Personal and emotional troubles, like many things, tend to work out by themselves” (reverse-scored), and “If I were experiencing a serious emotional crisis at this point in my life, I would be confident that I could find relief in psychotherapy.”

For the present study, several modifications were made to the wording and terminology of the original ATSPPHS items. First, consistent with language used in the shortened version of the ATSPPHS (Fischer & Farina, 1995), inclusive personal pronouns are used (i.e., “his or her” and “he or she” rather than “his” or “he”). Second, the original ATSPPHS uses the terms “psychologist,” “psychiatrist,” “psychological help,” and “psychiatric help” variably throughout the measure. Because one aim of this study was to assess intentions to seek help from a mental health professional, broadly defined, in this study, these terms were replaced with “mental health professional” and “professional mental health services.” The instructions included definitions of “mental health professional” and “professional mental health services” as including services.
provided by psychologists, counselors, psychiatrists, and clinical social workers. Other slight wording alterations were made to clarify meaning and update terminology, consistent with changes made by Fischer and Farina (1995). For example, the term “mental hospital” was replaced with “mental health facility”; “mental patient” was replaced with “mental health patient/client”; and the phrases “mental disorders”, “mental troubles”, “mental problem”, and “mental breakdown” were replaced with “mental health difficulties” or “mental health problem”. These alterations were made due to the datedness of the original terms, to indicate a broader range of difficulties and help-seeking services, and for consistency in terminology throughout the measure. Overall, wording changes have been made to 18 of the 29 original ATSPPHS items.

The initial evaluation of the ATSPPHS (Fischer & Turner, 1970) demonstrated the instrument to have adequate internal consistency reliability estimates ($\alpha = .83$ to .86) and test-retest reliability estimates ranging from five days, $r = .86$, to two months, $r = .84$, in samples of college students. Further evidence of internal consistency of the measure for use with college students has been provided by Cepeda-Benito and Short (1998) and Good, Dell, and Mintz (1989), who reported Cronbach’s alphas of .87 and .84, respectively. Fischer and Turner (1970) also provided discriminant validity evidence for the ATSPPHS. Total ATSPPHS scores were moderately related to socially desirable responding for men, $r = .20$, $p < .005$, but this relation was not significant for women. Total ATSPPHS scores successfully discriminated past users of mental health services from those who had not previously sought help, providing support for its construct validity.
Using a sample of 424 college and nursing students, responses to the 29 ATSPPHS items were subjected to factor analysis (Fischer & Turner, 1970). Three-, four-, and five-factor solutions were extracted, and the authors concluded that the four-factor solution was the most interpretable. These four factors were: recognition of need for psychological help, stigma tolerance, interpersonal openness, and confidence in mental health professionals. The four subscales were moderately intercorrelated ($r$’s ranged from .25 to .35), suggesting that the subscales are largely independent of one another. However, because of modest internal reliabilities of some of the factor-derived subscales, Fischer and Turner (1970) recommended use of the overall ATSPPHS score, and this score was used in the current study as a global measure of help-seeking attitudes.

Participants responded to the ATSPPHS using a 4-point Likert scale (disagree, disagree somewhat, agree somewhat, agree), with 18 items reverse-scored. The total score was calculated by summing responses to the 29 items for a total possible score ranging from 0 to 87. Higher scores indicated more positive attitudes toward help-seeking. ATSPPHS total scores were used as a predictor of help-seeking intentions.

*Outcome Questionnaire – 45.2.* The Outcome Questionnaire – 45.2 (OQ-45.2; Lambert et al., 1996) served as the measure of current psychological distress. The OQ-45.2 (Appendix B), developed for repeated assessment of client functioning over the course of treatment (Doerfler, Addis, & Moran, 2002) is a self-report measure consisting of 45 statements designed to provide an index of overall mental health. OQ-45.2 items were developed to address commonly occurring symptoms across a wide variety of diagnoses, and with applicability to respondents in a range of settings and
with a variety of problems (Lambert & Finch, 1999). The OQ-45.2 also was designed to measure characteristics and issues that are relevant to personal and social quality of life. The OQ-45.2 is not intended to for use as a diagnostic tool, but rather as a means of broadly assessing current level of psychological functioning, with the possibility of tracking changes over time (Lambert & Finch, 1999).

The OQ-45.2 measures distress in three domains (Lambert & Finch, 1999). The first subscale, Symptom Distress, is comprised of 25 items designed to assess symptoms of the most common psychiatric disorders, depression, anxiety, and substance abuse (Doerfler et al., 2002). These disorders are among the most common experienced by college students (Benton, Robertson, Tseng, Newton, & Benton, 2003). Sample items for the Symptom Distress subscale include, “I feel that something bad is going to happen” and “I feel something is wrong with my mind.” The second subscale, Interpersonal Relations, includes 11 items that tap satisfaction with and problems in interpersonal relationships, with emphasis on intimate relationships. Items dealing with friendships, family life, and committed relationships are included. Examples of items from the Interpersonal Relationships subscale are, “I have frequent arguments” and “I feel my love relationships are full and complete.” The third subscale, Social Role, consists of nine items measuring dissatisfaction, distress, conflict, and inadequacy in employment, academic, family, and leisure roles. Sample items from the Social Role subscale are, “I find my work/school satisfying” and “I enjoy my spare time.” For all 45 items, respondents used a five-point Likert scale (“never” to “always”) to report how frequently they experience each of the concerns described in the statement items. Nine of the items are reverse-scored. Total scores can range from 0 to 180, with higher
scores indicating higher levels of distress. Although scores can be derived for each of
the three subscales, in the present study the total score was used in the analyses. This
measure was chosen because of its inclusion of quality of social and interpersonal life,
in addition to symptoms of common psychological problems.

Lambert and Finch (1999) reported data supporting the reliability and validity of
the OQ-45.2. Total scores have demonstrated acceptable internal consistency reliability
estimates, with alpha estimates consistently above .90 for samples of college student
and employee assistance program patients. Seven-day test-retest reliability estimates of
the subscales and total scores in a sample of undergraduate students ranged from .66 to
.86, which, given changes in symptoms over time, appears to provide sufficient
evidence of the temporal stability of OQ-45.2 scores (Lambert & Finch, 1999).

Evidence of the construct validity of the OQ-45.2 was summarized by Lambert
and Finch (1999). Data from nonclinical community, university counseling center,
community clinic, and inpatient unit samples were compared using ANOVAs. For each
of the subscales and the total score, the community sample scored significantly lower
than the three clinical samples, and the inpatient unit sample scored significantly higher
than the other samples. Concurrent validity of the OQ-45.2 is supported via
correlations in expected directions with measures of other related constructs (Lambert
& Finch, 1999). For example, OQ-45.2 total scores were significantly correlated with
scores on the Symptom Checklist 90—Revised Global Severity Index (Derogatis,
Rickels, & Rock, 1976) for samples of university counseling center clients, \( r = .78, p < .05 \), community clinic clients, \( r = .84, p < .05 \), and inpatient unit clients, \( r = .88, p < .05 \)
(Lambert & Finch, 1999).
Problem Stimulus Survey. The Problem Stimulus Survey (PSS), adapted from Young (2003), was used to assist participants in focusing on one currently distressing issue as they responded to the help-seeking intentions measure. The PSS (Appendix C) consists of a list of 21 problems derived from the theoretical and empirical literature as commonly observed among individuals seeking psychological assistance. These problems, phrased so as to be understood by nonprofessional persons, are: relationship conflict(s), school-related problems, family death, moving/relocation, separation from family/homesickness, death of a friend, family illness, sexuality concerns, financial problems, general life stress, general anxiety, depression, alcohol/drug problems, phobias (e.g., fear of flying), anxiety in social settings, personal illness, occupational difficulty, life-threatening situation, confusion over who you are, feeling of alienation or not belonging to a social group, and loneliness.

An additional ten problems were added to those included by Young (2003), in order to provide a more comprehensive selection of presenting problems. Nine of these additional problems were taken from a recent study of changes in counseling center problems over the last 13 years (Benton et al., 2003), a taxonomy of problems commonly seen at university counseling centers (Chandler & Gallagher, 1996), and a recent study of help-seeking intentions (Uffelman & Hardin, 2002). The supplementary problems are: physical abuse, sexual abuse, difficulty selecting a career or major, suicidal thoughts, legal concerns, eating disorder, body image concerns, self-esteem concerns, and family conflict. Finally, although not included in problem lists used in recent research, the PSS will list discrimination/prejudicial treatment as a concern, since this is an issue experienced by many individuals of minority status (e.g., in response to
race/ethnicity, sexuality, disability, age), and is frequently addressed within psychotherapy even when it is not initially presented as a topic of concern (Sue, Zane, & Young, 1994). Thus, a total of 30 problems were listed for participants to examine. In addition to these problems, participants were invited to list one additional problem of concern or has been concerning in the past but was not included on the list.

From this list of up to 31 total problems, participants were asked to indicate any problems that have been concerning to them personally within the last week. Participants were instructed to select the one problem that is currently of greatest concern. Participants were instructed to focus on this problem as they respond to the measure of intentions, which follows. Finally, participants will rate, using four-point Likert scales, how troubling this problem is currently and has been in the past week. Responses to these two items were summed to create one score, the Problem Severity Rating (PSR), which represented level distress due to the specific problem of focus.

*Intentions to Seek Professional Psychological Help Scale.* The Intentions to Seek Professional Psychological Help Scale (ISPPHS; Young, 2003) were used to assess participants’ current help-seeking intentions (Appendix D). Four questions measure increasingly committed levels of behavioral intentions to seek help. Specifically, the items tapped participants’ intentions within the next month to: seek information about receiving help from a mental health professional, contact a mental health professional, set up an appointment with a mental health professional, and attend an appointment with a mental health professional.

Participants were instructed to think about the problem that was indicated on the Problem Stimulus Survey as of most concern at the present time as they respond to the
ISPPHS items, and used a seven-point Likert scale (very unlikely to very likely) to indicate their likelihood of engaging in each of the help-seeking behaviors within the next month. Responses to the four ISPPHS items were summed to represent intentions to seek help from each of the three help sources. Scores can range from 4 to 28, with higher scores indicating stronger intentions to seek help within the next month. This score served as the dependent (criterion) variable in the statistical analyses, described at the end of this chapter. Young (2003) reported that internal consistency of the measure was good as indicated by a coefficient alpha of .95 in a sample of 373 undergraduate students.

Hope Scale. The Hope Scale (HS; Snyder et al., 1991) was used to assess participants’ levels of dispositional hope (Appendix E). The HS consists of 12 items assessing the pathways and agency components of the hope construct. Agency and pathways thoughts are tapped by four items each, and the remaining four items serve as fillers.

Snyder et al. (1991) reported extensive analyses regarding the development and validation of the HS, using eight samples of college students and inpatient and outpatient mental health clients/patients from the community. Estimated internal consistency reliability as measured by Cronbach’s alpha for the total scale ranged from .74 for one sample of college students to .84 for clients at an outpatient stress center in the community. Alpha estimates for the agency subscale ranged from .71 for a sample of college students to .77 for stress center clients; alpha estimates for the pathways subscale ranged from .63 for a sample of college students to .80 for stress center clients. Thus, the HS demonstrates adequate internal consistency.
Convergent validity of the HS is evidenced by correlations in the expected directions with several instruments that measure similar or related constructs (Snyder et al., 1991). For example, in two samples of college students, HS scores were related positively to scores on a measure of optimism (Life Orientation Test; Scheier & Carver, 1985), r’s = .50 and .60, p < .005. HS scores were related negatively to scores on the Beck Hopelessness Scale (Beck et al., 1974), r = -.51, p < .005, and the Beck Depression Inventory (Beck et al., 1961), r = -.42, p < .005. Additionally, in a sample of 109 state mental health facility inpatients, HS scores were negatively related to K-corrected scores on eight of the ten clinical scales of the MMPI (1st ed., Hathaway & McKinley, 1951), with correlations ranging from -.30 (p < .001) for Hypochondriasis to -.60 (p < .001) for Depression. HS scores were not significantly correlated with scores on the Masculinity-Femininity and Hypomania subscales.

The HS has demonstrated strong discriminant utility, predicting additional unique variance in several desirable outcomes, beyond that which was accounted for by other known predictors (Snyder et al., 1991). For example, using hierarchical regression to analyze data from a sample of college students, after entering scores on two measures of negative affectivity, HS scores augmented the prediction of problem-focused coping, explaining an additional 3% of the variance (p < .05). Conversely, when HS scores were entered first, neither of the two negative affectivity measures augmented the prediction of problem-focused coping beyond that which was explained by hope. An identical pattern of results emerged when active coping, well-being, and mental health symptoms were used as the criterion variables. This pattern of results suggests that the
HS is able to predict unique variance in theoretically related variables and is not redundant with measures of similar constructs (Snyder et al., 1991).

HS scores are related to scores on measures of socially desirable responding (Snyder et al., 1991). Specifically, total HS scores were related significantly to scores on the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960), $r = .30$, $p < .005$, and the Self-Presentation Scale (Roth, Harris, & Snyder, 1988), $r = .28$, $p < .005$. However, Snyder et al. (1991) asserted that the significant relation between hope and “socially desirable responding can be viewed as providing convergent rather than discriminant validational information” (p. 575). This is because socially desirable responding can be viewed as a presentational style that is indicative, at least in part, to adaptive coping by maintaining positive impressions of oneself. Snyder et al. (1991) assert that high hope is associated is also a means of adaptive coping, so that some degree of overlap between the constructs is to be expected. Therefore, the finding that higher hope was moderately related to positive self-presentation was construed as providing additional evidence of the construct validity of the HS (Snyder et al., 1991).

The factor structure of the HS has also been examined in three independent investigations. First, Snyder et al. (1991) conducted a principal components analysis with oblique rotations on HS data from each of the eight samples described above. Results consistently demonstrated that the items designed to tap the pathways and agency constructs loaded on separate factors, providing strong initial support for the two-factor structure of the HS. Babyak, Snyder, and Yoshinobu (1993) conducted a confirmatory factor analysis of HS data from four samples (total N = 2,753) undergraduate students. Across all four samples and using four different fit indices, a
two-factor model representing the pathways and agency items consistently provided the best fit to the data (CFI₁ = .99, CFI₂ = .99, CFI₃ = .99, CFI₄ = .97). Finally, Steed (2002) examined the psychometric properties of the HS, including the factor structure, in a sample of 347 undergraduates. Confirmatory factor analysis on HS data again yielded a satisfactory fit to a two-factor model (CFI = .98, AGFI = .98, RMSEA = .07). When one pathways item was allowed to load on the agency scale, the fit was marginally improved (CFI = .99, AGFI = .99, RMSEA = .04). However, given the acceptable fit indices with items loading on their theoretically-intended factors, Steed (2002) recommended no alterations to the structure, administration, or scoring of the HS.

Demographic Questionnaire. Finally, participants completed a demographic questionnaire (Appendix F). Items included age, gender, race/ethnicity, relationship status, year in school, academic standing, and grade point average range. Also, participants were asked about their previous and current experience with professional mental health services, including from whom help was/is being sought, whether participation was/is voluntary, number of sessions, and perceived helpfulness of the services. Data from only those participants who are not currently participating in mental health treatment were in the main analyses of this study, as those currently in treatment will not have help-seeking intentions, per se.

Previous mental health treatment (dummy-coded), perceived helpfulness of prior treatment, help-seeking attitudes, and distress were used as predictors of help-seeking intentions in the analyses. Hope was examined as a moderator variable. Other items on the demographic questionnaire were used to provide descriptive data about the sample.
Procedure

Recruitment and administration procedures. The research instruments and procedures were reviewed and approved by the university’s Institutional Review Board (Appendix G). Undergraduate students in psychology courses at a large Midwestern university were recruited in class or via a posting on the department’s online research participation website. Students who volunteered to participate completed all materials individually via a secure online data collection website or via paper-and-pencil in their classrooms. Extra course credit was given in exchange for participation.

Each participant read and indicated their acceptance of an informed consent document (Appendix H), which explained the nature of the study procedure, that there were minimal anticipated risks of participation, that participation was voluntary and may be terminated at any time, and that extra course credit was given in exchange for participation. The informed consent document explained that the data were kept anonymous and confidential. Data were identified by participant number only, and this number was not connected to participants’ identifying information in any way. This was achieved by setting up the online data collection so that Internet IP addresses were not stored with participants’ responses. Those participants who completed the survey via paper-and-pencil did not indicate their names on any materials. All data were stored on a secure personal computer, accessible only by the researcher, and only group-level results are reported.

After reading and agreeing to the informed consent document, participants completed the measures included in the survey (Appendices A through F). The instruments were presented in counterbalanced order, with two exceptions: the PSS and
ISPPHS were always presented jointly, because the ISPPHS instructs participants to focus on the problem they identified on the PSS when responding; and the demographic questionnaire was always presented last, as it asked about previous help-seeking behavior. The counterbalancing resulted in four different forms of the survey; all participants completed identical measures.

Upon completing the survey packet, participants received a written debriefing form thanking them for their participation and explaining the purpose of the study. Contact information for the primary researcher and faculty member overseeing the project was provided. Also upon completing the survey packet, participants were provided with a list of contact information for mental health care resources available within the university and local communities. The debriefing and referral information are included in Appendix I. Finally, respondents were entered into a drawing for a gift certificate. Participants entered the drawing either by sending their names via email to the researcher, or by requesting extra credit. Entry in the prize drawing was not connected in any way to the respondents’ survey responses. Two participants’ names were randomly chosen to receive the gift certificates after data collection was complete.

Statistical Analyses

All analyses were conducted using SPPS 11.0 for Windows ®. Frequencies, means, standard deviations, and intercorrelations were computed for all the variables included in this study. In addition, internal consistency reliability estimates as measured by Cronbach’s alpha were computed for the ATSPPHS, OQ-45.2, ISPPHS, and HS. Following are hypotheses for the current study and a description of statistical analyses used to test each.
Hypothesis 1: Past help-seeking, perceived helpfulness of past help-seeking, help-seeking attitudes, and level of distress are positively related to intentions to seek professional psychological help in the next month.

To examine this hypothesis, zero-order correlations were calculated among ratings of perceived helpfulness of past help-seeking, ATSPPHS scores, and ISPPHS scores. Significant positive correlation coefficients would support this hypothesis. To examine the relation between past-help seeking (yes or no) and ISPPHS scores, a point-biserial correlation was calculated. Again, a significant positive correlation coefficient would support the above hypothesis.

Hypothesis 2: Hope moderates the relation between distress and intentions to seek professional psychological help in the next month, such that individuals high in distress have greater intentions to seek help, and that the strength of this relationship increases for individuals high in hope.

Hypothesis 2a: Agency moderates the relation between distress and intentions to seek professional psychological help in the next month, such that individuals high in distress have greater intentions to seek help, and that the strength of this relationship increases for individuals high in agency.

Hypothesis 2b: Pathways thinking moderates the relation between distress and intentions to seek professional psychological help in the next month, such that individuals high in distress have greater intentions to seek help, and that the strength of this relationship increases for individuals high in pathways.

