The efficacy of bibliotherapy for social anxiety and depressive symptomology

Paige Palumbo
THE EFFICACY OF BIBLIOTHERAPY FOR SOCIAL ANXIETY AND DEPRESSIVE SYMPTOMOLOGY

by

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A Thesis

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Abstract

Paige C. Palumbo
THE EFFICACY OF BIBLIOTHERAPY FOR SOCIAL ANXIETY AND DEPRESSIVE SYMPTOMATOLOGY
2014-2015
Jim A. Haugh, PhD
Master of Arts in Clinical Mental Health Counseling

In this study, the efficacy of a self-help treatment was examined. Participants were undergraduates experiencing comorbid social anxiety and depressive symptoms. It is hypothesized that those in the treatment condition (n=5) would experience a significant reduction in social anxiety and depressive symptoms over the course of the nine week treatment. In addition, it is hypothesized that these gains would be greater than the gains experienced by individuals in the wait-list control condition (n=5). The results of this study did support the hypotheses.
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Chapter 1

Introduction

Statement of the Problem

Social phobia, also referred to as social anxiety disorder (SAD), was first introduced as a mental health illness of interest in the *Diagnostic and Statistical Manual of Mental Disorders, 3rd Edition* in 1980 (DSM III, 1980) and was later established as a mental health disorder in the DSM III-R in 1987 (Brown et al., 1997). In the year 2013, upon the recent completion of the DSM-5, SAD has remained a dominant disorder and has quickly become considered as one of the most prevalent anxiety disorders. According to the 2005 National Comorbidity Replication (NCS-R) study, SAD was found to be the fourth most common psychiatric disorder (Hope, Heimberg & Turk, 2010). SAD has been found to affect 1 in 8 individuals (Andrew Kukes Foundation for Social Phobia, 2013) and has a lifetime prevalence rate of 7-13% (Tillfors, et al., 2008). In addition, according to the National Institute of Mental Health (2014), as many as 15 million Americans are affected by SAD. SAD is categorized by substantial fears in social and interpersonal situations including fears of being observed by others, presenting to others, and/or conversing with others. The fear experienced by those with SAD can create much distress and dysfunction in many areas of life including occupationally, educationally and socially (DSM-5, 2013, p 202-203).

Depression has also been found to be one of the most prevalent DSM-5 mental health disorders. According to the National Institute of Mental Health (2014), depression is one of the most common mental health disorders in the United States and has a
prevalence rate of 6.7%. Major Depressive Disorder (MDD) and Persistent Depressive Disorder (PDD) or Dysthymia are two prevalent mood and depressive disorders in the DSM-5 (DSM-5, 2013, p.155). Depressive disorders are categorized by feelings of sadness, guilt, worthlessness and/or hopelessness. Depressive disorders have been found to affect one’s mood, sleep, appetite, weight, pleasure, energy and concentration. As with SAD, the symptoms experienced by those with depressive disorders can create much distress and dysfunction in various parts of life.

As depicted in the research literature, there appears to be much overlap in symptomatology between depressive and anxiety disorders. Depressive and anxiety disorders have many similar symptoms including irritability, nervousness and difficulties sleeping and concentrating (Anxiety and Depression Association of America [ADAA], 2014). As a result, it is very common for individuals to suffer from both disorders or with comorbid symptoms. Researchers have found that nearly half of those suffering from major depression also suffer from a comorbid anxiety disorder (Den Boer, Wiersma & Van den Bosch, 2004). With such a high comorbidity rate and overlap between the two disorders, there is a need to further examine the efficacy of treatments for those with presenting comorbid symptomology.

Depressive disorders and SAD have also been found to commonly co-occur. Researchers have found that about 70% to 80% of those suffering from SAD meet criteria for an additional mental health disorder including depression (Hope, Heimberg & Turk, 2010). According to the DSM-5, SAD and MDD have various overlapping symptoms including being overly concerned and fixated on being negatively evaluated by others (DSM-5, 2013, p.207). With the overlap in presenting symptomology, it is anticipated
that if an individual suffers from one disorder that they are highly likely to suffer from the other.