Hierarchical multiple regression was used to test Hypotheses 2, 2a, and 2b, and ISPPHS scores served as the dependent variable in each analysis. Consistent with recommendations for testing moderation using multiple regression (Frazier et al., 2004), HS and OQ-45.2 total scores were entered in the first step, and the HS x OQ-45.2 interaction term was entered in the second step. The change in $R^2$ for this step served as the test of the hypothesis. Hypotheses 2a and 2b served to deconstruct HS scores to examine the contributions of the two subscales, pathways and agency, to the distress-
intentions relation. Thus, an additional two multiple regression analyses were conducted. To examine Hypothesis 2a, HS-Agency scores and OQ-45.2 total scores were entered in the first step, and the HS x OQ-45.2 interaction term was entered in the second step. The change in $R^2$ for this step served as the test of the hypothesis.

Similarly, to examine Hypothesis 2b, HS-Pathways and OQ-45.2 total scores were entered in the first step, and the HS x OQ-45.2 interaction term was entered in the second step. Again, the change in $R^2$ for this step served as the test of the hypothesis.

To examine the role of distress specific to a particular problem, these three analyses were repeated, substituting the PSR score for the OQ-45.2 total score.

Hypothesis 3: The hope x distress interaction accounts for variance in help-seeking intentions beyond that which is accounted for by past help-seeking, help-seeking attitudes, and distress such that individuals high in distress have greater intentions to seek help, and that the strength of this relationship increases for individuals high in hope.

Hypothesis 3a: The agency x distress interaction accounts for variance in help-seeking intentions beyond that which is accounted for by past help-seeking, help-seeking attitudes, and distress such that individuals high in distress have greater intentions to seek help, and that the strength of this relationship increases for individuals high in agency.

Hypothesis 3b: The pathways x distress interaction accounts for variance in help-seeking intentions beyond that which is accounted for by past help-seeking, help-seeking attitudes, and distress such that individuals high in distress have greater intentions to seek help, and that the strength of this relationship increases for individuals high in pathways.

Hierarchical multiple regression was again used to test Hypothesis 3, and ISPPHS total scores served as the dependent variable. ATSPPHS scores and past help-seeking (yes/no, dummy-coded) were entered in the first step. In the second step, OQ-45.2 scores and HS total scores were entered. In the third step, the HS x OQ-45.2 interaction scores was entered. The change in $R^2$ between step two and step three served as the test
of the Hypothesis 3. As in the previous hypothesis, Hypotheses 3a and 3b served to deconstruct HS scores to examine the contributions of the two subscales, pathways and agency, to the distress-intentions relation. Thus, an additional two multiple regression analyses were conducted. To examine Hypothesis 3a, ATSPPHS scores and past help-seeking (yes/no, dummy-coded) were entered in the first step. HS-Agency scores and OQ-45.2 scores were entered in the second step, and the HS-Agency x OQ-45.2 interaction term was entered in the third step. The change in $R^2$ for this step served as the test of the hypothesis. Similarly, to examine Hypothesis 3b, ATSPPHS scores and past help-seeking (yes/no, dummy-coded) were entered in the first step, HS-Pathways scores and OQ-45.2 scores were entered in the second step, and the HS-Pathways x OQ-45.2 interaction term was entered in the final step. Again, the change in $R^2$ for this step served as the test of the hypothesis. To examine the role of distress specific to a particular problem, these three analyses were repeated, substituting the PSR score for the OQ-45.2 total score.

**Hypothesis 4:** The hope x distress interaction accounts for variance in help-seeking intentions beyond that which is accounted for by perceived helpfulness of past help-seeking, help-seeking attitudes, and distress, such that individuals high in distress have greater intentions to seek help, and that the strength of this relationship increases for individuals high in hope.

**Hypothesis 4a:** The agency x distress interaction accounts for variance in help-seeking intentions beyond that which is accounted for by perceived helpfulness of past help-seeking, help-seeking attitudes, and distress, such that individuals high in distress have greater intentions to seek help, and that the strength of this relationship increases for individuals high in agency.

**Hypothesis 4b:** The pathways x distress interaction accounts for variance in help-seeking intentions beyond that which is accounted for by perceived helpfulness of past help-seeking, help-seeking attitudes, and distress, such that individuals high in distress have greater intentions to seek help, and that the strength of this relationship increases for individuals high in pathways.
For those participants who have received mental health services in the past, Hypothesis 4 examined whether the hope x distress interaction accounts for variance in help-seeking intentions beyond help-seeking attitudes, the degree to which past help was viewed as useful, and distress alone. After excluding participants who have never received psychological treatment, hierarchical multiple regression was utilized in a manner identical to that used for Hypothesis 3, except that the rating of helpfulness of past psychological services was substituted for past help-seeking (yes/no, dummy-coded). ISPPHS total scores served as the dependent variable and ATSPPHS scores and the helpfulness of past help-seeking rating were entered in the first step. In the second step, OQ-45.2 scores and HS total scores were entered. In the third step, the HS x OQ-45.2 interaction scores was entered. The change in $R^2$ between step two and step three served as the test of the Hypothesis 3. As in the previous hypothesis, Hypotheses 3a and 3b served to deconstruct HS scores to examine the contributions of the two subscales, pathways and agency, to the distress-intentions relation. Thus, an additional two multiple regression analyses were conducted. To examine Hypothesis 3a, ATSPPHS scores and the helpfulness of past help-seeking rating were entered in the first step. HS-Agency scores and OQ-45.2 scores were entered in the second step, and the HS-Agency x OQ-45.2 interaction term was entered in the third step. The change in $R^2$ for this step served as the test of the hypothesis. Similarly, to examine Hypothesis 3b, ATSPPHS scores and the helpfulness of past help-seeking rating were entered in the first step, HS-Pathways scores and OQ-45.2 scores were entered in the second step, and the HS-Pathways x OQ-45.2 interaction term was entered in the final step. Again, the change in $R^2$ for this step served as the test of the hypothesis. To examine the role of
distress specific to a particular problem, these three analyses were repeated, substituting the PSR score for the OQ-45.2 total score.
CHAPTER IV

RESULTS

Data were collected from a total of 211 students from a large Midwestern university. Data from 23 respondents were excluded as follows: seven respondents (gender unidentified) did not complete significant portions of the survey; 15 women and 1 man were under the age of 18 and minors could not give consent to participate in the study. The resulting final sample of 188 consisted of 135 women and 53 men.

Participants were offered extra course credit in exchange for their participation and were entered in a drawing for a $25 retail gift certificate as incentive to participate.

The final sample was comprised of 78 first year undergraduates, 52 second year undergraduates, 25 third year undergraduates, 19 fourth year undergraduates, five fifth year undergraduates, two students beyond the fifth year, one graduate student, and two students who identified their class rank as “other.” Four participants did not identify their class rank. Participants ranged in age from 18 to 48 ($M = 20.88, SD = 4.81, \text{mode} = 18$). In regard to ethnicity, 150 participants identified themselves as Caucasian (79.8%), 21 identified as African American (11.2%), five identified as multiracial (2.7%), four identified as Latino/Hispanic (2.1%), two identified as Native American (1.1%), one identified as Asian American (0.5%), and three identified as other (1.6%). Two participants identified themselves as international students (1.1%).
The majority of respondents (92.6%) reported being either single (46.3%) or
unmarried but in a committed dating relationship (46.3%). Other than “no GPA” (for
first year students), which was reported by 62 participants (33.0%), the modal reported
GPA range was 2.6 to 3.0 (18.6%), and the sample represented a variety of academic
majors. The majority of respondents (67.0%) reported having never been a client of
professional mental health services, with 59 participants indicating that they had
received some form of psychological treatment in the past. Almost all participants
(93.6%) reported that they were not currently in any form of psychological treatment.
Data from the nine participants who reported being in treatment currently and the three
who did not respond to this item were not included in the analyses for Hypotheses 2, 3,
and 4, as the meaning of any intentions to seek help by the former group would have
been unclear given that they were already in treatment.

Data were collected via two methods: through a secure website and via paper-
and-pencil. No differences existed in regard to questionnaire content between the two
methods. Of the final sample of 188 participants, 82 completed the study measures
online (43.6%) and 106 via paper-and-pencil (56.4%). In both data collection methods,
the instruments utilized were presented in counterbalanced order, resulting in four forms
of the questionnaire, to which participants were assigned randomly as follows: 45 to
Form 1 (23.9%), 47 to Form 2 (25.0%), 45 to Form 3 (23.9%), and 51 (27.1%) to Form
4. Univariate analyses of variance revealed no differences among the four groups on
any of the independent or dependent variables.

All data were checked manually for accuracy and missing data were replaced by
substituting the respondent’s mean score for the relevant scale, following the
recommendations of Tabachnick and Fidell (2001). In the case of the OQ-45.2, missing responses were replaced by calculating the mean of the remaining subscale items and then rounding to the nearest whole number, consistent with the Administration and Scoring Manual (Lambert et al., 1996). After excluding respondents who failed to complete substantial portions of the questionnaire, data replacement was necessary in only 18 cases (9.57%), and no participant omitted more than five responses. Scale totals were calculated in accordance with published guidelines, when applicable. Responses to the two items measuring problem severity currently and in the past week were summed to create the Problem Severity Rating (PSR). All statistical analyses using were conducted using SPSS 11.0 ® for Windows.

Preliminary Analyses

Means, standard deviations, skew, and kurtosis statistics for the main variables and scales were calculated and are reported in Table 1. Skew and kurtosis values for all variables were below an absolute value of 2.0, with one exception, and therefore did not violate the assumptions of normality and were deemed appropriate for use with the planned parametric statistics. For the dependent variable, intentions to seek help, the scores on the ISPPHS displayed positive kurtosis value slightly above the recommended cutoff of 2.0. However, according to Tabachnick and Fidell (2001), the practical impact of deviations from zero kurtosis diminishes in large samples, such that underestimates of variance due to positive kurtosis are negated in samples larger with 100 or more cases.

To examine evidence of internal consistency reliability, alpha coefficients were calculated for the ATSPPHS, OQ-45.2, HS, PSR, and ISPPHS. Additionally, alpha
coefficients were calculated for the three OQ-45.2 subscales (Symptom Distress, Interpersonal Relations, and Social Role) and the two HS subscales (Pathways and Agency). The obtained Cronbach’s alpha coefficients are also presented in Table 1. With the exception of the OQ-45.2 Social Role subscale ($\alpha = .66$), HS Pathways ($\alpha = .68$), and HS Agency ($\alpha = .69$), reliability estimates for all scales were at or above .70. Estimates of internal consistency reliability for all the instruments utilized in this study were comparable to those reported by the authors of the instruments.

Descriptive Analyses

The means and standard deviations presented in Table 1 demonstrate that the sample endorsed generally favorable attitudes toward psychological help-seeking, and the mean ATSPPHS score of 52.18 ($SD = 22.66$) is comparable to that found in other college student samples (e.g., Cepeda-Benito & Short, 1998; Kelly & Achter, 1995; Uffelman & Hardin, 2002). Scores on the ATSPPHS could range from 0 to 87, and in this sample ranged from 19 to 83, representing mild restriction of range.

Two measures operationalized distress, the OQ-45.2 and the PSR. Lambert et al. (1996) established clinical norms for the OQ-45.2, which assessed global distress. The cutoff for the Symptom Distress subscale is 36; 58 participants (30.9%) reported clinical levels of unpleasant symptoms. The cutoff for Interpersonal Relations is 15; 72 participants (38.3%) reported clinical levels difficulty in relationships with others. The cutoff for Social Role is 12; 89 participants (47.3%) reported clinical levels of difficulty with work and school. Finally, the cutoff for the total score is 63; 60 participants (31.9%) produced overall profiles that met or exceeded clinical levels of global distress. The PSR measured severity of the current problem now and in the past week. On this
measure, the sample indicated moderate to high levels of distress in regard to the problem identified as currently most troubling on the Problem Stimulus Survey (PSS).

Table 1.
Descriptive Statistics for Independent and Dependent Variables.

<table>
<thead>
<tr>
<th>Scale</th>
<th>Mean</th>
<th>SD</th>
<th>Skew</th>
<th>Kurtosis</th>
<th>Scale α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Helpfulness of Past Help-Seeking a</td>
<td>4.45</td>
<td>1.77</td>
<td>-.34</td>
<td>-.87</td>
<td></td>
</tr>
<tr>
<td>PSR b</td>
<td>5.59</td>
<td>1.34</td>
<td>.01</td>
<td>-.36</td>
<td>.75</td>
</tr>
<tr>
<td>ATSPPHS c</td>
<td>52.18</td>
<td>13.42</td>
<td>.14</td>
<td>-.32</td>
<td>.89</td>
</tr>
<tr>
<td>OQ-45.2 c</td>
<td>54.42</td>
<td>22.66</td>
<td>.59</td>
<td>-.12</td>
<td>.94</td>
</tr>
<tr>
<td>Symptom Distress c</td>
<td>30.04</td>
<td>14.13</td>
<td>.61</td>
<td>-.22</td>
<td>.93</td>
</tr>
<tr>
<td>Interpersonal Relations c</td>
<td>12.89</td>
<td>6.59</td>
<td>.29</td>
<td>-.64</td>
<td>.82</td>
</tr>
<tr>
<td>Social Role c</td>
<td>11.49</td>
<td>4.33</td>
<td>.67</td>
<td>1.34</td>
<td>.66</td>
</tr>
<tr>
<td>HS c</td>
<td>25.07</td>
<td>3.09</td>
<td>.04</td>
<td>.18</td>
<td>.78</td>
</tr>
<tr>
<td>Agency c</td>
<td>12.49</td>
<td>1.81</td>
<td>-.34</td>
<td>1.01</td>
<td>.69</td>
</tr>
<tr>
<td>Pathways c</td>
<td>12.58</td>
<td>1.70</td>
<td>.03</td>
<td>.54</td>
<td>.68</td>
</tr>
<tr>
<td>Intentions d</td>
<td>6.88</td>
<td>4.91</td>
<td>1.80</td>
<td>2.33</td>
<td>.93</td>
</tr>
</tbody>
</table>

Note. a n = 60, b n = 185, c n = 188, d n = 176. Helpfulness of Past Help-Seeking Rating, scores may range from 1 to 7; PSR = Problem Severity Rating, scores may range from 2 to 8; ATSPPHS = Attitudes Toward Seeking Professional Psychological Help-Short Form, scores may range from 0 to 87; OQ-45.2 = Outcome Questionnaire 45.2, scores may range from 0 to 180; Symptom Distress scores may range from 0 to 100; Interpersonal Relations scores may range from 0 to 44; Social Role Scores may range from 0 to 36; HS = Hope Scale, scores may range from 8 to 32; Pathways = Pathways subscale of HS, scores may range from 4 to 16; Agency = Agency subscale of HS, scores may range from 4 to 16; Intentions = Intentions to Seek Professional Psychological Help Scale, scores may range from 4 to 28; Scale α = Cronbach’s alpha.

Among students not currently in psychological treatment, intentions to seek psychological help in the next month across the entire sample were relatively low, and
comparable to those found by Young (2003) among college students. These scores ranged from 4 to 24 (possible range of 4 to 28), with higher scores representing greater intentions to seek help. The mean intentions score was 6.88, but the modal and median intentions score were both 4, representing being very unlikely to take any steps toward seeking help in the next month.

In regard to scores on the Hope Scale (HS), participants as a group evidenced moderate levels of total hope. The mean HS score of 25.07 for this sample was comparable to that of several samples of college students in the HS validation study, which ranged from 25.08 to 25.64 (Snyder et al., 1991). However, there was some restriction of range on HS scores (range of 16 to 32) in the current sample. The Pathways and Agency subscale mean scores were also similar to the college student samples on which the HS was validated.

Participants were asked on the Problem Stimulus Survey to indicate which of 30 common problems were currently troubling them; they could endorse more than one problem, if appropriate. Ten problems were endorsed by at least 20% of the sample: general life stress (77.1%), school-related problem (65.4%), relationship conflict (56.4%), financial problems (55.9%), general anxiety (37.2%), loneliness (36.2%), self-esteem concerns (33.5%), difficulty selecting a career/major (26.1%), depression (20.2%), and homesickness (20.2%). Eight participants (4.3%) reported having “no problem” at the time of their participation; these participants were not included in the tests of Hypotheses 2, 3, and 4 because they were not expected to have intentions to seek psychological help.
Nine participants (4.8%) reported currently being a client in some form of professional mental health treatment. Mean scores on the measures of help-seeking attitudes, distress, and hope for those currently in treatment and those not in treatment are reported in Table 2. Due to the small number of participants currently receiving treatment, t-tests were not calculated to compare statistically the differences between group means.

Table 2.
Means on Independent Variables Comparing Participants Currently Not Receiving and Receiving Psychological Treatment.

<table>
<thead>
<tr>
<th></th>
<th>Not In Treatment a</th>
<th>In Treatment b</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>ATSPPHS</td>
<td>51.17</td>
<td>12.68</td>
</tr>
<tr>
<td>PSR</td>
<td>5.55</td>
<td>1.35</td>
</tr>
<tr>
<td>OQ-45.2</td>
<td>54.08</td>
<td>22.59</td>
</tr>
<tr>
<td>Symptom Distress</td>
<td>29.91</td>
<td>14.12</td>
</tr>
<tr>
<td>Interpersonal Relations</td>
<td>12.83</td>
<td>6.53</td>
</tr>
<tr>
<td>Social Role</td>
<td>11.34</td>
<td>4.20</td>
</tr>
<tr>
<td>HS</td>
<td>25.08</td>
<td>3.10</td>
</tr>
<tr>
<td>Agency</td>
<td>12.48</td>
<td>1.82</td>
</tr>
<tr>
<td>Pathways</td>
<td>12.61</td>
<td>1.70</td>
</tr>
</tbody>
</table>

Note. a n = 176, b n = 9.

Notable differences between the two groups were observed on help-seeking attitudes, with those in treatment reporting more favorable attitudes toward help-seeking $(M = 75.00, SD = 6.96)$ than those not in treatment $(M = 51.17, SD = 12.68)$. Those in treatment also evidenced higher levels of distress as measured by the OQ-45.2 $(M = \ldots$
66.33, \(SD = 22.62\) as compared with those not in treatment (\(M = 54.08, SD = 22.59\)). The two groups demonstrated similar levels of hope (\(M = 25.08, SD = 3.10\) for those not in treatment, \(M = 24.11, SD = 2.71\) for those in treatment).

**Test of Hypothesis 1**

Hypothesis 1 stated that past help-seeking, perceived helpfulness of past help-seeking, help-seeking attitudes, and level of distress are each positively related to intentions to seek help in the next month. To test this hypothesis, intercorrelations among these variables were calculated and are presented in the first column of Table 3. Because these analyses were hypothesis-driven, no adjustment was made to control for experiment-wise Type I error, and results were interpreted as significant at an alpha of .05. Data from participants who reported currently being in some form of psychological treatment were excluded from the correlation analyses involving intentions to seek help, resulting in a maximum sample size of 176 for these calculations.

As predicted, intentions to seek professional psychological help in the next month were correlated positively with the five different measures of distress (OQ-45.2 total score and three subscales, as well as the current PSR), with correlations ranging from .15 (\(p < .05\)) to .34 (\(p < .01\)), such that higher distress as operationalized by all the measures was related to greater intentions to seek help. Help-seeking intentions were also positively related to having sought psychological help in the past, \(r_{(point-biserial)} = .34, p < .01\), and helpfulness of past help-seeking experiences, \(r = .31, p < .05\), such that having sought help in the past and viewing past help-seeking experiences as more helpful were both related to greater intentions to seek psychological help in the next month. Attitudes toward seeking professional psychological help, as measured by the
Table 3.

Intercorrelations Among Independent and Dependent Variables.