Researchers have found that the comorbidity of SAD with depressive disorders is associated with more severe impairment (Hope, Heimberg & Turk, 2010). It is highly likely that those suffering from more than one mental health disorder experience even greater distress and impairment. In addition, Rapee et al. (2007) has found that the presence of comorbid SAD and depressive symptoms can negatively affect the outcome of treatment. Those suffering from comorbid mental health symptoms experience greater disability, distress, a decreased quality of life, and are often more difficult to treat compared to those suffering from only one mental health disorder (Titov, Gibson, Andrews, & McEvoy, 2009).

With such high prevalence rates, comorbidity rates and levels of impairment and distress, it may come as a surprise that only a small percentage of those suffering from SAD and depressive symptoms receive traditional mental health treatment. A recent study estimated that only one third of those with SAD receive traditional therapy (Craighead, Miklowitz, & Craighead, 2013). In addition, it has been found that approximately two thirds of those suffering from depressive or anxiety disorders do not seek any psychological treatment (Seekles et al., 2011). Furthermore, according to ADAA (2014), 36% of those with SAD report suffering from such symptoms for ten or more years before seeking any form of help. From this information it appears that the majority of those suffering from SAD and depressive symptoms are left untreated for a long period of time. As a result, additional treatment modalities and resources must be readily available to treat this population.
According to Den Boer, Wiersma, and Van den Bosch (2004), the mental healthcare system unfortunately does not have the necessary resources to treat and provide optimal care for all of those suffering with anxiety and depressive disorders. Many research studies have found this to be due to limited availability of practitioners in the individual’s surrounding environment and/or financial means. As a result, the majority of those in the mental health population (an estimated 65%) suffering from a mental health disorder do not receive any form of treatment or services (Van Straten, Cuijpers, & Smits, 2008). As mentioned, the limited treatment resources available leave a substantial portion of those with anxiety and depressive disorders untreated (Jorm & Griffiths, 2005). According to the DSM-5, if left untreated, those with SAD and depressive symptoms can have a chronic and remitting course (DSM-5, 2013, p.205). More research must be conducted to propose additional resources to treat those with social anxiety and depressive symptomology.

Researchers and practitioners in the mental health field are constantly in search of effective treatments and resources for clients. From the research literature, it appears that they have been in search of additional resources that can be used in conjunction with traditional therapy and aside from traditional face-to-face therapy. One alternative treatment modality that has been of recent interest is self-help. For the purpose of the present study, self-help is defined as a psychological treatment regimen in which the client or patient works through a standardized treatment protocol more or less independently (Rapee et al., 2007). Self-help has been studied and deemed an effective treatment alternative for various presenting concerns including mental and behavioral health disorders. One such population that would potentially benefit from this alternative
treatment modality is those suffering from SAD and depressive symptoms. As will be discussed, further research is necessary in demonstrating the efficacy of self-help for those suffering from SAD and depressive symptomology.

Beginning in the late 19th century and throughout the 20th century the field of self-help treatment began to quickly emerge (Redding et al., 2008). As early as the 1970’s self-help treatments were becoming more widely recognized and used throughout various parts of the world (Den Boer, Wiersma, & Van den Bosch, 2004). Self-help is deemed a highly appealing and beneficial treatment modality for individuals suffering with various difficulties and concerns. There are many benefits of self-help treatments. Self-help is typically easily accessible and available and can be utilized at a time and place of convenience to the consumer. Self-help is also typically cheaper and less expensive than traditional therapy. Lastly, there are various self-help treatment regimens available, many of which can fit a desired budget.