<table>
<thead>
<tr>
<th>Scale</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Intentions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. ATSPPHS</td>
<td>.18&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Previous Help-Seeking</td>
<td>.34&lt;sup&gt;**b,j&lt;/sup&gt;</td>
<td>.28&lt;sup&gt;***c,j&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Helpfulness of Past H-S</td>
<td>.31&lt;sup&gt;d&lt;/sup&gt;</td>
<td>.21&lt;sup&gt;e&lt;/sup&gt;</td>
<td>.05&lt;sup&gt;c,i&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. PSR</td>
<td>.15&lt;sup&gt;f&lt;/sup&gt;</td>
<td>-0.03&lt;sup&gt;c&lt;/sup&gt;</td>
<td>.15&lt;sup&gt;g,i&lt;/sup&gt;</td>
<td>-0.03&lt;sup&gt;h&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. OQ-45.2 SD</td>
<td>.30&lt;sup&gt;**a&lt;/sup&gt;</td>
<td>-0.07&lt;sup&gt;i&lt;/sup&gt;</td>
<td>.22&lt;sup&gt;c,i&lt;/sup&gt;</td>
<td>.02&lt;sup&gt;e&lt;/sup&gt;</td>
<td>.39&lt;sup&gt;***c&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. OQ-45.2 IR</td>
<td>.34&lt;sup&gt;**a&lt;/sup&gt;</td>
<td>-0.13&lt;sup&gt;i&lt;/sup&gt;</td>
<td>.23&lt;sup&gt;c,i&lt;/sup&gt;</td>
<td>-0.02&lt;sup&gt;e&lt;/sup&gt;</td>
<td>.26&lt;sup&gt;***c&lt;/sup&gt;</td>
<td>.73&lt;sup&gt;***i&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. OQ-45.2 SR</td>
<td>.18&lt;sup&gt;a&lt;/sup&gt;</td>
<td>-0.10&lt;sup&gt;i&lt;/sup&gt;</td>
<td>.16&lt;sup&gt;c,i&lt;/sup&gt;</td>
<td>.09&lt;sup&gt;e&lt;/sup&gt;</td>
<td>.35&lt;sup&gt;***c&lt;/sup&gt;</td>
<td>.70&lt;sup&gt;***i&lt;/sup&gt;</td>
<td>.52&lt;sup&gt;***i&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. OQ-45.2 Total</td>
<td>.32&lt;sup&gt;**a&lt;/sup&gt;</td>
<td>-0.10&lt;sup&gt;i&lt;/sup&gt;</td>
<td>.24&lt;sup&gt;c,i&lt;/sup&gt;</td>
<td>.03&lt;sup&gt;e&lt;/sup&gt;</td>
<td>.39&lt;sup&gt;***c&lt;/sup&gt;</td>
<td>.97&lt;sup&gt;***i&lt;/sup&gt;</td>
<td>.85&lt;sup&gt;***i&lt;/sup&gt;</td>
<td>.78&lt;sup&gt;***i&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Pathways</td>
<td>-0.14&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.02&lt;sup&gt;i&lt;/sup&gt;</td>
<td>.13&lt;sup&gt;c,i&lt;/sup&gt;</td>
<td>.07&lt;sup&gt;e&lt;/sup&gt;</td>
<td>-0.14&lt;sup&gt;c&lt;/sup&gt;</td>
<td>-0.45&lt;sup&gt;***i&lt;/sup&gt;</td>
<td>-0.43&lt;sup&gt;***i&lt;/sup&gt;</td>
<td>-0.37&lt;sup&gt;***i&lt;/sup&gt;</td>
<td>-0.48&lt;sup&gt;***i&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Agency</td>
<td>-0.16&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.10&lt;sup&gt;i&lt;/sup&gt;</td>
<td>-0.12&lt;sup&gt;c,i&lt;/sup&gt;</td>
<td>.11&lt;sup&gt;e&lt;/sup&gt;</td>
<td>-0.23&lt;sup&gt;c&lt;/sup&gt;</td>
<td>-0.51&lt;sup&gt;***i&lt;/sup&gt;</td>
<td>-0.50&lt;sup&gt;***i&lt;/sup&gt;</td>
<td>-0.46&lt;sup&gt;***i&lt;/sup&gt;</td>
<td>-0.55&lt;sup&gt;***i&lt;/sup&gt;</td>
<td>.54&lt;sup&gt;***i&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>12. Hope Total</td>
<td>-0.17&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.07&lt;sup&gt;i&lt;/sup&gt;</td>
<td>-0.15&lt;sup&gt;c,i&lt;/sup&gt;</td>
<td>.11&lt;sup&gt;e&lt;/sup&gt;</td>
<td>-0.21&lt;sup&gt;c&lt;/sup&gt;</td>
<td>-0.55&lt;sup&gt;***i&lt;/sup&gt;</td>
<td>-0.53&lt;sup&gt;***i&lt;/sup&gt;</td>
<td>-0.47&lt;sup&gt;***i&lt;/sup&gt;</td>
<td>-0.59&lt;sup&gt;***i&lt;/sup&gt;</td>
<td>.87&lt;sup&gt;***i&lt;/sup&gt;</td>
<td>.89&lt;sup&gt;***i&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

Note. Helpfulness of Past H-S = Helpfulness of Past Help-Seeking; OQ-45.2 SD = Symptom Distress; OQ-45.2 IR = Interpersonal Relations; OQ-45.2 SR = Social Role; a n = 176, b n = 174, c n = 185, d n = 51, e n = 60, f n = 173, g n = 182, h n = 59, i N = 188, j = point-biserial correlation; * p < .05, ** p < .01, *** p < .0008.
ATSPPHS, were also positively related to intentions to seek help, $r = .18, p < .01$, consistent with Hypothesis 1. Thus, Hypothesis 1, that greater intentions to seek help would be found among individuals with greater distress, those with more favorable attitudes toward psychological help-seeking, those who have previously sought psychological help, and those who characterized their prior help-seeking as helpful, was supported.

For the remaining correlation analyses (found in columns 2 through 11 of Table 3), a Bonferroni adjustment was utilized to control for experiment-wise Type I error. The resulting alpha required for statistical significance for these analyses was .0008. Examination of these correlation coefficients reveals several noteworthy relations. First, consistent with the findings of research described in Chapter II, previous psychological help-seeking was positively related to attitudes toward psychological help-seeking, $r = .28, p < .0008$ ($n = 185$), such that having received mental health treatment in the past was related to more positive attitudes about psychological help-seeking. However, contrary to expectation, perceived helpfulness of previous help-seeking was unrelated to help-seeking attitudes, $r = .21, p > .05$ ($n = 60$). Indeed, help-seeking attitudes were related only to intentions to seek help, $r = .18, p < .05$ ($n = 176$), and to past help-seeking. Hope Scale scores were consistently related inversely to distress as measured by the OQ-45.2 scales, such that higher level of distress was related to lower self-reported ability to generate strategies and sustain movement toward goal achievement. Severity of the current problem as measured by the summed PSR was unrelated to Hope Scale total and subscale scores ($p > .0008$), but was positively related to distress as measured by the OQ-45.2 scales.
Test of Hypothesis 2

Hypothesis 2 examined the proposal that hope moderates the relation between distress and intentions to seek psychological help. As established by the findings supporting Hypothesis 1, higher levels of distress were related to greater intentions to seek help in the next month. Hypothesis 2 addressed the possibility that help-seeking is a manifestation of high hope in situations of psychological distress. It was proposed that for individuals high in hope, intentions to seek help increases as distress increases; for those low in hope, intentions to seek help relate to a lesser degree to distress. Hypotheses 2a and 2b examined the potential moderating roles of the components of hope, pathways and agency. This hypothesis was examined twice, using OQ-45.2 and PSR scores separately as different operationalizations of distress.

To examine this hypothesis, hierarchical multiple regression was used, with total scores on the HS and OQ-45.2 entered in the first step to examine the influence of hope and global distress, respectively, on help-seeking intentions. The HS x OQ-45.2 interaction was entered in the second step to determine whether the interaction between hope and distress adds significant explanatory power to the prediction of help-seeking intentions. Data from nine participants who indicated that they were currently receiving some form of psychological treatment, three participants who did not respond to the item about current help-seeking, and eight participants who reported having no problem were excluded from the Hypothesis 2 analyses, resulting in a sample of 176 participants.

The intercorrelations among the included variables and interactions were examined to assess for multicollinearity, which can distort multiple regression results.
The correlations between the distress ratings and the hope-distress interaction for each analysis exceeded ±.80 (ranging from .83 to .95), indicating that multicollinearity is a concern (Shannon & Davenport, 2001). Frazier, Tix, and Barron (2004) advocate for centering variables as standard practice in regression to reduce problems associated with multicollinearity. When this was done with the current data, multicollinearity was reduced, yet the regression results were identical to those using uncentered variables. Indeed, Aiken and West (1991) note that centering has no effect on weights calculated for interaction terms; only on weights calculated for main effects, and suggest that when the interactions are of primary interest, that centering may be unnecessary. Given that the hypotheses of this study focused on the interaction effects in each regression, and because centering the variables had no meaningful effect on regression results, the analyses using uncentered variables are reported throughout the results.

The results of these regression analyses using OQ-45.2 scores for Hypothesis 2 are presented in Table 4. The first regression examined whether the interaction between hope and distress would account for variance in intentions to seek help beyond that accounted for by the main effects of hope and distress combined. The HS and OQ-45.2 total scores were entered in the first step, together accounting for significant variance (11%) in help-seeking intentions. Examination of β weights indicated that only global distress contributed uniquely in this step, β = .32, t = 3.59, p < .001. When the interaction between hope scores and global distress was entered in step two, it failed to account for significant incremental variance in help-seeking intentions, β = -.86, t = -1.79, p > .05. Thus, Hypothesis 2 was not supported when using the OQ-45.2 to measure distress, as the interaction between hope and global distress did not account for
incrementally significant variance in help-seeking intentions, beyond that which was explained by hope and distress alone.

Table 4.
Hierarchical Regression Analyses Predicting Intentions from Global Distress and Hope.

<table>
<thead>
<tr>
<th>Criterion and Steps</th>
<th>$B$</th>
<th>$\beta$</th>
<th>$T$</th>
<th>$R^2$</th>
<th>$R^2$</th>
<th>df</th>
<th>$F_{df}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Help-Seeking Intentions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HS Total</td>
<td>-.03</td>
<td>-.02</td>
<td>-.18</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OQ Total</td>
<td>.07</td>
<td>.32</td>
<td>3.59**</td>
<td>.33</td>
<td>.11</td>
<td>2,16</td>
<td>10.02***</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HS Total x OQ</td>
<td>-.09</td>
<td>-.86</td>
<td>-1.79</td>
<td>.35</td>
<td>.13</td>
<td>.02</td>
<td>1,16</td>
</tr>
<tr>
<td>Help-Seeking Intentions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agency</td>
<td>-.02</td>
<td>.00</td>
<td>-.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OQ Total</td>
<td>.07</td>
<td>.33</td>
<td>3.75**</td>
<td>.33</td>
<td>.11</td>
<td>2,16</td>
<td>10.00***</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agency x OQ</td>
<td>-.01</td>
<td>-.47</td>
<td>-1.14</td>
<td>.34</td>
<td>.12</td>
<td>.01</td>
<td>1,16</td>
</tr>
<tr>
<td>Help-Seeking Intentions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pathways</td>
<td>-.08</td>
<td>-.03</td>
<td>-.34</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OQ Total</td>
<td>.07</td>
<td>.31</td>
<td>3.47**</td>
<td>.33</td>
<td>.11</td>
<td>2,16</td>
<td>10.05***</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pathways x OQ</td>
<td>-.02</td>
<td>-.81</td>
<td>-1.78</td>
<td>.36</td>
<td>.13</td>
<td>.02</td>
<td>1,16</td>
</tr>
</tbody>
</table>

Note. n = 167; ** $p < .01$, *** $p < .001$.

A nearly identical pattern of results was observed in the second regression, which examined the role of the agency component of hope in moderating the relation between distress and help-seeking intentions. In the first step, scores on Agency and the OQ-45.2 together accounted for 11% of the variance in help-seeking intentions. As in the first regression, only global distress accounted for unique variance, $\beta = .33$, $t = 3.75$, $p < .001$. In the second step, the interaction between Agency and global distress was
entered, but failed to account for significant additional variance in help-seeking intentions. Therefore, Hypothesis 2a was also not supported when using the OQ-45.2, as the interaction between distress and Agency did not account for significant incremental variance in help-seeking intentions, beyond that which was attributed to distress and Agency alone.

The same pattern of results was found for the regression involving the pathways component of hope. As in the preceding two regression analyses, in the first step the variables together accounted for 11% of the variance in help-seeking intentions. Only OQ-45.2 scores contributed uniquely to the prediction of help-seeking intentions, $\beta = .31, t = 3.47, p < .01$. When the interactions between hope and global distress were added in the second step, the change in $R^2$ was not significant. Consequently, when using OQ-45.2 scores to measure distress, Hypothesis 2b was not supported, as the interaction between pathways and distress did not add significant incremental variance to the prediction of help-seeking intentions, beyond that which was accounted for by distress alone.

These three regression analyses were repeated, substituting the PSR for OQ-45.2 total scores, to examine whether the two operationalizations of distress (global vs. specific) operate differently with hope to predict help-seeking intentions. The results of these analyses are presented in Table 5. When help-seeking intentions were predicted from hope and ratings of distress specific to the problem identified as currently most troublesome, a different pattern of results emerged.
Table 5.

Hierarchical Regression Analyses Predicting Intentions from Problem Severity and Hope.

<table>
<thead>
<tr>
<th>Criterion and Steps</th>
<th>$B$</th>
<th>$\beta$</th>
<th>$t$</th>
<th>$R$</th>
<th>$R^2$</th>
<th>$R^2_{adj}$</th>
<th>$df$</th>
<th>$F_A$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Help-Seeking Intentions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HS Total</td>
<td>-.30</td>
<td>-.18</td>
<td>-2.27*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSR</td>
<td>.38</td>
<td>.10</td>
<td>1.32</td>
<td>.22</td>
<td>.05</td>
<td>.05</td>
<td>2,16</td>
<td>4.13*</td>
</tr>
<tr>
<td>Step 2 (Interactions)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HS Total x PSR</td>
<td>-.18</td>
<td>-1.25</td>
<td>-1.89</td>
<td>.26</td>
<td>.07</td>
<td>.02</td>
<td>1,16</td>
<td>3.59</td>
</tr>
<tr>
<td>Help-Seeking Intentions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agency</td>
<td>-.43</td>
<td>-.15</td>
<td>-1.94</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSR</td>
<td>.37</td>
<td>.10</td>
<td>1.25</td>
<td>.20</td>
<td>.04</td>
<td>.04</td>
<td>2,16</td>
<td>3.41*</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agency x PSR</td>
<td>-.34</td>
<td>-1.18</td>
<td>-2.02*</td>
<td>.25</td>
<td>.06</td>
<td>.02</td>
<td>1,16</td>
<td>4.09*</td>
</tr>
<tr>
<td>Help-Seeking Intentions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pathways</td>
<td>-.47</td>
<td>-.16</td>
<td>-2.03*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSR</td>
<td>.46</td>
<td>.12</td>
<td>1.59</td>
<td>.21</td>
<td>.04</td>
<td>.04</td>
<td>2,16</td>
<td>3.60*</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pathways x PSR</td>
<td>-.20</td>
<td>-.73</td>
<td>-1.19</td>
<td>.22</td>
<td>.05</td>
<td>.01</td>
<td>1,16</td>
<td>1.42</td>
</tr>
</tbody>
</table>

*Note.* $n = 167$; * $p < .05$.

In the first regression, HS total and PSR scores were entered in the first step, and together accounted for 5% of the variance in help-seeking intentions. Examination of $\beta$ coefficients indicated that HS contributed uniquely to the prediction of help-seeking intentions, $\beta = -.18, t = -2.27, p < .05$, such that lower hope was related to greater intentions to seek help. When the interaction between hope and specific distress was added in the second step, it failed to account for significant incremental variance in help-seeking intentions. Thus, regardless of whether global or specific distress was
utilized, Hypothesis 2 was not supported, because the interaction between hope and
distress did not account for significant variance in help-seeking intentions beyond that
which was explained by the hope and distress main effects alone.

The next regression examined the agency component of hope and the specific
distress ratings as predictors of help-seeking intentions. In the first step, Agency and
PSR scores together accounted for 4% of the variance in help-seeking intentions;
however, neither agency nor specific distress accounted for significant unique variance
in the dependent variable. When the agency x specific distress interaction was entered
in step two, the increase was significant and accounted for an additional 2% of the
variance in help-seeking intentions. Therefore, when distress was operationalized as the
degree to which a specific problem is currently troublesome, agency moderated the
relation between distress and help-seeking intentions. However, the relation was in the
opposite direction as hypothesized, so Hypothesis 2a was not supported when using
PSR scores.

Figure 4.1 represents the moderation of the relation between distress and
intentions by agency. Persons who described their problems as highly severe and who
were low in agency evidenced the greatest intentions to seek help, followed by those
with low problem severity and high agency. Persons with high problem severity and
high agency demonstrated the least intentions to seek professional psychological help.

The third regression examined whether the pathways component of hope
moderates the relation between specific distress and help-seeking intentions. As in the
regression for HS total scores, in the first step, Pathways and PSR scores together
accounted for 4% of the variance in help-seeking intentions. Only Pathways scores
uniquely contributed to the prediction of help-seeking intentions, $\beta = -.47$, $t = -2.03$, $p < .05$. When the Pathways x PSR interaction was entered in the second step, it did not account for significant incremental variance in help-seeking intentions. Thus, pathways did not moderate the relation between specific distress and help-seeking intentions, and Hypothesis 2b was unsupported, regardless of how distress was operationalized.

![Graph showing the observed relation between distress and intentions to seek help, with moderation by agency.](image)

Figure 4.1. Observed relation between distress and intentions to seek help, with moderation by agency.

**Test of Hypothesis 3**

Hypothesis 3 addressed the ability of the hope-distress interaction to explain help-seeking intentions beyond that which could be explained by other empirically-supported constructs, including past help-seeking, help-seeking attitudes, and distress. Although evidence of moderation (by pathways) was observed in the previous analyses only in the relationship between specific distress and help-seeking intentions, the planned analyses investigating moderation beyond other empirically-derived constructs were calculated as exploratory analyses.
To examine Hypothesis 3, hierarchical regression was again utilized. In the first step, ATSPPHS scores and past help-seeking (yes/no, dummy-coded) were entered. In the second step, the measure of global distress, OQ-45.2 total scores, and HS total scores were entered. Finally, in step three, the HS x OQ-45.2 interaction term was entered, to determine whether the interaction between hope and distress accounted for significant incremental variance in help-seeking intentions. As in the previous analyses, only those participants not currently receiving mental health treatment and those who endorsed a problem of concern were included. Also, the analyses were conducted twice, once using OQ-45.2 scores and then using PSR scores as two different measures of distress. For all the regression analyses, intercorrelations among included variables were examined, and the correlations between the distress measures and the interaction terms exceeded .80, suggesting that multicollinearity is a concern. However, when the regressions were calculated using centered variables, the results were identical to those using uncentered variables; thus, the results of the latter are reported for ease of interpretation.

The results of the analyses are presented in Table 6. The first regression assessed the ability of hope to moderate the relation between distress and help-seeking intentions beyond the influence of help-seeking attitudes, past help-seeking, and distress alone. In the first step, help-seeking attitudes and past help-seeking together significantly accounted for 14% of the variance in intentions to seek help. However, only past help-seeking accounted for unique variance in help-seeking intentions, $\beta = .33, t = 4.48, p < .001$, such that having sought psychological help in the past was related to greater intentions to seek such help in the next month. In the next step, hope and global distress
Table 6.
Hierarchical Regression Analyses Predicting Intentions from Help-Seeking Attitudes, Previous Help-Seeking, Global Distress, and Hope.

<table>
<thead>
<tr>
<th>Criterion and Steps</th>
<th>$B$</th>
<th>$\beta$</th>
<th>$t$</th>
<th>$R$</th>
<th>$R^2$</th>
<th>$R^2_A$</th>
<th>$df$</th>
<th>$F_A$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Help-Seeking Intentions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 1:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ATSPPHS</td>
<td>.05</td>
<td>.14</td>
<td>1.85</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Past Help-Seeking</td>
<td>3.60</td>
<td>.33</td>
<td>4.48***</td>
<td>.38</td>
<td>.14</td>
<td>.14</td>
<td>2,163</td>
<td>13.62*</td>
</tr>
<tr>
<td>Step 2:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HS Total</td>
<td>-0.03</td>
<td>-0.02</td>
<td>-0.21</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OQ Total</td>
<td>0.06</td>
<td>0.29</td>
<td>3.35***</td>
<td>.48</td>
<td>.23</td>
<td>.08</td>
<td>2,161</td>
<td>8.63**</td>
</tr>
<tr>
<td>Step 3:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HS Total x OQ</td>
<td>-0.01</td>
<td>-0.67</td>
<td>-1.46</td>
<td>.49</td>
<td>.24</td>
<td>.01</td>
<td>1,160</td>
<td>2.14</td>
</tr>
<tr>
<td><strong>Help-Seeking Intentions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 1:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ATSPPHS</td>
<td>.05</td>
<td>.14</td>
<td>1.85</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Past Help-Seeking</td>
<td>3.60</td>
<td>.33</td>
<td>4.48***</td>
<td>.38</td>
<td>.14</td>
<td>.14</td>
<td>2,163</td>
<td>13.62*</td>
</tr>
<tr>
<td>Step 2:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agency</td>
<td>-0.01</td>
<td>-0.01</td>
<td>-0.06</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OQ Total</td>
<td>0.07</td>
<td>0.30</td>
<td>3.49***</td>
<td>.48</td>
<td>.23</td>
<td>.08</td>
<td>2,161</td>
<td>8.60**</td>
</tr>
<tr>
<td>Step 3:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agency x OQ</td>
<td>-0.05</td>
<td>-0.23</td>
<td>-0.58</td>
<td>.48</td>
<td>.23</td>
<td>.00</td>
<td>1,160</td>
<td>.34</td>
</tr>
<tr>
<td><strong>Help-Seeking Intentions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 1:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ATSPPHS</td>
<td>.05</td>
<td>.14</td>
<td>1.85</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Past Help-Seeking</td>
<td>3.60</td>
<td>.33</td>
<td>4.48***</td>
<td>.38</td>
<td>.14</td>
<td>.14</td>
<td>2,163</td>
<td>13.62*</td>
</tr>
<tr>
<td>Step 2:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pathways</td>
<td>-0.07</td>
<td>-0.02</td>
<td>-0.29</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OQ Total</td>
<td>0.06</td>
<td>0.29</td>
<td>3.63***</td>
<td>.48</td>
<td>.23</td>
<td>.08</td>
<td>2,161</td>
<td>8.65**</td>
</tr>
<tr>
<td>Step 3:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pathways x OQ</td>
<td>-0.02</td>
<td>-0.80</td>
<td>-1.94</td>
<td>.49</td>
<td>.24</td>
<td>.02</td>
<td>1,160</td>
<td>3.75</td>
</tr>
</tbody>
</table>

Note. n = 166; ** $p < .01$, *** $p < .001$.

explained an additional 8% of the variance in help-seeking intentions. This significant incremental prediction was a function of distress, accounting for significant unique variance, $\beta = .29$, $t = 3.35$, $p < .001$, indicating that higher distress was related to greater
intentions to seek help. In the final step, the hope x distress interaction failed to explain additional variance in help-seeking intentions, and Hypothesis 3 was not supported when using OQ-45.2 scores to measure distress.

The second regression presented in Table 6 repeated this analysis, substituting the agency component of hope for the HS total score. Because the hope scores were not entered until the second step, the first step of the regression was identical to that in the previous regression analysis. The same pattern of results was observed as in the previous regression. In the second step, agency and global distress were added, and the increase in variance explained was significant, accounting for an additional 8% of the variance in help-seeking intentions, beyond that which was explained by help-seeking attitudes and previous help-seeking; only global distress as measured by the OQ-45.2 contributed uniquely to the prediction of help-seeking intentions, $\beta = .30$, $t = 3.49$, $p < .001$. In the final step, the interaction between distress and agency was nonsignificant and failed to account for incremental variance in help-seeking intentions. Therefore, Hypothesis 3b was not supported when using OQ-45.2 scores.

Finally, in the regression exploring the moderation by the pathways component of hope, a parallel pattern of results was observed. As in the previous two analyses, favorable attitudes toward help-seeking and having previously sought help together accounted for 14% of the variance in intentions to seek help in the next month, with previous help-seeking uniquely contributing to the prediction, $\beta = .33$, $t = 4.48$, $p < .001$. When the main effects for pathways and global distress were added in step two, the change was significant and accounted for an additional 8% of the variance in help-seeking intentions, with global distress emerging as the significant unique predictor of
intentions, $\beta = .29, t = 3.63, p < .001$, such that higher distress was related to greater intentions to seek help. In the final step, the interaction between pathways and distress failed to account for significant incremental variance in help-seeking intentions. Thus, Hypothesis 3b was not supported. In summary, Hypotheses 3, 3a, and 3b were not supported when ratings of global distress were utilized, indicating that hope and distress do not interact to explain variance in help-seeking intentions, beyond that which can be explained by attitudes toward help-seeking, past help-seeking behavior, and global distress alone.

These three regression analyses were repeated substituting the PSR ratings, which operationalized distress due to the problem identified as currently most troubling. In the first regression (Table 7), help-seeking attitudes and past help-seeking (yes/no) together accounted for 14% of the variance in help-seeking intentions. This significant incremental change was a function of past help-seeking contributing unique predictive power, $\beta = .33, t = 4.47, p < .001$, such that having sought professional psychological help in the past was related to greater intentions to seek help in the next month. HS total and PSR scores were entered in the second step, and together accounted for an additional 4% incremental variance in help-seeking intentions. This significant incremental prediction was a function of hope contributing uniquely to the prediction of intentions, $\beta = -.16, t = 2.19, p < .05$, indicating that greater intentions to seek help were found among those who were lower in hope. In the final step, the interaction between hope and specific distress was entered. This interaction was significant and accounted for an additional 2% of the variance in help-seeking intentions, beyond that which was explained by help-seeking attitudes, past help-seeking, and main effects for hope and
distress. However, the direction of this relation was opposite from what was hypothesized, and therefore, Hypothesis 3 was not supported when distress is operationalized by the PSR.

Table 7.
Hierarchical Regression Analyses Predicting Intentions from Help-Seeking Attitudes, Previous Help-Seeking, Problem Severity, and Hope.

<table>
<thead>
<tr>
<th>Criterion and Steps</th>
<th>B</th>
<th>β</th>
<th>t</th>
<th>R</th>
<th>R²</th>
<th>R² Δ</th>
<th>df</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Help-Seeking</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 1:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ATSPPHS</td>
<td>.05</td>
<td>.13</td>
<td>1.81</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Past Help-Seeking</td>
<td>3.60</td>
<td>.33</td>
<td>4.47***</td>
<td>.38</td>
<td>.14</td>
<td>.14</td>
<td>2,162</td>
<td>13.33***</td>
</tr>
<tr>
<td>Step 2:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HS Total</td>
<td>-.27</td>
<td>-.16</td>
<td>-2.19*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSR</td>
<td>.29</td>
<td>.08</td>
<td>1.05</td>
<td>.42</td>
<td>.18</td>
<td>.04</td>
<td>2,160</td>
<td>3.39*</td>
</tr>
<tr>
<td>Step 3:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HS Total x PSR</td>
<td>-.18</td>
<td>-1.24</td>
<td>-1.99*</td>
<td>.44</td>
<td>.20</td>
<td>.02</td>
<td>1,159</td>
<td>3.95*</td>
</tr>
<tr>
<td>Help-Seeking</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 1:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ATSPPHS</td>
<td>.05</td>
<td>.13</td>
<td>1.81</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Past Help-Seeking</td>
<td>3.60</td>
<td>.33</td>
<td>4.47***</td>
<td>.38</td>
<td>.14</td>
<td>.14</td>
<td>2,162</td>
<td>13.33**</td>
</tr>
<tr>
<td>Step 2:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agency</td>
<td>-.40</td>
<td>-.14</td>
<td>-1.92</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSR</td>
<td>.27</td>
<td>.07</td>
<td>.97</td>
<td>.41</td>
<td>.17</td>
<td>.03</td>
<td>2,160</td>
<td>2.85</td>
</tr>
<tr>
<td>Step 3:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agency x PSR</td>
<td>-.33</td>
<td>-1.14</td>
<td>-2.07*</td>
<td>.44</td>
<td>.19</td>
<td>.02</td>
<td>1,159</td>
<td>4.29*</td>
</tr>
<tr>
<td>Help-Seeking</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 1:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ATSPPHS</td>
<td>.05</td>
<td>.13</td>
<td>1.81</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Past Help-Seeking</td>
<td>3.60</td>
<td>.33</td>
<td>4.47***</td>
<td>.38</td>
<td>.14</td>
<td>.14</td>
<td>2,162</td>
<td>13.33**</td>
</tr>
<tr>
<td>Step 2:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pathways</td>
<td>-.41</td>
<td>-.14</td>
<td>-1.89</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSR</td>
<td>.36</td>
<td>.10</td>
<td>1.30</td>
<td>.41</td>
<td>.17</td>
<td>.03</td>
<td>2,160</td>
<td>2.77</td>
</tr>
<tr>
<td>Step 3:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pathways x PSR</td>
<td>-.20</td>
<td>-.75</td>
<td>-1.30</td>
<td>.42</td>
<td>.28</td>
<td>.01</td>
<td>1,159</td>
<td>1.68</td>
</tr>
</tbody>
</table>

Note. n = 165; * p < .05, ** p < .01, *** p < .001.
Figure 4.2 represents the moderation by hope of the relation between specific
distress and help-seeking intentions, after accounting for the effects of help-seeking
attitudes and past help-seeking. Persons reporting greater problem severity and with
low hope had the greatest intentions to seek help, followed by those with low problem
severity and low hope. Persons reporting high problem severity and high hope
demonstrated the least intentions to seek help. Low-hope persons reported greater
intentions to seek help than high-hope persons, regardless of level of problem severity.

![Graph of Intention to Seek Help vs. Problem Severity]

Figure 4.2. Observed relation between distress and intentions to seek help, with
moderation by hope, after accounting for help-seeking attitudes and helpfulness of past
help-seeking.

The second regression presented in Table 7 examined the agency component of
hope, and reveals a slightly different pattern of results. The first step is identical to that
of the previous regression. In the second step, HS Agency and PSR scores did not
account for significant incremental variance in intentions to seek help. However, when
the interaction between agency and specific distress was entered in the third step, the

change in $R^2$ was significant and accounted for an additional 2% of the variance in help seeking intentions, $\beta = -.33, t = -2.07, p < .05$, suggesting that agency moderates the relation between specific distress and help-seeking intentions, even after accounting for the effects of help-seeking attitudes, past help-seeking, distress, and agency. Again, the relation was in the direction opposite from hypothesis, so Hypothesis 3a was not supported.

Figure 4.3 represents this interaction, and demonstrates that persons who rated their problem as severe and who were low in agency reported the greatest intentions to seek help. Those whose problems were high in severity but who also were highly agentic reported the least intentions to seek help. Those with low problem severity were similar in their help-seeking intentions, regardless of their level of agency.

![Figure 4.3](image)

Figure 4.3. Observed relation between distress and intentions to seek help, with moderation by agency, after accounting for help-seeking attitudes and helpfulness of past help-seeking.

The final regression in Table 7 examines the pathways component of hope. The first step is identical to that in the previous two analyses. In the second step, HS
Pathways and PSR scores did not account for significant incremental variance in help-seeking intentions. Likewise, in the third step, the interaction between pathways and specific distress did not result in a significant change in $R^2$. Thus, regardless of whether distress is measured on a general or specific level, pathways does not moderate the relation between distress and help-seeking intentions, beyond that which can be attributed to help-seeking attitudes and past help-seeking. Therefore, Hypothesis 3b was not supported.

**Test of Hypothesis 4**

The final hypothesis concerned whether, for those individuals who have received psychological services in the past, the perceived helpfulness of these services was related to future help-seeking intentions; and if so, whether the hope-distress interaction could provide explanatory power beyond hope, distress, help-seeking attitudes, and helpfulness of past help-seeking. Those participants ($n = 49$) who reported having sought professional help in the past, who were not currently in treatment, and who endorsed a problem as currently of concern, were included in the analyses. Despite this reduced sample size, which compromised statistical power for these analyses, and nonsignificant findings in previous analyses, these exploratory analyses were conducted to investigate the role of previous help-seeking. As for the previous hypotheses, six regression analyses were conducted. Intercorrelations among included variables were examined, and the correlations between the distress measures and the interaction terms exceeded .80, suggesting that multicollinearity is a concern. However, when the regressions were calculated using centered variables, the results were identical to those
using uncentered variables; thus, the results of the latter are reported for ease of interpretation.

The first set of three regressions (Table 8) utilized OQ-45.2 scores as the operationalization of distress. Consistent with the previous sets of analyses, in each regression, past help-seeking (in this case, how helpful the services were perceived to be) and help-seeking attitudes were entered in the first step. Together with help-seeking attitudes, helpfulness of past help-seeking failed to reach significance, $F_{\Delta} (2,44) = 2.48, p > .05$. In the second step, hope and global distress together explained significant incremental variance in help-seeking intentions, but neither HS nor OQ-45.2 scores contributed unique variance to the prediction of intentions in this step. Entered in the third step, the interaction between distress and hope failed to account for additional variance in help-seeking intentions. Hence, Hypothesis 4 was not supported, as hope did not moderate the relation between distress and help-seeking intentions, beyond that which could be explained by perceived helpfulness of past mental health treatment, help-seeking attitudes, and distress.

The same pattern of results was observed in the regression examining the role of agency in moderating the relation between hope and distress. As in the previous analysis, the first step, which included help-seeking attitudes and helpfulness of past help-seeking, failed to reach the $p < .05$ level of significance. In the second step, Agency and OQ-45.2 scores together accounted for an additional 12% of the variance in help-seeking intentions. This significant incremental prediction, however, was not reflected in significant betas for either of the predictors. In the third step, the distress-
agency interaction did not account for significant incremental variance in help-seeking intentions. Thus, Hypothesis 4a was not supported.

Table 8.

Hierarchical Regression Analyses Predicting Intentions from Help-Seeking Attitudes, Helpfulness of Past Help-Seeking, Global Distress, and Hope.

<table>
<thead>
<tr>
<th>Criterion and Steps</th>
<th>B</th>
<th>β</th>
<th>t</th>
<th>R</th>
<th>R²</th>
<th>R²_A</th>
<th>df</th>
<th>F_A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Help-Seeking</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 1:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ATSPPHS</td>
<td>-.01</td>
<td>-.03</td>
<td>-.19</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Helpfulness</td>
<td>1.11</td>
<td>.32</td>
<td>2.23*</td>
<td>.32</td>
<td>.10</td>
<td>.10</td>
<td>2.44</td>
<td>2.48</td>
</tr>
<tr>
<td>Step 2:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HS Total</td>
<td>-.38</td>
<td>-.21</td>
<td>-1.29</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OQ Total</td>
<td>.06</td>
<td>.22</td>
<td>1.26</td>
<td>.49</td>
<td>.24</td>
<td>.13</td>
<td>2.42</td>
<td>3.68*</td>
</tr>
<tr>
<td>Step:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HS x OQ</td>
<td>-.01</td>
<td>-.73</td>
<td>-.88</td>
<td>.50</td>
<td>.25</td>
<td>.01</td>
<td>1.41</td>
<td>.78</td>
</tr>
<tr>
<td>Help-Seeking</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 1:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ATSPPHS</td>
<td>-.01</td>
<td>-.03</td>
<td>-.19</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Helpfulness</td>
<td>1.11</td>
<td>.32</td>
<td>2.23*</td>
<td>.32</td>
<td>.10</td>
<td>.10</td>
<td>2.44</td>
<td>2.48</td>
</tr>
<tr>
<td>Step 2:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HS Agency</td>
<td>-.40</td>
<td>-.15</td>
<td>-1.29</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OQ Total</td>
<td>.07</td>
<td>.26</td>
<td>1.44</td>
<td>.47</td>
<td>.22</td>
<td>.12</td>
<td>2.42</td>
<td>3.17*</td>
</tr>
<tr>
<td>Step 3:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HS Agency x OQ</td>
<td>-.01</td>
<td>-.35</td>
<td>-.53</td>
<td>.47</td>
<td>.23</td>
<td>.01</td>
<td>1.41</td>
<td>.28</td>
</tr>
<tr>
<td>Help-Seeking</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 1:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ATSPPHS</td>
<td>-.01</td>
<td>-.03</td>
<td>-.19</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Helpfulness</td>
<td>1.11</td>
<td>.32</td>
<td>2.23*</td>
<td>.32</td>
<td>.10</td>
<td>.10</td>
<td>2.44</td>
<td>2.48</td>
</tr>
<tr>
<td>Step 2:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HS Pathways</td>
<td>-.63</td>
<td>-.18</td>
<td>-1.22</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OQ Total</td>
<td>.07</td>
<td>.28</td>
<td>1.80</td>
<td>.48</td>
<td>.23</td>
<td>.13</td>
<td>2.42</td>
<td>3.56*</td>
</tr>
<tr>
<td>Step 3:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HS Pathways x OQ</td>
<td>-.03</td>
<td>-1.17</td>
<td>-1.16</td>
<td>.51</td>
<td>.26</td>
<td>.02</td>
<td>1.41</td>
<td>1.35</td>
</tr>
</tbody>
</table>

*Note. n = 49; Helpfulness = helpfulness of past professional help-seeking; * p < .05.
Finally, the third regression presented in Table 8 examined whether the pathways component of hope moderates the relation between distress and help-seeking, and a pattern of results identical to those of the prior two regressions was observed. The results of the first step are identical to that in the previous two analyses. In the second step, the main effects for pathways and global distress together accounted for incremental variance (13%) in help-seeking intentions, but neither of the predictor betas was significant. In the final step, the interaction of pathways and distress failed to explain significant incremental variance in intentions to seek help. Therefore, Hypothesis 4b was not supported.