For those suffering from SAD and depression, self-help may be of particular interest for a number of reasons. As noted previously, those with SAD may feel embarrassed, fearful, ashamed, judged and scrutinized by others in interpersonal situations. As a result, a relatively low percent seek out traditional therapy. Self-help material can allow for the potential to reach a broad audience and provide resources for those who would otherwise go untreated. Self-help regimens have also been described as being less stigmatizing. Self-help regimens are readily available without the knowledge of others including that of insurance companies. As a result, self-help can assist and treat this population without them experiencing such distress or potential stigmatization.
Self-help treatments are available in various formats including books, also referred to as bibliotherapy, computer or online programs, audio or video tape programs and self-help groups. As mentioned, self-help regimens can be utilized as an alternative to, or in conjunction with, traditional therapy. For example, Menchola, Arkowitz, and Burke (2007) found that over 80% of psychologists report recommending some form of self-help interventions to their patients in addition to traditional face-to-face treatment. The self-help regimens mentioned can be utilized with, or without, the guidance and contact of a mental health practitioner, also referred to as guided or unguided self-help, respectively. Therapeutic contact can come in various forms including in-person, phone, e-mail or video messaging and in various durations including weekly, monthly or an as needed basis.

Cuijpers, Donker, van Straten, and Andersson (2010) found that unguided self-help was significantly less effective than guided self-help for depressive and anxiety disorders. In addition, research has demonstrated that unguided self-help without therapeutic contact is deemed less effective for those who may be lacking motivation or confidence such as those with depression and anxiety (Mead et al., 2005). As a result of these studies, therapeutic contact via e-mail will be used in addition to bibliotherapy. It is anticipated that therapeutic contact with the participants in the present study will allow for an enhanced clarification and understanding of the material, answering of any questions if needed and monitoring adherence to treatment.
Significance of the Study

The present study sought out to counteract the following limitations found in previously research. The current research literature on SAD has been conducted primarily in and on those overseas, typically in various parts of Europe. According to Antony and Swinson (2008), it is challenging to analyze SAD across various cultures since signs of social anxiety differ according to the culture. Physical, physiological, cognitive and behavioral signs of social anxiety and depressive symptoms in one culture, such as the United States, may be viewed differently compared to that of another culture, such as Switzerland or the Netherlands. As a result, more studies must be conducted in and on additional cultures. In the present study, research will be conducted in and on those of the United States. It is believed that this is one of the first studies conducted on the efficacy of bibliotherapy for comorbid SAD and depressive symptomology in and on those in the United States. It is anticipated that the current study will enhance the research literature on the efficacy of bibliotherapy for those with comorbid SAD and depressive symptoms within the United States.

The current research literature on the efficacy of self-help varies greatly depending on the target population and treatment modality of interest. The research on the effectiveness of various self-help treatments for depression is vast and lengthy and began early on during the emergence of the self-help field in the early 1980’s. The research literature on self-help treatments for SAD is slim and began recently starting in the early 2000’s. Unfortunately, very few studies have examined the efficacy of self-help on comorbid SAD and depressive symptomology. The majority of the research literature appears to focus on one mental health disorder as the primary construct, such as SAD,
and examines additional disorders as secondary constructs, such as depression. As a result, the present study is anticipated to be one of the first studies that examine the efficacy of bibliotherapy on comorbid SAD and depressive symptoms.

In addition, the research conducted analyzing the effectiveness of self-help regimens has been conducted primarily on middle-aged and older adults between the ages of 30 to 50 years-old. Despite the current research literature, the highest prevalence rates of these disorders are seen in adolescents and young adults. SAD has been found to most commonly begin during early childhood and adolescent (Hope, Heimberg, & Turk, 2010). According to DSM-5, the median age at onset of SAD in the United States is 13 years-old and 75% of those with this disorder have an age of onset between the ages of 8 and 15 years-old (DSM-5, 2013, p.204). In addition, the DSM-5 states that the prevalence for MDD is highest in those between the ages of 18 and 29 years-old (DSM-5, 2013, p.165). According to the National Institute of Mental Health (2014), about 3.3% of those between the ages of 13 and 18 years-old suffer from a depressive disorder. As a result, additional research studies must be conducted on adolescents and young adults with SAD and depressive symptomology whom have been found to have the highest prevalence rates.

One population of interest that is in need of further research in the self-help field is college students. College students typically consist of older adolescents and young adults who attend a college or university. As with all new experiences, it is anticipated that the transition into young adulthood can come as a stressful and difficult time. During this time students have enhanced responsibilities, independence and expectations especially in the educational and occupational realms. With the abundance of changes
and transitions occurring, it is possible that many students experience various levels of distress, depression and/or anxiety. In 2013, the National College Health Assessment collected and examined data on the mental health and functioning of 125,000 students from more than 150 colleges and universities. Novotney (2014) found that about one-third of the college students in the sample reported having had difficulty functioning within the last twelve months at school due to depression and almost half reported feeling an overwhelming amount of anxiety in the last year while at school. In addition, Damer, Latimer, and Porter (2010) report that social anxiety is a frequently reported complaint and problem among college and university students. High levels of social anxiety in the college population has been found to lead to many additional difficulties including substance use, loneliness and comorbid mental health issues such as depression (Damer, Latimer, & Porter, 2010).

Finally, according to the Center for Collegiate Mental Health (CCMH), over 260 college and university mental health centers have seen an increase in mental health care utilization from the college student population (Novotney, 2014). The CCMH reports that over the last three years, there has been an 8% increase in the number of college and university students seeking out mental health services, many of whom are left on waiting lists and untreated. As a result, additional research studies must be conducted on this population and how to further treat them.

As mentioned previously, one form of self-help that has been deemed effective for various mental health disorders is bibliotherapy. Bibliotherapy is the use of self-help books in paper or e-book format. Bibliotherapy has been carefully studied and deemed effective for many disorders including, but not limited to, depression, generalized
anxiety, posttraumatic stress, insomnia, bulimia nervosa, binge eating and alcohol abuse. Compared to other anxiety disorders, there has been little research conducted on the efficacy of bibliotherapy for social phobia (Nordgreen et al., 2011). Upon analyzing the current research literature, there appears to be a limited number of studies conducted on this treatment modality for those with SAD.

The research literature on bibliotherapy for SAD is relatively minimal. Of the few research studies published, the following studies examining the efficacy of bibliotherapy on those with SAD have found the strongest results. Furmark et al. (2009) evaluated the efficacy of internet delivered Cognitive Behavioral Therapy (CBT) and bibliotherapy on those with SAD. Researchers found that both conditions were equally effective in improving social anxiety, general anxiety, depression and quality of life. In addition, Rapee, Abbott, Baillie, and Gatson (2007) examined the efficacy of guided and unguided bibliotherapy on those with SAD. Researchers found that the two groups were equally effective in reducing SAD symptoms. Lastly, the most recent study conducted by Nordgreen et al. (2011) evaluated the efficacy of the book Overcoming Shyness and Social Phobia: A Step by Step Guide by Rapee on those with social phobia. Researchers found that those receiving access to bibliotherapy had greater reductions in social phobia compared to those in the waitlist control condition.

As noted, the empirical support for bibliotherapy, adolescents and young adults, and in and on those in the United States in regards to SAD and depression is minimal. As a result, additional studies are needed to further understand the efficacy of such resources in treating this population. The research literature shows significant and promising results that bibliotherapy is an effective treatment for SAD as well as depression. It is anticipated
that the present study will further enhance the current literature on the efficacy of self-help bibliotherapy as an alternative treatment modality for those suffering from social anxiety and depressive symptomology. In addition, the present study seeks to counteract the limitations mentioned that have been noted in previously conducted and related studies. It is expected that counteracting the previous research limitations will greatly benefit and strengthen the current study.