Table 9 presents the results of three regression analyses in which PSR scores served as the independent variable measuring specific distress. As in the analyses using the OQ-45.2 scores, in the first step, help-seeking attitudes and perceived helpfulness of past help-seeking did not reach significance in predicting help-seeking intentions. In the second step, HS total and PSR scores together accounted for an additional 12% of the variance in help-seeking intentions. This significant incremental prediction was a function of HS total scores contributing uniquely to the prediction of help-seeking intentions, $\beta = -.32$, $t = -2.35$, $p < .05$, such that lower hope was related to greater help-seeking intentions. In the final step, the interaction between hope and specific distress failed to significantly account for additional variance in help-seeking intentions.

The remaining two regression analyses examined whether the agency and pathways components of hope, respectively, moderate the relation between specific distress and help-seeking intentions, after accounting for help-seeking attitudes and perceived helpfulness of past help-seeking. In each regression, the first step is identical
Table 9.

Hierarchical Regression Analyses Predicting Intentions from Help-Seeking Attitudes, Helpfulness of Past Help-Seeking, Problem Severity, and Hope.

<table>
<thead>
<tr>
<th>Criterion and Steps</th>
<th>$B$</th>
<th>$\beta$</th>
<th>$t$</th>
<th>$R^2$</th>
<th>$R^2_{\Delta}$</th>
<th>$df$</th>
<th>$F_{\Delta}$</th>
</tr>
</thead>
</table>
| Help-Seeking Intentions
| Step 1:             |      |         |      |       |                 |      |             |
| ATSPPHS             | -.01 | -.03    | -.19 |       |                 |      |             |
| Helpfulness         | 1.11 | .32     | 2.23*| .32   | .10             | 2,44 | 2.48        |
| Step 2:             |      |         |      |       |                 |      |             |
| HS Total            | -.59 | -.32    | -2.35*|       |                 |      |             |
| PSR                 | .59  | .11     | .79  | .47   | .22             | 2,42 | 3.13*       |
| Step:               |      |         |      |       |                 |      |             |
| HS x PSR            | -.20 | -1.07   | -1.00| .49   | .24             | 1,41 | .99         |

Help-Seeking Intentions
Step 1:
| ATSPPHS             | -.01 | -.03    | -.19 |       |                 |      |             |
| Helpfulness         | 1.11 | .32     | 2.23*| .32   | .10             | 2,44 | 2.48        |

Help-Seeking Intentions
Step 2:
| HS Agency           | -.75 | -.27    | -1.93|       |                 |      |             |
| PSR                 | .45  | .08     | .59  | .43   | .19             | 2,42 | 2.23        |

Help-Seeking Intentions
Step 3:
| HS Agency x PSR     | -.32 | -.91    | -1.01| .46   | .21             | 1,41 | 1.03        |

Help-Seeking Intentions
Step 1:
| ATSPPHS             | -.01 | -.03    | -.19 |       |                 |      |             |
| Helpfulness         | 1.11 | .32     | 2.23*| .32   | .10             | 2,44 | 2.48        |

Help-Seeking Intentions
Step 2:
| HS Pathways         | -1.01| -.28    | -2.03*|       |                 |      |             |
| PSR                 | .81  | .15     | 1.06 | .44   | .19             | 2,42 | 2.42        |

Help-Seeking Intentions
Step:               |      |         |      |       |                 |      |             |
| HS Pathways x PSR  | -.46 | -1.35   | -1.03| .46   | .21             | 1,41 | 1.06        |

Note. $n = 47$; Helpfulness = helpfulness of past professional help-seeking; * $p < .05$. 

to that that of the previous analysis. When examining agency, in the second step, Agency and PSR scores together failed to account for significant incremental variance in help-seeking intentions, beyond that which was explained by help-seeking attitudes.
and helpfulness of past help-seeking. The agency-distress interaction was entered in the final step, and failed to reach significance. Likewise, in the final regression, Pathways and PSR together did not account for significant variance in help-seeking intentions. When the pathways-distress interaction was entered in the third step, it also failed to explain significant incremental variance in help-seeking intentions. Thus, regardless of whether distress was measured on a general or specific level, Hypotheses 4, 4a, and 4b were not supported.

Summary of the Results

Four hypotheses examined the ability of distress, hope, and previous help-seeking to explain help-seeking intentions. Hypothesis 1 proposed that significant positive relations existed between intentions to seek psychological help and each of the following: past help-seeking, perceived helpfulness of past help-seeking, help-seeking attitudes, and level of distress. Consistent with previous research, correlational data supported this hypothesis, as significant positive correlations were found in each case. Thus, Hypothesis 1 was supported.

Hypotheses 2, 3, and 4 (and their sub-hypotheses) examined whether hope moderates the relation between distress and help-seeking intentions. Hierarchical multiple regression was used to test these hypotheses. When distress was operationalized using the OQ-45.2, hope and its component constructs, agency and pathways, failed to moderate the relation between distress and intentions to seek help. When distress was operationalized using the PSR, which measured severity of the current problem, and attitudes and prior help-seeking were not considered, agency was shown to moderate the relation between severity of the current problem and help-
seeking intentions (Hypothesis 2a). This moderation persisted even when help-seeking attitudes and previous help-seeking were considered (Hypothesis 3a). However, in both cases, the direction of the relation was opposite from what was expected. Specifically, individuals who reported low levels of motivation to work toward goals and high levels of distress also reported high intentions to seek help. Conversely, those individuals who reported high motivation to begin and sustain movement toward goals and high levels of distress reported that they were least likely to seek psychological help.

Likewise, when examining whether hope in general moderated the relation between severity of the current problem and help-seeking intentions, the hope x severity interaction was found to account for variance in help-seeking intentions beyond that which was attributed to previous help-seeking and help-seeking attitudes (Hypothesis 3). Again, the direction of the relation was opposite from that which was hypothesized, with low-hope individuals demonstrating greater intentions to seek help, regardless of problem severity. The pathways component of hope did not moderate the relationship between distress and help-seeking intentions when previous help-seeking and help-seeking attitudes were considered.

Finally, when only persons who had prior experience in treatment were considered and attitudes and the helpfulness of that treatment were controlled, no evidence of moderation by hope, or its components, was found of the relation between distress and intention to seek help.
CHAPTER V
DISCUSSION

This chapter opens with a summary of the purposes and hypotheses of the current study, followed by exploration of the study’s results and possible interpretations of the findings. These results are then discussed in the context of the extant literature on help-seeking intentions and Hope Theory. Implications for theory and practice, limitations of the study, and suggestions for future research conclude the chapter.

Summary of the Research

The present research attempted to clarify the relationship between distress and intentions to seek professional psychological help by examining the potential moderating role of hope (Snyder et al., 1991). Previous research established that having sought help in the past (e.g., Bringle & Byers, 1997; Carlton & Deane, 2000; Deane & Todd, 1996; Haldin et al., 1987; Meissen et al., 1996), viewing past mental health services as helpful (e.g., Ciarrochi et al., 2002; Deane et al., 1999), and having favorable attitudes toward help-seeking (e.g., Bayer & Peay, 1997; Carlton & Deane, 2000; Cepeda-Benito & Short, 1998; Cramer, 1999; Deane et al., 1999; Deane & Todd, 1996; Kelly & Achter, 1995) all relate to greater intentions to seek help.

Level of psychological distress is a construct that seems logical to investigate in regard to help-seeking intentions; intuitively, one would expect that highly distressed individuals would be more motivated to seek psychological help than those with lower
levels of distress. Yet, when this hypothesis has been examined empirically, results have been mixed. Several studies have suggested that higher level of distress, whether measured generally or in terms of a specific form of distress (such as depressive symptomology), is indeed related to increased intentions to seek help (e.g., Carlton & Deane, 2000; Cepeda-Benito & Short, 1998; Cramer, 1999; Deane & Chamberlain, 1994; Halgin et al., 1987). Results of other studies seem to indicate that distress is unrelated to help-seeking intentions when considered alongside other variables such as attitude toward seeking help and previous help-seeking (e.g., Deane et al., 1996; Deane & Todd, 1996; Kelly & Achter, 1995). Yet another study (Deane et al., 2001) found that persons with very high levels of distress, in the form of high levels of suicidal ideation, reported the weakest intentions to seek help.

To attempt to clarify these apparent discrepancies, the current study proposed that the relation between distress and help-seeking intentions might be moderated by some personal characteristic or individual differences variable. This suggestion is consistent with theoretical assertions regarding the impact of predisposing factors, such as personality traits and dispositions, on help-seeking behaviors (Pescosolido & Boyer, 1999) and also answers the recent call by Frazier et al. (2004) to advance counseling psychology research and theory by moving beyond basic correlational questions to examine how main effects might be moderated or mediated by other theoretically relevant constructs.

One such individual differences construct that might have bearing on the help-seeking process is hope, as conceptualized in Hope Theory (Snyder et al., 1991). This theory is essentially a paradigm for understanding how people think about achieving
their goals (Snyder et al., 1999). Hope Theory posits that, having identified a goal or desired outcome, individuals must generate one or more viable routes to the goal and have belief in their ability to progress along these routes. These two components are referred to as pathways thinking and agency thinking, respectively, and together comprise hope. Thus, according to this theory, hope is defined as “a cognitive set that is based on a reciprocally derived sense of successful (a) agency (goal directed determination) and (b) pathways (planning of ways to meet goals)” (Snyder et al., 1991, p. 571). Research supports the distinctiveness of the agency and pathways constructs (Drach-Zahavy & Somech, 2002; Magaletta & Oliver, 1999; Snyder et al., 1991), as well as the uniqueness of the hope construct in comparison to other similar constructs such as optimism and self-efficacy (Drach-Zahavy & Somech, 2002; Magaletta & Oliver, 1999).

Because hope is conceptualized as a trait-level characteristic, it is by definition cross-situational in nature (Snyder et al., 2000) and therefore would be expected to exert influence on thoughts and behaviors across a variety of circumstances. Thus, it is reasonable to speculate that hope would be relevant when distressed individuals consider their options for alleviating their distress. Specifically, within the framework of Hope Theory, seeking professional psychological help by distressed persons can be conceptualized as the result of identifying therapy as a reasonable route, or pathway, to the goal of reducing distress. Furthermore, forming an intention to seek psychological help, which is a direct precursor to help-seeking behavior (Ajzen, 1988), can be viewed as the result of determination to take action toward the goal of alleviating distress. In other words, developing an intention to seek help can be viewed as an expression of
both pathways and agency. Therefore, we would expect that distressed individuals with high levels of trait hope would be more likely to seek help than distressed individuals low in hope. The current study proposed that hope may lend explanatory power to differentiate distressed individuals who express intentions to seek help from similarly distressed individuals who do not report intentions to seek help. In this way, it was hypothesized that hope serves to moderate the relation between distress and help-seeking behaviors such that distressed persons with high levels of hope would report greater intentions to seek help than distressed low-hope individuals.

Thus, the ability of hope and its component constructs to moderate the relation between distress and help-seeking was examined in the current study. Hypothesis 1 explored the bivariate relations among help-seeking attitudes, previous help-seeking, perceived helpfulness of past help-seeking, two measures of distress, and help-seeking intentions. Hypotheses 2, 2a, and 2b examined whether hope and its component constructs, agency and pathways, moderate the relation between distress and help-seeking intentions. The analyses for this hypothesis were conducted twice, once using global distress (OQ-45.2) scores, and once using specific distress (PSR) scores. Hypotheses 3, 3a, and 3b built upon Hypothesis 2 by investigating whether hope, agency, and pathways would moderate the relation between distress and help-seeking intentions, even after accounting for variance which could be attributed to help-seeking attitudes and past help-seeking. The analyses for Hypothesis 3 were also conducted twice, once using global distress scores and once using specific problem severity scores. Finally, Hypotheses 4, 4a, and 4b utilized data from respondents who indicated that they had engaged in mental health services in the past. The ability of hope, agency, and
pathways to moderate the relation between distress and help-seeking, after accounting for perceptions of the helpfulness of past help-seeking and help-seeking attitudes, was examined separately for global and specific ratings of distress, as in the previous hypotheses.

In addition to exploring possible moderation of the relation between distress and help-seeking intentions, the present study also addressed methodological shortcomings of previous research on help-seeking intentions in two ways. First, the measurement of help-seeking intentions was improved by having participants select, from a list of thirty common problems, the issues that were currently troubling them and then report their intentions to engage in increasingly involved help-seeking behaviors (i.e., seeking information, contacting a help source, making an appointment, keeping the appointment) for the problem of their choosing. In this way, the measurement of intentions was specific, thorough, and immediate, and improved on the methods of past studies, which commonly assessed willingness to seek help in the hypothetical case that a variety of different problems were experienced. Second, distress was operationalized in two manners: the OQ-45.2 measured global distress across three life domains, and the PSR measured perceived severity of the problem which was selected as most troubling. It was expected that the OQ-45.2 would be a better measure of distress for college students than measures of distress utilized in previous studies (e.g., the HSCL-21), as it assesses difficulties that are likely to be experienced by college students. The PSR allowed for a rating of distress which was directly tied to the problem for which help-seeking intentions were assessed, in order to provide an assessment of distress that matched level of specificity to the measurement of help-seeking intentions.
The findings of the present study are examined next and discussed in the context of the extant literature on help-seeking and hope. This is followed by a discussion of implications of the findings for theory and practice, limitations of the current study, and suggestions for future research.

**Exploration of the Findings**

Correlational results supported Hypothesis 1, that distress, help-seeking attitudes, past help-seeking, and helpfulness of past mental health treatment were all positively related to intentions to seek help in the next month. That is, individuals who reported high levels of distress, favorable attitudes toward seeking help, having sought help in the past, and viewing past mental health services as beneficial were all more likely to report intentions to seek help in the next month. That the correlations among these variables were in expected directions based on theory and past research lends confidence to the quality of the present data.

Yet, in comparing the magnitude of these correlations with those from prior research, it appears that the results diverged from previous findings in some ways. First, the correlation in the present research between previous help-seeking and current help-seeking intentions of .34 ($p < .01$) was somewhat greater than that observed in previous studies, in which values for that correlation ranged from -.14 to .22 (Carlton & Deane, 2000; Ciarrochi & Deane, 2001). Further, in the present sample, help-seeking attitudes were only modestly related to intentions to seek help, $r = .18$ ($p < .05$) and this relation was weaker than that which was observed in previous studies (e.g., Cepeda-Benito & Short, 1998; Deane & Todd, 1996; Kelly & Achter, 1995); prior correlations between help-seeking attitudes and help-seeking intentions ranged from .35 to .68,
depending on how help-seeking intentions were operationalized and the type of problem experienced. However, it should be noted that in the present sample, nine respondents who were currently participating in therapy were excluded from the calculation of these correlations; when those individuals were included, the correlation between help-seeking attitudes and intentions was .37 ($p < .001$), which was comparable to the findings of previous studies. Whether participants who were in therapy were excluded from the correlation analyses in the previous studies is unclear; thus comparisons between these correlations should be considered tentative.

The correlations between help-seeking intentions and the various measures of distress (OQ-45.2 total scores, OQ-45.2 subscale scores, and PSR scores) were modest as well, ranging from .15 ($p < .05$) to .34 ($p < .01$), and were similar to findings in previous studies (e.g., Carlton & Deane, 2000; Cepeda-Benito & Short, 1998; Deane et al., 1999; Deane & Todd, 1996; Kelly & Achter, 1995). Distress in regard to problematic interpersonal relationships, as measured by a subscale of the OQ-45.2, was most strongly related to intentions to seek help. Scores on the Problem Severity Rating (PSR), on which respondents rated the severity of their chosen problem currently and in the past week, were not as strongly related to help-seeking intentions as were OQ-45.2 scores. The similarity of these findings to those of past research lends validity to the results of the present study.

Hypotheses 2, 3, and 4 addressed whether hope moderated the relation between distress and help-seeking. Although none of these hypotheses was supported, some interesting findings emerged. First, when no covariates were considered, agency, but not pathways thinking or hope in general, moderated the relation between distress and
help-seeking, but this relation was in a direction opposite of what was expected: highly distressed individuals who were high in agency reported the weakest intentions to seek help and low-agency persons with high distress reported the strongest intentions to seek help.

Similarly, after controlling for help-seeking attitudes and past-help seeking, hope and agency both emerged as moderators. Again, individuals high in distress and low in hope (or agency) were the most likely to intend to seek help; low-distress individuals, regardless of their level of hope, were similar in their help-seeking intentions. Help-seeking attitudes, past help-seeking, hope, problem severity, and the interaction between hope and problem severity together explained 20% of the variance in help-seeking intentions. When agency was substituted for hope total scores, this group of variables accounted for 19% of the variance in help-seeking intentions. This modest amount of variance explained is comparable to that of previous studies of help-seeking intentions (e.g., Carlton & Deane, 2000; Cepeda-Benito & Short, 1998; Deane & Chamberlain, 1994; Deane & Todd, 1996; Kelly & Achter, 1995).

Finally, when only those who had prior experiences with professional mental health services (n = 49) were considered, and when variance due to help-seeking attitudes and perceived helpfulness of past help-seeking was accounted for, neither hope, agency, nor pathways moderated the relation between distress and help-seeking intentions, regardless of whether distress was measured specifically or globally. Thus, Hypothesis 4 was not supported. However, the reduced sample size for this analysis compromised statistical power and limited ability to detect moderation. Post-hoc power analyses indicated that the maximum power to detect a significant interaction among the
six regression analyses was .19, far below the recommended minimum power of .80 (Cohen, 1988).

A common finding in the analyses for Hypotheses 3 and 4 was that help-seeking attitudes did not emerge as a unique predictor of help-seeking intentions. Instead, past help-seeking and helpfulness of past help-seeking consistently demonstrated unique power to explain help-seeking intentions. That help-seeking attitudes did not emerge as a significant predictor of intentions was both unexpected and inconsistent with past research, as well as theory (Ajzen & Fishbein, 1980), which posits that attitudes about a particular behavior are highly correlated with intentions to engage in that behavior. It is feasible that prior help-seeking and the perceived helpfulness of past help-seeking experiences reflect one’s current attitudes toward seeking help, and as such, these two constructs may have subsumed help-seeking attitudes in the current sample.

Based on the present findings, it seems that the trait of agency, or the perceived capacity to engage in strategies that lead to goal accomplishment, is the driving component of this inverse relationship between hope and help-seeking, as pathways thinking did not emerge as a significant moderator in any of the analyses. In other words, it seems likely that in those analyses where hope was found to moderate the distress—intentions link, the moderation was likely driven by agency, which in each case emerged as a significant moderator when considered alone. Thus, it seems that perceived ability to engage in goal-directed behaviors is the salient construct to consider in terms of hope’s relation to help-seeking among distressed individuals.

The moderation by agency of the relation between problem severity and intention to seek help, though statistically significant, was contrary to the hypothesized direction.
Rather than high agency serving to mobilize distressed individuals to seek help, it seems that having high amounts of agency, or willpower, overrode the need for counseling in this sample of college students. In other words, participants with higher amounts of agency apparently perceived that they had the ability to mobilize their own resources to solve their problems, and believed they would be able to find relief from their distress without seeking professional help. The converse implication is that individuals with low amounts of agency saw themselves as lacking the requisite resources or motivation to engage in strategies that would alleviate distress and, absent this internal problem-solving ability, they were more likely to form an intention to seek professional help to deal with their distress.

As theorized, then, agency served to clarify the relation between distress and help-seeking, albeit it the opposite manner as hypothesized in this study. Despite being contrary to hypothesis, this finding may be an important advance in understanding why some individuals who are distressed seek psychological help, while others do not. Additionally, this finding corroborates the notion identified in many theories of help-seeking (e.g., Andersen, 1968; Andersen & Newman, 1973; Fischer et al., 1983; Goldsmith et al., 1988; Pescosolido, 1992; Rosenstock, 1966) that personal characteristics impact the process of seeking help (Pescosolido & Boyer, 1999). The present research suggests that the trait of agency is one such characteristic that may influence psychological help-seeking.

Wills and DePaulo (1991) provided a thorough summary of research on the help-seeking process, describing a multitude of empirical findings suggesting that personal characteristics do indeed influence psychological help-seeking. For example, one
theme identified by these authors is that individuals with high self-esteem appear to be resistant to seeking help, while those with low self-esteem display greater willingness to ask for help, across a variety of settings and research designs. Wills and DePaulo interpreted this tendency as reluctance on the part of individuals with high self-esteem to avoid feeling demoralized by having to ask for help, as this would threaten their positive view of self. In this way, agency may parallel high self-esteem, as individuals who generally feel able to engage in behaviors to solve their problems might perceive that they are admitting failure if they seek help. Furthermore, Wills and DePaulo discussed research on achievement motivation as it relates to help-seeking, concluding that individuals who have both high motivation to achieve and high self-esteem report low likelihood of seeking help, purportedly out of a need to protect their self-appraisals by solving problems independently of assistance from others. This theme seems to relate to the present findings regarding the role of agency. Specifically, highly agentic individuals may also tend to have both high self-esteem and achievement motivation (Snyder et al., 1991), and therefore may feel better equipped to manage or seek solutions for their distress, reducing the need for professional psychological help. Conversely, individuals with less agency may feel unequipped to manage their distress independently, but are more willing to seek professional help. In this way, both high- and low-agency persons may have viable and adaptive coping strategies for reducing psychological distress.

The pattern of results obtained in this study, if taken at face value, suggests that people who see themselves as having low ability to engage in behaviors that move them toward their goals also see themselves as more likely to seek the help of a mental health
professional when they are experiencing a problem which is of sufficient severity. That is, those who are low in one aspect of hope, agency, are actually more likely to seek help than those high in agency. These findings appear, at first consideration, to be contrary to what would be expected based on Hope Theory. Hope Theory asserts that, when faced with a problem, individuals higher in hope have a greater ability to generate and act upon strategies for alleviating distress. One potential way to alleviate psychological distress is to seek professional psychological help. Applied to help-seeking, Hope Theory would suggest that, when experiencing psychological distress, persons higher in hope would report greater intentions to behave in ways that are likely to alleviate distress, including seeking professional psychological help. However, the present application of Hope Theory did not account for the likelihood that high agency individuals have avenues in addition to psychological help-seeking (or interpersonal help-seeking in general) that may serve to alleviate distress. Thus, it may be that high agency individuals would report a greater likelihood of engaging in other distress-reducing behaviors that were not considered in the present study.

Alternatively, it may be that individuals who have little hope recognize their inability (so far) to solve their problems, so they seek help. In this way, help-seeking is a hopeful act, but does not require one to be characteristically high in hope. This argument brings to mind the difference between “trait” and “state” hope (Snyder et al., 1996). Trait hope, which was examined in this study, refers to a stable internal cognitive set that influences goal-directed thoughts and behaviors across a spectrum of situations. State hope refers to goal-directed thinking in a given moment and may fluctuate based on situational and other factors (Snyder et al., 1996). Perhaps
psychological help-seeking represents a surge in state hope at the time that help is sought (e.g., making an appointment), but overall, distressed individuals seeking help have low trait hope, as suggested by the present findings. Indeed, in discussing how hope might be related to help-seeking, Snyder (1994) suggested,

“When a client has chosen to seek help from a mental health professional, this decision alone is evidence that the would-be client is not entirely lacking in will- [agency] and way [pathway]-related thinking. After all, psychotherapy represents a viable pathway to the goal of alleviating the distress; the fact that the person makes the appointment suggests some willpower [agency]” (p. 291).

This premise may also fit with Fischer et al.’s (1983) model of help-seeking, which proposed that some precipitating event serves to mobilize help-seeking behavior. It may be possible to conceptualize a surge in state hope as such a catalyst. If this is the case, then measuring intentions to seek help might not be particularly relevant, because individuals will not report intentions to seek help until the increase in state hope occurs. This possibility is also consistent with the importance of measuring constructs at the same level of specificity (i.e., relating hope in the present moment, current distress, and current help-seeking intentions).

Conceptualizing help-seeking in terms of within-subjects changes in state hope is an alternative application of Hope Theory to psychological help-seeking that was not considered in the present study. However, this conceptualization moves away from trait-level characteristics that, in theory, should influence help-seeking. It is possible that trait and state both have bearing on intentions to seek help for psychological problems. Previous research on the respective influences of state and trait hope (e.g., Curry et al., 1997) suggests that state hope explains variance in behavioral outcomes
(such as academic and athletic achievement) beyond that which is explained by trait hope. Whether state hope better explains, or perhaps adds explanatory power to the prediction of help-seeking intentions beyond that which is accounted for by trait hope, is an empirical question to be examined in future research.

A final possibility is that psychological help-seeking does not require a high degree of trait-level hope, but rather, requires some optimal amount of hope to serve as a catalyst to take some action toward solving the problem (alleviating distress). In this way, when hope is low enough to enable clinically significant distress to develop but yet high enough to facilitate some goal-directed action, then seeking psychological help may occur. Of course, even under these circumstances, professional help-seeking is only likely to occur among individuals who possess other traits that have been shown to relate to help-seeking, such as having favorable help-seeking attitudes, being able to express oneself emotionally, and having access to mental health services. Being totally devoid of hope, in addition to precluding taking action toward alleviating distress, would likely be related to suicidality, because one would lack the belief that one has any power to change one’s life circumstances. Framed in this manner, it may be useful to examine in future studies whether a curvilinear relation exists, among distressed individuals, between hope and help-seeking intentions, such that individuals at very low and very high levels of hope would express lower intentions to seek help than individuals at moderate levels of hope. Unfortunately, range restriction on Hope Scale scores (with almost no respondents endorsing very low levels of hope) precluded exploration of this hypothesis in the current data set.
Although the role of hope in psychological help-seeking had not been examined directly prior to the current study, evidence from the health psychology literature appeared to provide some preliminary support for the hypothesized relation between hope and help-seeking. Drach-Zahavy and Somech (2002) found that high-hope individuals, when dealing with a stressful health problem, engaged in more constructive thinking and focused on likely solutions more effectively than did low-hope persons. Constructive thinking is defined as a set of cognitive productive thoughts that affect one’s ability to solve problems in everyday living with minimal costs in terms of stress (Epstein & Meier, 1989). To the extent that seeking services from a mental health professional can be viewed as a constructive coping mechanism, it would seem logical that high hope individuals, when distressed, would report a greater likelihood of seeking professional help. Nevertheless, when applied to forming an intention to seek help for psychological problems, it appears that hope functions in a manner contrary to this expectation. A possible explanation for this is that seeking psychological help is not a direct manifestation of constructive thinking; rather, it is possible that constructive thinking enhances one’s ability to address psychological distress without resorting to professional help and that psychological help-seeking occurs in the absence of constructive thinking. The hypotheses of the current study were formulated, in part, with the results of Drach-Zahavy and Somech (2002) in mind, assuming that psychological help-seeking is an expression or result of constructive thinking. However, it is probable given the current findings that help-seeking represents a “last resort” attempt to alleviate distress after other avenues produced by constructive thinking are exhausted.
Other research on coping with health problems may also inform the present discussion of hope and seeking help for psychological distress. For example, there is evidence suggesting that highly hopeful undergraduate women were able to generate significantly more strategies for dealing with the hypothetical situation of being diagnosed with cancer than low-hope women (Irving et al., 1998). Extrapolating from this finding, it was hypothesized that when facing psychological distress, seeking professional help would be among the problem-solving strategies generated by high-hope individuals. However, an important difference between the Irving et al. study and the present research is that in the former, the women were responding to a hypothetical situation which was assumed to cause distress, while in the present research, participants were reporting their reactions to actual distress which was currently being experienced. Moreover, the present study did not directly test whether distressed individuals could generate a different number of strategies for dealing with their distress based on their level of hope. Furthermore, ability to generate strategies says nothing about one’s intention to utilize any given strategy. Thus, it may be that high hope individuals in the present sample were able to imagine viable strategies for dealing with their distress and yet still reported low intention to seek professional psychological help. A more basic application of Hope Theory would be to determine whether high hope individuals can generate more strategies for dealing with psychological distress than their low-hope distress counterparts.

Indeed, a consistent finding throughout the analyses was that pathways thinking did not moderate the relation between distress and help-seeking. Pathways thinking refers to one’s perceived ability to generate practicable strategies for attaining one’s
goals, in this case, alleviating psychological distress. In this sample, help-seeking intentions were unrelated in bivariate correlations to pathways thinking, and help-seeking intentions among distressed individuals did not vary as a function of level of pathways thinking. This lack of relation cannot likely be attributed to abnormal levels of pathways thinking among members of the current sample as the mean Pathways score was similar to that of other samples of college students (Snyder et al., 1991). Specificity of measurement is again an issue in that pathways thinking was assessed on a trait level, and related to intentions to seek help for a specific problem. It was not possible, using the current methodology, to determine participants’ perceived ability to generate strategies for reducing their psychological distress. It may be that high-pathways students in this sample were able to imagine a variety of strategies for addressing their concerns, and yet still had low intentions to seek professional help, either because they were not aware of how professional psychological help could be beneficial or because their problems did not seem conducive to mental health treatment.

This possibility raises concerns about whether the present sample adequately represented the population of potential help-seekers. Specifically, the severity of the problems experienced by participants may not be the types of problems for which individuals would normally consider seeking professional mental health services. It is probably unreasonable to expect that students would report intentions to seek professional help when their level of distress is relatively low. Indeed, only 32% of participants produced profiles on the OQ-45.2 which exceeded the clinical cutoffs, and the sample’s mean OQ-45.2 score of 54.42 was below the clinical cutoff of 63. This suggests that the sample was comprised mostly of students who were experiencing low
to moderate levels of psychological distress, and so it is not surprising that intentions to seek psychological help were also quite weak.

A related issue is the type of problems experienced by participants. Examining scores on the OQ-45.2 subscales reveals that the highest proportion (47.3%) of the sample reported clinically significant distress on the Social Role scale, which measures difficulty in school or work settings. Furthermore, three of the most commonly endorsed on the Problem Stimulus Survey were school-related problem (65%), general life stress (77%), and financial problem (56%). It is likely that the typical student would not be likely to seek mental health treatment for problems such as these. Rather, the type and severity of the problems endorsed by participants may lend themselves more readily to problem-solving strategies other than seeking help from a mental health professional. In fact, students were asked on their survey materials to list the three persons they were most likely to talk with about their problems. The most common responses were parents or other family members, friends or significant others, and instructors. Comparatively few respondents (n = 24) listed a counselor, psychologist, or other mental health professional as one of their top three choices for discussing their concerns. It may be that strong help-seeking intentions did not emerge simply because other solutions were more appropriate to the problems students were experiencing (e.g., talking to a professor about difficulty in a class, or seeking information at the financial aid office for monetary concerns).

The implication of this is that in a strictly “clinical” sample, distress, hope, and help-seeking intentions might relate to one another differently than they did in the present data. To explore this possibility statistically, the list of problems identified as
most troubling by participants was examined. For the purpose of this exploratory analysis, participants who indicated that their most troubling problem was school-related, financial, legal, general life stress, or coping with their own or a family member’s illness were excluded from the data set. Correlations among the measures of distress and help-seeking intentions were calculated using data from those participants (n = 64) who endorsed more “clinical” problems (e.g., depression, anxiety, suicidal thoughts, relationship concerns, family conflict, loneliness/homesickness, career uncertainty). Examination of these correlation coefficients suggests that the relations between the measures of distress and intentions were generally greater in magnitude when only those individuals with more “clinical” problems were included as compared with the findings for the entire sample. For example, the correlation between OQ-45.2 Symptom Distress scores and intentions to seek help in the entire sample was .30 (p < .01); for those endorsing more clinical problems, this correlation rose to .41 (p < .01).

Thus, it seems possible that in a strictly clinical sample, distress, hope, and help-seeking intentions might relate differently than in the present data set. However, this speculation should be examined empirically in a new sample of distressed individuals of sufficient size to explore the moderation hypothesis with adequate statistical power.

It is also important to consider that hope may interact differently with distress to produce help-seeking intentions if a wider range of help sources is considered. Previous research indicates that students’ intentions to seek help vary depending on the help source considered (Ciarrochi et al., 2002; Christensen & Magoon, 1977; Deane et al., 2001; Good et al., 1989; Tinsley, Brown, de St. Aubin, & Lucek, 1984). In fact, reviews of the help-seeking literature (Pescosolido & Boyer, 1999; Wills & DePaulo,
1991) suggest that there exists a sequence of help-seeking, in which help is sought from different sources based on the type and severity of the problem. Specifically, Wills and DePaulo (1991) suggested that individuals first seek assistance from friends and family, followed by appeals to “first-line helping agents” (p. 365) such as clergy and other paraprofessional helpers, and finally seek professional psychological assistance for the most serious and persistent issues. Because the present study only assessed intentions to seek help from a mental health professional, it may be that participants had intentions to seek help from other sources or otherwise address their problems.

Exploratory post hoc findings lend support to this notion. As previously mentioned, on an open-ended question, respondents in the current sample overwhelmingly indicated that they would seek help from family, friends, and instructors rather than a mental health professional. Specifically, only 24 out of 188 respondents indicated that they would seek the help of a mental health professional as one of their top three help sources. Of the 70 participants who endorsed a clinical problem (as described previously), 21% indicated that a mental health professional would be among their top three sources of help. Of the 118 who endorsed a “nonclinical” problem, only 8% indicated that a mental health professional was among their top three help sources. This tentatively suggests that individuals with less severe problems were more likely to seek help from other first-line and paraprofessional helpers, as would be expected based on theory and past research. It also underscores the possibility previously mentioned that the nonclinical nature of the problems experienced by the majority of the sample may have influenced the overall low level of help-seeking intentions. Undoubtedly, chosen help source is influenced by type of
problem experienced. However, in the current study, the ability of hope to influence help-seeking for a variety of help sources was not measured. Thus, the possibility that high-hope individuals may display greater intentions to seek help in general, but that in this sample the types of problems did not activate intentions to seek professional help, remains unexamined.

In addition, talking with another person is only one strategy that a person could choose when facing psychological distress, so it is possible that individuals with high Pathways scores were able to generate a multitude of approaches to solving their problems, but still report little or no intention to consult with anyone, much less seek professional psychological help. A possibility not examined in the present research is that hope moderates the relation between distress and help-seeking intentions when there are limited realistic paths to an outcome. If so, this would not have been detectable within the design of the present study, since the sample was not a strictly clinical one. However, this is a possibility that warrants further exploration.

It is also worth noting that only the regressions involving distress as measured by the PSR supported moderation by agency of the relation between distress and help-seeking intentions. The PSR was comprised of responses to two items on which respondents rated how severe their chosen problem was in the past week and currently, making it a specific rating of distress due to one most troubling problem. The relation between help-seeking intentions and OQ-45.2 total scores, which measured general psychological distress across three life domains, was not moderated by hope or its subcomponents in any of the analyses. This pattern of results suggests that low levels of agency result in intentions to seek help when one considers the severity of the
problem that is most troubling currently, but low agency does not relate to help-seeking when one’s overall level of distress across a variety of life domains is considered. This finding invokes reminders about the importance of matching measurement specificity between independent and dependent variables.

These results may also be interpreted within the context of previous research relating hope to other individual differences variables. Chang (1998) found that high-hope students were more likely to have a positive problem orientation and to use rational coping strategies than low-hope students. It is possible that high hope students reported low intentions to seek help because their problem-solving styles afforded them confidence in their ability to address their concerns without seeking psychological help. Another possibility is that help-seeking is related to locus of control (Rotter, 1966, 1975), which is the generalized expectancy about the degree to which one controls one’s own outcomes. That is, low-agency individuals may externalize responsibility for their problems, believing that they are unable to make improvements in their situation without assistance. In this way, low-agency distressed persons, seeking motivation, accountability, and professional expertise, seek help from a therapist. Conversely, distressed persons who have high levels of agency may view the solutions to their problems as being within their own personal control, and therefore, seeking help from an outside professional source is unwarranted. Snyder et al. (1991) found that hope accounted for variance in mental health symptoms beyond that which could be attributed to locus of control, suggesting that the constructs are not identical. However, it is unknown at this time whether hope and locus of control could each contribute uniquely to the prediction of help-seeking intentions.
A final possibility for interpreting the present results regards the instrumentation of hope. It may be that Hope Scale items are somewhat biased toward independent problem-solving and ignore interpersonal approaches to attaining goals. Although a review of the Hope Scale items suggests that interdependent problem-solving approaches are not excluded, it is noted that no items explicitly address collaborating with others to solve problems or seeking assistance as a means of attaining one’s goals. If Hope Scale items are interpreted by college students to refer to the ability to engage in autonomous efforts to attain goals, it may be that individuals with the tendency to engage in relational actions (e.g., help-seeking) would achieve low hope scores. In this way, the Hope Scale may be measuring tendency to solve problems independently and therefore would not correlate highly with intentions to seek help. How Hope Scale items are interpreted by respondents has not been empirically examined, but may be needed to better understand how hope may be related to help-seeking.

Implications for Theory and Practice

If the present findings are assumed to be an accurate representation of how hope influences help-seeking among distressed individuals in the population at large, then several implications for theory and professional practice emerge. First, as previously noted, the present study provides additional evidence supporting the contention in many theories of help-seeking (e.g., Andersen, 1968; Andersen & Newman, 1973; Fischer et al., 1983; Goldsmith et al., 1988; Pescosolido, 1992; Rosenstock, 1966) that there are personal or trait-level characteristics that predispose some individuals to be more willing to seek professional help when distressed. An important next step in the study of help-seeking intentions might be to revise theory by developing a taxonomy of such
traits, based on empirical findings. Recent research (e.g., Addis & Mahalik, 2003; Cepeda-Benito & Short, 1998; Ciarrochi et al., 2002; Cramer, 1999; Deane & Chamberlain, 1994; Good et al., 1989; Kelly & Achter, 1995) as well as reviews of extant help-seeking literature (e.g., Wills & DePaulo, 1991) suggest that a multitude of attitudinal and individual differences influence help-seeking. At this point in the study of help-seeking, it appears that it would be useful for theory to evolve to produce informed hypotheses about how these established correlates work together in a more complex manner to influence help-seeking. Incorporating these empirical findings into theory not only satisfies the need for theory and research to inform one another in an iterative manner (Tracey & Glidden-Tracey, 1999), but would also allow for more systematic research on multivariate relationships among variables that interact to influence the complex process of help-seeking.