**Purpose of the Study**

In this study, the self-help book *The Shyness & Social Anxiety Workbook: Second Edition* (Antony & Swinson, 2008) will be examined. This workbook has been widely recognized and recommended for people with social anxiety. The Association for Behavioral and Cognitive Therapies (ABCT) recognizes a select amount of self-help books as scientifically based, reviewed as credible and evidence-based treatments for outpatient psychotherapy (ABCT, 2015). Such self-help books are stamped with the Self Help Books of Merit. *The Shyness & Social Anxiety Workbook: Second Edition* (Antony & Swinson, 2008) has been stamped with the *Self-Help Seal of Merit* by the ABCT.

Antony and Swinson published the first edition of this workbook in 2000. Previous literature has demonstrated beneficial results with the first edition. Abramowitz, Moore, Braddock and Harrington (2009) examined the efficacy of *The Shyness and Social Anxiety Workbook* by Antony and Swinson on those suffering from social phobia. Researchers found that those whom received access to the workbook had significantly greater reductions in social phobia, general anxiety, depression and global illness severity compared to those in the waitlist control condition. In addition, Redding, Herbert and
Gaudino (2008) analyzed the quality of fifty self-help books. They examined the extent of their overall usefulness as a self-administered treatment for change, potential to provide advice, reasonable expectations of self-help techniques, abilities to provide guidance, and ground in psychological science, theory, techniques and research. Researchers found that *The Shyness & Social Anxiety Workbook* (Antony & Swinson, 2000) received the second highest rating of the fifty self-help books.

In 2008, the second edition of the workbook was published. This edition has been updated with the latest scientific knowledge and references concerning the nature and treatment of social anxiety. In addition, the second edition contains revised information on medications, an added discussion on the Human Genome Project, rewritten sections that were unclear or out of date, additional examples, forms and diaries, an added section on strategies for improving motivation for treatment for family members and friends of people who suffer from social anxiety and an updated list of recommended readings and internet sources (Antony & Swinson, 2008). Despite this self-help book being published in 2008, no research studies have been conducted examining the effectiveness of this self-help book.

In this study, the efficacy of the self-help book *The Shyness & Social Anxiety Workbook: Second Edition* (Antony & Swinson, 2008) with therapeutic contact was examined on a college student population from the United States suffering from social anxiety and depressive symptoms. It was hypothesized that those in the treatment condition would experience a significant reduction in social anxiety and depressive symptoms over the course of the nine week treatment. In addition, it was hypothesized
that these gains would be greater than gains experienced by individuals in the wait-list control condition.
Chapter 2

Methods

Participants

Students registered at Rowan University, a public university located in Glassboro, New Jersey, were recruited for the purpose of this study. Participants were recruited through the means of online advertisements including the Rowan Daily Mail, a daily e-mail sent to students, and through the Rowan University SONA System, an online system used to grant course research credit to students registered for various courses. Participants were also recruited through flyers posted throughout campus including on bulletin boards and in classrooms.

All advertisements provided interested participants with information pertaining to social anxiety, information about the study, the inclusion and exclusion criteria, compensation and an online link to pre-screen for the study. Upon visiting the online link, the interested participant was asked to read through the pre-screening informed consent and virtually sign the document. Upon accepting the pre-screening informed consent, interested participants were then asked to provide their contact information, their recruitment means, demographic information and their medical history. Lastly, they were asked to complete the Beck Depression Inventory- Second Edition (BDI-II) to measure depressive symptoms and the Social Interaction Anxiety Scale (SIAS) to measure social anxiety symptoms. Upon completion of these pre-screening measures, interested participants were instructed that they would be contacted by a member of the research team by means of e-mail within 48 hours regarding the results.
In order to be included in this study, participants had to meet the following criteria: be at least 18 years-old, be a student registered at Rowan University, if currently taking psychotropic medication(s) the dosage had to remain constant three months before the start of the study and remain constant throughout the study, were available to be reached by a member of the research team at least once a week by means of e-mail, had access to a computer with internet connection, had social anxiety according to the Social Interaction Anxiety Scale (SIAS) and depression according to the Beck Depression Inventory- Second Edition (BDI-II).