The present findings also have implications for Hope Theory (Snyder et al., 1991). An important finding of the present study was that only the agency component of hope served to modify the relation of distress to help-seeking intentions; pathways did not emerge as a moderator in any of the analyses. In fact, although agency demonstrated a weak inverse relation to help-seeking intentions in bivariate correlations, pathways was unrelated to help-seeking intentions. This finding is reminiscent of other research on the influence of hope on various behaviors in that the agency component has often demonstrated relations to outcome variables while the pathways component has failed to do so. For example, Chang (1998) found that agency predicted variance in life satisfaction beyond that which was accounted for by age, sex, problem-solving style, and coping strategies, but pathways did not emerge as a significant predictor. Likewise,
Magaletta and Oliver (1999) found that agency, but not pathways, accounted for variance in general well-being over and above the effects of self-efficacy and optimism. This pattern of findings raises the possibility that the pathways construct may be problematic in the sense that it is not related in meaningful ways to outcome variables of interest. Further work may be needed to more establish more definitively the construct-related and predictive validity of the pathways construct. Alternatively, it may be that the Pathways subscale of the Hope Scale is psychometrically problematic, such that it does not reliably and validly assess the pathways construct.

Along these same lines, Magaletta and Oliver (1999) found that the agency component of hope was related to self-efficacy (Bandura, 1977, 1982, 1986, 1989); this finding is consistent with Hope Theory, which asserts that agency parallels self-efficacy (Snyder et al., 1991). Thus, if only agency, but not pathways, moderates the relation between distress and help-seeking, and if agency essentially duplicates generalized self-efficacy, then perhaps Hope Theory has little to offer in aiding our understanding of psychological help-seeking beyond that which can be explained by self-efficacy theory. If hope only adds minimal explanatory power beyond that which is already explained by other constructs, this implies that hope is hardly the panacea or unifying theory of behavior that one might like to believe it is.

Indeed, if the present findings are valid, it seems that hope’s ability to explain behaviors may be much more limited than is suggested by Hope Theory. The results of this study indicate that when hope was found to moderate the relation between distress and help-seeking intentions, this moderation explained very small (albeit statistically significant) amounts of incremental variance. Specifically, the hope x problem severity
interaction only accounted for an additional 2% of the variance in help-seeking intentions above and beyond variance due to main effects. This finding is very similar to results of previous studies exploring the ability of hope to account for variance in outcomes beyond that which could be accounted for by other theoretically relevant constructs (e.g., Snyder et al., 1991). However, it may be that the Pathways subscale of the Hope Scale is psychometrically flawed and therefore does not accurately capture the pathways construct, resulting in weak relations between pathways and theoretically-relevant outcome variables. Thus, our understanding of hope and how it relates to various behavioral and psychological outcomes may benefit from further exploration of the validity of the hope construct, paying particular attention to how pathways is measured.

A final implication of the present findings regards the relation of hope as conceptualized by Hope Theory (Snyder et al., 1991) to hopelessness as operationalized by the Beck Hopelessness Scale (BHS; Beck et al., 1974). Research investigating the effects of hopelessness as measured by the BHS on help-seeking intentions indicated that high levels of hopelessness were related to decreased intentions to seek professional psychological help (Ciarrochi & Deane, 2001; Ciarrochi et al., 2002; Deane et al., 2001). If hope as defined by Hope Theory is the simple opposite of hopelessness as measured by the BHS, we would expect that Hope Scale scores to demonstrate the inverse relationship with help-seeking intentions. However, in the current sample, low hope was related to increased help-seeking intentions, whereas low hopelessness in the previous studies was related to increased help-seeking intentions. Assuming that this is not an instrumentation issue, this finding suggests that hope is not merely the opposite
of hopelessness, at least in terms of how the constructs relate to help-seeking intentions. This finding is consistent with evidence that hope and hopelessness are negatively correlated, but only moderately (Snyder et al., 1991). At this time, no studies have directly examined the predictive utilities of hope and hopelessness in the same sample and in relation to the same outcome criteria.

The findings of the present study have potential implications for the practice of psychology in applied settings. First, psychological services could be marketed differently to groups of people based on their level of agency. For example, to increase the likelihood that distressed individuals with high levels of agency would seek mental health services, a marketing campaign could emphasize that counseling is a tool for helping oneself solve one’s own problems. This would permit highly agentic individuals to view help-seeking as a way of utilizing their own internal resources to alleviate psychological distress.

Individuals who are low in agency, according to the results of this study, are already more likely to seek help when distressed; however, it may be possible to augment their help-seeking tendencies even further. This could be accomplished through addressing, via marketing or social norming campaigns, other factors that might inhibit help-seeking. For example, some distressed individuals who are low in hope might be reluctant to seek help because of negative help-seeking attitudes or fear of the stigma associated with mental health services. To increase the help-seeking behavior of this group of potential consumers, attempts could be made to decrease the stigma associated with help-seeking by advertising statistics about how often individuals in a particular peer group utilize mental health services. Another approach would be to
increase the visibility and accessibility of local mental health services (e.g., university counseling centers, community mental health centers) so that distressed low-agency individuals (who are willing to seek help but might not be likely to investigate help options) would be aware of appropriate help sources when the need for assistance arises.

These results might also have implications for increasing the effectiveness of therapy for high- and low-agency individuals. Because high hope apparently predicts a decreased likelihood of seeking psychological services, those high-agency individuals who attend counseling may be different in some way, perhaps more tentative in their commitment to counseling. In this way, they may find a more structured approach to therapy to be preferable, as this may help them feel confident that therapy will be effective in reducing their distress. In fact, Michael, Taylor, and Cheavens (2000), noting the complementarity of these concepts, offered a framework for applying Hope Theory to solution-focused therapy approaches. Therapy with high-agency clients will likely be most successful if a main strategy is to empower the client to enact his/her own change. Such clients may also be reassured by taking time in the initial stage of therapy to develop, with the therapist, a plan for addressing their concerns. Although perhaps reluctant to seek help, once they have established a therapeutic relationship, highly agentic persons are likely to use therapy very effectively.

On the other hand, low-agency individuals may present in therapy as quite demoralized and may have difficulty using therapy effectively right away. This possibility brings to mind ideas presented in recent years that an important precursor to change is having a minimal level of hope (Hanna, 2002). In fact, hope has been
conceptualized as a common factor or one of the vehicles through which different therapeutic approaches each demonstrate effectiveness (Hubble, Duncan, & Miller, 1999). Thus, by conceptualizing through the lens of hope, therapists may increase the effectiveness of treatment with demoralized clients by assessing client’s pathways and agency thinking, and devising interventions (prior to those aimed at the target symptoms) to instill hope in their clients.

Similarly, individuals who have lower amounts of agentic motivation, while perhaps more likely to initially seek professional help, may have more difficulty taking steps to enact changes in their lives. Since low hope individuals seem to lack confidence in their own ability to solve their problems, they may have difficulty transitioning to the action stage (Hill & O’Brien, 1999) of the therapeutic process. Thus, therapists working with such individuals may need to provide structure and accountability in order to assist the client in achieving his/her therapeutic goals. Based on these likely reactions to the therapeutic process based on level of agency, when a client first begins therapy, therapists might enhance their ability to tailor their interventions by assessing the client’s level of trait hope. That is, by knowing in advance the degree to which the new client is able to motivate him/herself to enact change, the therapist might choose interventions that would enhance, and not impede, the client’s own self-actualization process.

Limitations of the Study and Suggestions for Future Research

The present study improved on previous research on help-seeking intentions in several important ways. First, distress was operationalized in two different ways, representing both global and specific levels of distress. Previous studies had
operationalized distress either by measuring only one type of distress (e.g., depression or suicidality) or by measuring only global distress. By measuring distress in two different ways simultaneously in the same sample, a technique that has never been used in research on help-seeking intentions, potentially important new information about how distress serves to motivate psychological help-seeking was gained. Second, replicating the method used by Young (2003), help-seeking intentions were measured by assessing students’ increasing levels of commitment to seek help within the next month. Thus, unlike many other studies of help-seeking intentions, this study measured intentions that were specific and immediate.

Despite these strengths, however, several important limitations warrant discussion. That the major hypotheses of this study were not supported may be the result of one or more methodological issues that may impact the interpretation of the results. First, the degree to which this sample of undergraduate students represents the population of adults is unknown. Clearly, when students from one university are sampled, issues such as regional influences, socioeconomic status, campus norms, and other cultural issues may limit generalizability of the sample to the desired population. Additionally, the age \((M = 20.88\) years) of the sample represents a key limitation of the study. As discussed previously, the sample’s overall low levels of distress and endorsement of nonclinical problems also raises questions about whether these results generalize to the population of potential help-seekers. Subsequent research on the role of hope in psychological help-seeking could advance this line of inquiry by sampling a more distressed adult population from the community.
Second, the mono-method nature of the data collection (all instruments were self-report) is a limitation of the current study. In fact, self-report measurement of traits such as hope is potentially problematic. Schwartz (1999) asserted that “self-reports are a fallible source of data” (p. 93) and that the measurement of behaviors and attitudes is highly context-dependent (e.g., order effects, setting of measurement). Although no order effects were discovered in the present research, it is possible that the very nature of the questions being asked of participants or the research setting itself somehow influenced their self-ratings of hope, distress, and help-seeking intentions.

Perhaps more important is the possibility that there exists a difference between participants’ actual ability to generate and act upon goal-directed strategies and their perceived ability to do so. The Hope Scale is intended to measure self-perceptions, but perceptions may not be directly related to behaviors. Such a discrepancy between perceived hope and hope-driven behaviors may be due to socially desirable responding or simple misjudgments of one’s own abilities and attitudes. Snyder et al. (1991) maintained that hope scores would be expected to relate moderately to socially desirable responding because both represent a positive self-presentation style that is part of adaptive coping (i.e., the fact that Hope Scale scores are correlated with scores on measures of socially desirable response tendencies provides convergent validity for the hope construct). Although it may be that hope’s overlap with social desirability has no adverse impact in terms of predicting outcomes such as subjective well-being, this may become an issue when attempting to use hope to predict behaviors (or intentions to engage in behaviors, as in the current study). That is, although one may rate oneself as high in the ability to generate and engage in strategies to accomplish goals, this belief
may not translate directly into behaviors. Thus, although a person may produce high Hope Scale scores, they may be unrelated to behavioral intentions to seek help.

Relatedly, because hope is believed to be a trait-level characteristic that influences thoughts and behaviors across situations, it is also likely that one’s level of trait hope influences one’s perceptions of distress. Specifically, it is probable that individuals with higher levels of hope would perceive and rate their problems as less distressing than low-hope persons, because they, by definition, are more likely to view these problems as solvable, and therefore, less distressing. In this way, hope itself may have confounded the relation between distress and intentions to seek help. Future research could investigate experimentally the role of hope in individual’s perceptions of distress.

The present study augmented external validity by allowing participants to focus on one problem of their choice when reporting their help-seeking intentions rather than having participants think about hypothetical situations. In this way, external validity was maximized at the expense of internal validity, as members of the sample chose a variety of different problems to focus on when reporting their help-seeking intentions. In the future, researchers might choose methodologies that enhance internal validity in order to more clearly understand how distress, hope, and help-seeking intentions co-function. This would help address the possibility that this study’s limited internal validity restricted the ability to detect actual significant relations among hope, distress, and help-seeking intentions. Specifically, future studies should minimize potentially confounding effects of multiple types of problems considered by respondents (e.g., by including only depressed individuals).
A final methodological issue that may have impacted the findings of this study involves the degree to which intentions to seek help are meaningfully different from actual help-seeking behaviors. Although past research supports that intentions are strongly correlated with behaviors (Ajzen, 1988), if help-seeking intentions were perceived by this sample to be significantly different than help-seeking behavior, it is possible that hope is related to help-seeking behavior but not intentions. Thus, it is possible that higher levels of hope would be observed among distressed individuals who actually seek help when compared with distressed individuals who have not sought help.

Several statistical issues also warrant comment. One issue concerns the adverse effects on statistical power of range restriction of independent variables (Frazier et al., 2004). As noted in Chapter IV, range restriction was evident on several of the independent variables, such that the sample was skewed toward being high in hope and low in distress. The implication is that it is unlikely that the sample accurately represented the entire population, since not all possible scores on the independent variables were represented. Therefore, it is possible that an interaction between hope and distress is present in the population but was not detected in this sample due to range restriction and sampling issues. Range restriction also limits generalizability of the results to the greater population. Perhaps more importantly, range restriction on the independent variables of distress may have minimized effect sizes and masked possible curvilinear effects.

Another issue that may have adversely impacted the power of the regression analyses is the reliability of the measures that were utilized in this study. Frazier et al.
(2004) noted that when reliability estimates of predictor variables are .80 (rather than 1.0), the statistical power of the test can be reduced by up to half. Given that the reliability estimates of the measures used in this study ranged from .66 to .94, there is a strong possibility that power was reduced, perhaps leading to an inability to detect interactions when present.

A final statistical issue concerns the “coarseness” of the dependent variable, help-seeking intentions (Frazier et al., 2004). This refers to whether the outcome variable has at least as many response options as the product of the response options on the predictor and moderator variables. In the current study, the product of the number of response options of the independent and moderator variables was 16 when using the OQ-45.2 to measure distress, and 28 when using the PSR to measure distress. According to Frazier et al., the dependent variable (help-seeking intentions) should have had at least 28 response options in order to maximize statistical power. Because the ISPPHS, which measured help-seeking intentions, was scored on a 7-point Likert scale, it is possible that statistical power was reduced for the moderation analyses.

Although the concerns about power might be construed as minimal given that some significant findings were detected, the statistical issues discussed earlier could be addressed in future studies in a relatively simple manner and this would increase confidence in the results obtained. Although scale reliability is typically beyond the control of the researcher, the issue of “coarseness” of the dependent variable can be easily addressed. Frazier et al. (2004), for example, suggested using a computer program which allows respondents to mark a point on a line which represents, in this
case, their help-seeking intentions. In this way, there are an infinite number of response options for the dependent variable and the issue of coarseness is eliminated.

The findings of the current study, and the limitations of the methodology just discussed, lend themselves to a discussion of recommendations for future research. One possibility worthy of further examination is that hope is related to help-seeking intentions through its effect on distress. That is, high hope is related to low levels of distress, which in turn reduces the need for psychological help-seeking. This hypothesis can be tested in future research through mediational analyses. However, without an experimental research design, the question of causality would not be resolved. Although it would be unethical to expose research participants to adverse stimuli which are severe enough to produce the need for psychological treatment, the issue of causality might be explored in the laboratory by exposing persons with different levels of hope to a common mild stressor (e.g., negative news about their academic status) and measure response in terms of their reported willingness to seek assistance (e.g., from an academic advisor) as a result. Alternatively, although not strictly experimental in design, future studies might employ field or analogue methodologies to further investigate the role of hope in help-seeking. For example, persons with different levels of hope could keep diaries to document their exposure to stresses, or could be presented with scenarios that evoke psychological distress and help-seeking intentions then could be assessed.

Another hypothesis, as previously discussed, is that some minimal amount of hope is needed to activate help-seeking intentions, but that at higher levels of hope, help-seeking intentions are suppressed. In future research, the possibility of a threshold level
of hope that facilitates help-seeking and/or a curvilinear relation between hope and help-seeking should be explored. Due to range restriction of Hope Scale scores in the current sample, this possibility could not be examined. Thus, by identifying a population of clinically distressed individuals and oversampling to ensure the full range of hope scores, future research could explore whether the relation between hope and help-seeking among distressed individuals is curvilinear in nature. Future research could also address whether hope functions differently to influence help-seeking as a function of helping source. That is, how does hope influence distressed individuals’ intentions to seek help or support from family members, friends, clergy, and academic advisors?

An important and needed advance in the study of help-seeking for psychological problems is to move beyond the study of intentions to determining what factors are related to actual help-seeking behaviors. In regard to the role of hope in help-seeking, one possibility would be to measure, at the time at which an appointment is made, the future client’s state-level hope. Snyder et al. (1996) developed a brief six-item State Hope Scale which could feasibly be administered orally (e.g., over the telephone when the appointment is scheduled). If a similarly-distressed sample of individuals who have not sought psychological help could be identified, then levels of state hope could be compared to determine whether temporary increases in hope account for the help-seeking observed among some distressed individuals.

Other individual differences variables have been examined in relation to help-seeking, but were not included in the present study due to its exploratory nature. It is critical to remember that hope may not be able to explain significant incremental
variance in help-seeking intentions if variance due to other relevant individual differences, such as perceived social support, is first accounted for. Future studies could employ advanced statistical procedures, such as path modeling, to further understand the multivariate relationships which influence help-seeking intentions (Fischer & Farina, 1995).
REFERENCES


162


APPENDIX A

ATTITUDES TOWARD SEEKING PROFESSIONAL PSYCHOLOGICAL HELP SCALE

Please respond to the following items as accurately and honestly as possible.

Remember that your responses are anonymous and confidential. There are no wrong answers. It is important that you answer every item.

For each statement below, decide whether you **disagree**, **somewhat disagree**, **somewhat agree**, or **agree**. Circle one number for each statement to indicate your response.

For this survey, the term “mental health professional” refers to any of the following persons: psychologist, psychiatrist, counselor, or clinical social worker.

<table>
<thead>
<tr>
<th></th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Somewhat Agree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Although there are clinics for people with mental health difficulties, I would not have much faith in them.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>If a good friend asked my advice about a mental health problem, I might recommend that he/she see a mental health professional.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>I would feel uneasy going to a mental health professional because of what some people would think.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>A person with strong character can get over mental health difficulties by himself/herself, and would have little need for a mental health professional.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
For this survey, the term “mental health professional” refers to any of the following persons: psychologist, psychiatrist, counselor, or clinical social worker.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Somewhat Disagree</th>
<th>Somewhat Agree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.</td>
<td>There are times when I have felt completely lost and would have welcomed professional advice for a personal or emotional problem.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>6.</td>
<td>Considering the time and expense involved in psychotherapy, it would have doubtful value for a person like me.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>7.</td>
<td>I would willingly confide intimate matters to an appropriate person if I thought it might help me or a member of my family.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>8.</td>
<td>I would rather live with certain mental health difficulties than go through the ordeal of getting professional mental health assistance.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>9.</td>
<td>Personal and emotional troubles, like many things, tend to work out by themselves.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>10.</td>
<td>There are certain problems which should not be discussed outside of one’s family.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>11.</td>
<td>A person with a serious emotional disturbance would probably feel most secure in a good mental health facility.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>12.</td>
<td>If I believed I was having mental health difficulties, my first inclination would be to get professional attention.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>13.</td>
<td>Keeping one’s mind on a job is a good solution for avoiding personal worries and concerns.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>14.</td>
<td>Having been a mental health patient/client is a blot on a person’s life.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>15.</td>
<td>I would rather be advised by a close friend than by a mental health professional, even for an emotional problem.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>16.</td>
<td>A person with an emotional problem is not likely to solve it alone; he/she is likely to solve it with professional help.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
For this survey, the term “mental health professional” refers to any of the following persons: psychologist, psychiatrist, counselor, or clinical social worker.

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>17.</td>
<td>I resent a person – professionally trained or not – who wants to know about my personal difficulties.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>18.</td>
<td>I would want to get professional mental health attention if I was worried or upset for a long period of time.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>19.</td>
<td>The idea of talking about problems with a mental health professional strikes me as a poor way to get rid of emotional conflicts.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>20.</td>
<td>Having been mentally ill carries with it a burden of shame.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>21.</td>
<td>There are experiences in my life I would not discuss with anyone.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>22.</td>
<td>It is probably best not to know <em>everything</em> about oneself.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>23.</td>
<td>If I were experiencing a serious emotional crisis at this point in my life, I would be confident that I could find relief in mental health services.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>24.</td>
<td>There is something admirable in the attitude of a person who is willing to cope with his/her conflicts and fears <em>without</em> resorting to professional help.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>25.</td>
<td>At some future time I might want to have psychological counseling.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>26.</td>
<td>A person should work out his/her own problems; getting psychological counseling would be a last resort.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>27.</td>
<td>Had I received treatment in a mental health facility, I would not feel that it ought to be “covered up.”</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>28.</td>
<td>If I thought I needed professional mental health assistance, I would get it no matter who knew about it.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>29.</td>
<td>It is difficult to talk about personal affairs with highly educated people such as doctors, teachers, and clergymen/women.</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>
APPENDIX B

OUTCOME QUESTIONNAIRE – 45.2 © *

Instructions: Looking back over the past week, including today, help us understand how you have been feeling. Read each item carefully and mark the box under the category which best describes your current situation. For this questionnaire, work is defined as employment, school, housework, volunteer work, and so forth.

1 = Never    2 = Rarely    3 = Sometimes    4 = Frequently    5 = Always

1. I get along well with others.  (IR)  1  2  3  4  5
2. I tire quickly.  (SD)  1  2  3  4  5
3. I feel no interest in things.  (SD)  1  2  3  4  5
4. I feel stressed at work/school.  (SR)  1  2  3  4  5
5. I blame myself for things.  (SD)  1  2  3  4  5
6. I feel irritated.  (SD)  1  2  3  4  5
7. I feel unhappy in my marriage/significant relationship.  (IR)  1  2  3  4  5
8. I have thoughts of ending my life.  (SD)  1  2  3  4  5
9. I feel weak.  (SD)  1  2  3  4  5
10. I feel fearful.  (SD)  1  2  3  4  5

174
11. After a night of heavy drinking, I need a drink the next morning to get going.

(If you never drink, mark “never”) (SD) 1 2 3 4 5

12. I find my work/school satisfying.

1 2 3 4 5

13. I am a happy person. (SD)

1 2 3 4 5

14. I work/study too much. (SR)

1 2 3 4 5

15. I feel worthless. (SD)

1 2 3 4 5

16. I am concerned about family troubles. (IR) 1 2 3 4 5

17. I have an unfulfilling sex life. (IR)

1 2 3 4 5

18. I feel lonely. (IR)

1 2 3 4 5

19. I have frequent arguments. (IR)

1 2 3 4 5

20. I feel loved and wanted. (IR)

1 2 3 4 5

21. I enjoy my spare time. (SR)

1 2 3 4 5

22. I have difficulty concentrating. (SD)

1 2 3 4 5

23. I feel hopeless about the future. (SD)

1 2 3 4 5

24. I like myself. (SD)

1 2 3 4 5

25. Disturbing thoughts come into my mind that I cannot get rid of. (SD)

1 2 3 4 5

26. I feel annoyed by people who criticize my drinking (or drug use). (If not applicable, mark “never”) (IR)

1 2 3 4 5

27. I have an upset stomach. (SD)

1 2 3 4 5
28. I am not working/studying as well as I used to. (SR) 1 2 3 4 5
29. My heart pounds too much. (SD) 1 2 3 4 5
30. I have trouble getting along with friends and close acquaintances. (IR) 1 2 3 4 5
31. I am satisfied with my life. (SD) 1 2 3 4 5
32. I have trouble at work/school because of drinking or drug use. (If not applicable, mark “never”) (SR) 1 2 3 4 5
33. I feel that something bad is going to happen. (SD) 1 2 3 4 5
34. I have sore muscles. (SD) 1 2 3 4 5
35. I feel afraid of open spaces, of driving, or being on buses, subways, and so forth. (SD) 1 2 3 4 5
36. I feel nervous. (SD) 1 2 3 4 5
37. I feel my love relationships are full and complete. (IR) 1 2 3 4 5
38. I feel that I am not doing well at work/school. (SR) 1 2 3 4 5
39. I have too many disagreements at work/school. (SR) 1 2 3 4 5
40. I feel something is wrong with my mind. (SD)  
   1  2  3  4  5

41. I have trouble falling asleep or staying asleep. (SD)  
   1  2  3  4  5

42. I feel blue. (SD)  
   1  2  3  4  5

43. I am satisfied with my relationships with others. (IR)  
   1  2  3  4  5

44. I feel angry enough at work/school to do something that I might regret. (SR)  
   1  2  3  4  5

45. I have headaches. (SD)  
   1  2  3  4  5

SD = Symptom Distress
IR = Interpersonal Relations
SR = Social Role
* Items reproduced with permission from American Professional Credentialing Services LLC.
APPENDIX C

PROBLEM STIMULUS SURVEY

Below are some problems people commonly experience. Please consider your life situation and read over the list of problems. Check any of the problems that you are currently experiencing or have experienced within the last week. You may check as many problems as you wish. Remember, your responses are anonymous and confidential and will not be stored with any identifying information.

<table>
<thead>
<tr>
<th>Problem</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationship conflict(s)</td>
<td></td>
</tr>
<tr>
<td>School-related problem(s)</td>
<td></td>
</tr>
<tr>
<td>A family death</td>
<td></td>
</tr>
<tr>
<td>Moving/relocation difficulty</td>
<td></td>
</tr>
<tr>
<td>Separation from family/homesickness</td>
<td></td>
</tr>
<tr>
<td>Death of a friend</td>
<td></td>
</tr>
<tr>
<td>Coping with family member’s illness</td>
<td></td>
</tr>
<tr>
<td>Sexuality concerns</td>
<td></td>
</tr>
<tr>
<td>Financial problems</td>
<td></td>
</tr>
<tr>
<td>Confusion over who you are</td>
<td></td>
</tr>
<tr>
<td>Physical abuse</td>
<td></td>
</tr>
<tr>
<td>Difficulty selecting a career or major</td>
<td></td>
</tr>
<tr>
<td>Legal concerns</td>
<td></td>
</tr>
<tr>
<td>General life stress</td>
<td></td>
</tr>
<tr>
<td>General anxiety</td>
<td></td>
</tr>
<tr>
<td>Depression</td>
<td></td>
</tr>
<tr>
<td>Alcohol/drug problems</td>
<td></td>
</tr>
<tr>
<td>Phobias (e.g., fear of flying)</td>
<td></td>
</tr>
<tr>
<td>Anxiety in social settings</td>
<td></td>
</tr>
<tr>
<td>Coping with own illness</td>
<td></td>
</tr>
<tr>
<td>Occupational difficulty</td>
<td></td>
</tr>
<tr>
<td>Life-threatening situation</td>
<td></td>
</tr>
<tr>
<td>Loneliness</td>
<td></td>
</tr>
<tr>
<td>Sexual abuse</td>
<td></td>
</tr>
<tr>
<td>Suicidal thoughts</td>
<td></td>
</tr>
<tr>
<td>Eating disorder</td>
<td></td>
</tr>
</tbody>
</table>
Now, please list up to three additional problems that have been concerning to you in the past which are not listed above, and check any of these that you are currently experiencing or have experienced within the last week:

_____ Other: _____________________________________
_____ Other: _____________________________________
_____ Other: _____________________________________

Now, look back over all of the problems that you checked, including any additional problems that you typed in above. Of the problems that you marked, select the one problem that is currently the most troubling or distressing to you. Type/write this problem in the blank below:

My most troubling problem in the last week is: ________________________________

How much is the problem you have chosen troubling you right now?

1  2  3  4
not at all    a little    quite a bit    extremely

How much has the problem you have chosen been troubling you in the last 7 days?

1  2  3  4
not at all    a little    quite a bit    extremely

Please think about this problem as you answer the following questions.
APPENDIX D

INTENTIONS TO SEEK PROFESSIONAL PSYCHOLOGICAL HELP SCALE

As you answer the following questions, please think about the problem you just chose as most troubling to you right now. Please type the problem you chose as most troubling to you here: _________________________________

Answer the following questions **in regard to the problem you chose**.

1. As you think about the problem you chose, who is the person/people you are most likely to seek help from in the next month? Please list these people (e.g., father, mother, friend, counselor, pastor, etc.) below, with the person from whom you are most likely to seek help listed first:
   a. ____________________________________________
   b. ____________________________________________
   c. ____________________________________________

2. In the next month, how likely are you to seek information about **professional mental health services** (e.g., psychologist, psychiatrist, counselor, clinical social worker)?

   1  2  3  4  5  6  7
   very unlikely somewhat neutral somewhat likely likely very likely
3. In the next month, how likely are you to contact (i.e., by phone or e-mail) a mental health professional (e.g., psychologist, psychiatrist, counselor, clinical social worker)?

1 2 3 4 5 6 7
very unlikely somewhat neutral somewhat likely likely very likely

4. In the next month, how likely are you to set up an appointment with a mental health professional (e.g., psychologist, psychiatrist, counselor, clinical social worker)?

1 2 3 4 5 6 7
very unlikely somewhat neutral somewhat likely likely very likely

5. In the next month, how likely are you to attend an appointment you set up with a mental health professional (e.g., psychologist, psychiatrist, counselor, clinical social worker)?

1 2 3 4 5 6 7
very unlikely somewhat neutral somewhat likely likely very likely
APPENDIX E

HOPE SCALE*

Read each item carefully and circle the number that best answers each statement for you.

1. I can think of many ways to get out of a jam. (P)
   
   1  2  3  4
   definitely false  mostly false  mostly true  definitely true

2. I energetically pursue my goals. (A)

   1  2  3  4
   definitely false  mostly false  mostly true  definitely true

3. I feel tired most of the time. (F)

   1  2  3  4
   definitely false  mostly false  mostly true  definitely true

4. There are lots of ways around any problem. (P)

   1  2  3  4
   definitely false  mostly false  mostly true  definitely true
5. I am easily downed in an argument. (F)

1  2  3  4
---    ---    ---    ---
definitely false mostly false mostly true definitely true

6. I can think of many ways to get the things in life that are most important to me. (P)

1  2  3  4
---    ---    ---    ---
definitely false mostly false mostly true definitely true

7. I worry about my health. (F)

1  2  3  4
---    ---    ---    ---
definitely false mostly false mostly true definitely true

8. Even when others get discouraged, I know I can find a way to solve the problem. (P)

1  2  3  4
---    ---    ---    ---
definitely false mostly false mostly true definitely true

9. My past experiences have prepared me well for my future. (A)

1  2  3  4
---    ---    ---    ---
definitely false mostly false mostly true definitely true

10. I’ve been pretty successful in life. (A)

1  2  3  4
---    ---    ---    ---
definitely false mostly false mostly true definitely true
11. I usually find myself worrying about something. (F)

1   2   3         4
definitely false     mostly false      mostly true          definitely true

12. I meet the goals that I set for myself. (A)

1   2   3         4
definitely false     mostly false      mostly true          definitely true

A = Agency items
P = Pathways items
F  = Filler items

* When presented to respondents, this instrument is titled “Goals Scale”.

184
APPENDIX F

DEMOGRAPHIC QUESTIONNAIRE

Please check or fill in the correct information about yourself.

1. Age: _____ years

2. Gender: _____ Man _____ Woman

3. Race/Ethnicity:
   _____ African-American
   _____ Asian-American/Pacific Islander
   _____ Caucasian
   _____ Latino/Hispanic
   _____ Native American
   _____ Multiracial
   _____ International Student from: ________________________ (fill in)
   _____ Other: ________________________________ (fill in)

4. Relationship status:
   _____ Single  _____ Married  _____ Widowed
   _____ Partnered  _____ Divorced
   _____ In a committed dating relationship
5. Year in school:
   ____ First year
   ____ Second year undergraduate
   ____ Third year undergraduate
   ____ Fourth year undergraduate
   ____ Fifth year undergraduate
   ____ Beyond fifth year undergraduate
   ____ Graduate or Law student

6. Academic status (in terms of credits completed):
   ____ Freshman/first year student
   ____ Sophomore
   ____ Junior
   ____ Senior
   ____ Graduate/Law student
   ____ Unknown

7. Major: ___________________________________

8. Approximate cumulative grade point average (GPA):
   ____ 0.0 to 0.5
   ____ 0.6 to 1.0
   ____ 1.1 to 1.5
   ____ 1.6 to 2.0
   ____ 2.1 to 2.5
   ____ 2.6 to 3.0
   ____ 3.1 to 3.5
   ____ 3.6 to 4.0
   ____ unknown
   ____ no GPA yet (for first year students)
9. Have you ever been a client of professional mental health services (e.g., from a psychologist, psychiatrist, social worker, or counselor) in the past? 
   _____ yes  _____ no (if no, skip to question 14)

10. If you answered yes to question 9, please indicate to the best of your knowledge who you saw for mental health services (mark more than one, if necessary):
   _____ psychologist  
   _____ psychiatrist  
   _____ clinical social worker  
   _____ counselor  
   _____ other: _________________________ (fill in)

11. What was your age in years when you were a client?  __________ years old

12. Was your participation in mental health treatment voluntary?
   _____ yes  ______ no

13. How many meetings or sessions did you have?  _____ (fill in)

14. Generally speaking, how helpful were your experiences with mental health services?

   1  2  3  4  5  6  7  
   extremely unhelpful  very unhelpful  somewhat unhelpful  neutral  somewhat helpful  very helpful  extremely helpful

15. Are you currently a client of professional mental health services (e.g., from a psychologist, psychiatrist, social worker, or counselor)?
   _____ yes  _____ no (if no, click on “Continue” below)
16. If you answered yes to question 15, please indicate to the best of your knowledge who you are currently seeing for mental health services:

_____ psychologist
_____ psychiatrist
_____ clinical social worker
_____ counselor
_____ other: _________________________ (fill in)

17. Is your current participation in mental health treatment voluntary?

_____ yes   _____ no

18. How many meetings or sessions have you had so far? _____ (fill in)

19. So far, has your experience with mental health services been positive, negative, or neutral?

1 2 3 4 5 6 7
extremely unhelpful   very unhelpful   somewhat unhelpful   neutral   somewhat helpful   very helpful   extremely helpful
APPENDIX G

INSTITUTIONAL REVIEW BOARD LETTER OF APPROVAL

July 9, 2004

Rachel Uffelman
1445 Ashland Ave., #4
St. Paul, MN 55104

Ms. Uffelman:

The University of Akron’s Institutional Review Board for the Protection of Human Subjects (IRB) completed a review of the protocol entitled “Moderation of the Relation between Distress and Help-Seeking Intentions: an Application of Hope Theory”. The IRB application number assigned to this project is 20040706.

The protocol qualified for exemption from continuing IRB review on July 8, 2004. The protocol represented minimal risk to subjects. Additionally, the protocol matched the following federal category for exemption:

Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: (i) information is recorded in such a manner that subjects can be identified, directly or through identifiers linked to subjects; AND (ii) any disclosure of responses outside the research could reasonably place the subjects at risk of civil or criminal liability or be damaging to subjects’ financial standing, employability or reputation.

If you propose changes to this protocol, an Application for Continuing Review Form must be completed and submitted to the Office of Research Services.

Please retain this letter for your files. If the research is being conducted for a master’s thesis or doctoral dissertation, the student must file a copy of this letter with the thesis or dissertation.

Sincerely,

[Signature]
Sharon McWhorter, Associate Director

Cc: Linda Subich, Department Chair
    Susan Hardin, Advisor
    Phil Allen, IRB Chair

The University of Akron is an Equal Education and Employment Institution.
Dear Participant:

Welcome to the “Understanding personal characteristics that predict help-seeking” survey. Thank you in advance for your time. If you decide to participate in this research, the following survey will take approximately 30 minutes to complete. You will complete a survey about your attitudes toward help-seeking and other personal characteristics and behaviors. When you have finished the survey, you will receive information on how to receive extra credit for your psychology course, if desired.

A possible risk of your involvement in this study is that considering current areas of concern may cause you emotional discomfort; a potential benefit is that you will have the opportunity to consider areas of personal need and growth as well as contribute to research on help-seeking. Your responses will not be connected in any way to your identifying information, and they will be maintained in a confidential manner by the researcher. Only group-level data will be reported.

This research has been reviewed and approved by The University of Akron Institutional Review Board for the Protection of Human Subjects. Every effort has been made to explain to you the nature and purpose of the above-described procedure and the risks and benefits involved in your participation. If you have any comments or questions, you may contact the investigator, Rachel Uffelman, at urachel@uakron.edu,
or her advisor, Dr. Susan I. Hardin, at shardin@uakron.edu. If, at any time, you feel that your questions have not been adequately answered, you may request to speak with the Chair of the Department of Psychology, Dr. Linda Subich (330-972-7280).

Questions about your rights as a research participant may be directed to Ms. Sharon McWhorter, Associate Director of Research Services at The University of Akron (330-972-8311 or 888-232-8790).

You are free to withdraw consent and discontinue participation in the project at any time without penalty. Within one year of your participation, a copy of this Informed Consent form was provided to you upon request.

Participation in this research is voluntary. If you have read and understand the above statements, please click on the "Continue" button below to indicate your consent to participate in this study. If you do not wish to participate, simply close this window on your web browser.
APPENDIX I

DEBRIEFING AND REFERRAL INFORMATION

Thank you for your participation in the “Understanding personal characteristics that predict help-seeking” study. You have now completed all the required materials. If you would like to receive extra course credit for your participation, click “Continue” at the bottom of this form. You were given a confirmation number and instructions for receiving course credit.

The purpose of this study is to explore various influences on college students’ intentions to seek help for psychological problems. One possible outcome of this research is that the results will help us to better reach students who are experiencing psychological distress, and assist them in receiving help for their problems. In answering the questions in this study, you may have become aware of some problem(s) that are currently troubling you. If this is the case, we would like to encourage you to seek help in dealing with your concern(s).

Below are phone numbers for several resources that are available to you. Please take this sheet with you so that you may contact a help source, if needed. Also, please feel free to contact the principal researcher, Rachel Uffelman, or the faculty member overseeing this project, Dr. Susan Hardin, if you have any concerns about this study, your participation, or any adverse effects you may be experiencing. They can be reached at the Department of Psychology, (330) 972-7280.
Counseling, Testing, and Career Center  
Schrank Hall North Room 152  
(330) 972-7082  
www3.uakron.edu/counseling  
Free individual, couples, group, and career counseling for UA students

Psychology Department Counseling Clinic  
Arts & Sciences Building Room 342  
(330) 972-6714  
www3.uakron.edu/psychology/counseling/clinic.html  
Free individual counseling for UA students and community members

Clinic for Individual and Family Counseling  
Carroll Hall Room 128  
(330) 972-6822  
www.uakron.edu/colleges/educ/Counseling/clinic.php  
Sliding scale fee for individual, couples, and family counseling for UA students and community members (adults and children)

Portage Path Behavior Health (Community Mental Health Center)  
340 South Broadway Street, Akron  
(330) 253-3100  
Crisis Hotline: (330) 434 9144 or 888-434-8878  
www.portagepath.org

Summit County Board of Mental Health  
(330) 253-3100

Cuyahoga County Board of Mental Health  
(216) 241-3400

Portage County Board of Mental Health  
(330) 673-1756

Stark County Board of Mental Health  
(330) 454-2484

Medina County Board of Mental Health  
(330) 723-9642

If you would like to enter a drawing to win one of two $25 gift certificates to either Best Buy or Barnes & Noble, simply send an email message to racheluffelman@hotmail.com. Include your first name, telephone number, and your
preference of gift certificates. Upon completion of data collection for this study, two
names will be drawn and winners will be contacted. Please note that entering this
drawing will in no way compromise the confidentiality of your responses, as your name
and email address will not be connected to your survey answers.