Participants were excluded from the study if they endorsed suicidal ideation, psychosis and/or substance abuse at the time of prescreening. Participants who were excluded from the study were referred to the Rowan University Counseling & Psychological Services Center. Those who appeared to be in need of urgent care due to crisis were advised to contact the Rowan University Counselor on Call. In addition, they were advised to dial 911 by telephone and/or go the nearest Hospital Emergency Room if in need.

Of the 224 participants who applied to participate in the study, 26 fulfilled the necessary inclusion criteria and 198 were excluded from the study. The 198 students who were excluded from the study endorsed substance abuse, psychosis, suicidal ideation and/or a recent change in their psychological medication use. Of the 26 students who fit the inclusion criteria, only 10 participants were interested in participating in the present study.
The participants in this study consisted of primarily undergraduate students (90%), females (70%), with a mean age of 22 years-old, whom identified as Caucasian (90%), and Non-Hispanic of Latino (90%), and were not taking medications at the time of the study (80%). The student body at Rowan University has been found to have the following demographic characteristics. For race/ancestry, students at Rowan University are 77.1% White, 7.6% Black, 8.5% Latino, 3.0% Asian, 0.2% Native American and 0.1% Native Hawaiian/Pacific Islander. For gender, students are 50.4% female and 49.6% male. Lastly, for age, 85.3% of the students are under 25 years-old and 14.7% of the students are 25 years-old and over (College Results Online, 2014). As a result, the sample in the present study appears to adequately represent the Rowan University student population. Refer to Table 1 for a demographic description of the participants in the current study.
Table 1.

Demographic Description of the Participants

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<td>Psychotropic medication(s)</td>
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<tr>
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<td>4</td>
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<td>20%</td>
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<tr>
<td>Recruitment Means</td>
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<tr>
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<td>5</td>
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<tr>
<td>Flyer on Campus</td>
<td>1</td>
<td>0</td>
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<td>10%</td>
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</table>
Measures

The following measures were collected and stored in an online format through Qualtrics, a free online software and questionnaire tool. Measures were collected at pre-treatment which was prior to beginning the study, and post-treatment which was nine weeks after the start of the study. Refer to Figure 1 for data collection at each stage of the study.

To ensure confidentiality in the study, all participants were assigned a participant identification number. The participants were asked to provide their identification number instead of their name for the online surveys. The participant’s names and corresponding identification numbers for this study were secured in the office of the Principal Investigator on campus. The Principal Investigator, the Study Coordinator and another graduate research student were the only three individuals who had access to this secure location containing the participant’s identification number and their corresponding identifying information. The present study has been approved by Rowan University’s Institutional Review Board (IRB) prior to being conducted.
**Demographic information.** Participants were asked to provide demographic information. Participants were asked to provide their age in years, gender, race and ethnicity from categories provided by the United States Census in order to obtain a greater understanding of the current sample.

**Medical history.** Participants were also asked to provide their medical history. Participants were asked to provide information on their current medication use including the name of the medication(s), dosage and the duration(s) they have been taking the medication(s) at this dosage.
Social Interaction Anxiety Scale (SIAS). The Social Interaction Anxiety Scale (SIAS, Mattick and Clark, 1998) is a 20 item self-report measure that assesses fear experienced during social interactions (Brown, et al., 1997). SIAS is used to assess prevalence and severity of social anxiety and social phobia symptoms experienced over the course of their lifetime. The questions assess feelings such as nervousness, worry, embarrassment, awkwardness, comfort and tenseness. Participants are asked to rate how much each symptom effects them on a 5-point scale from 0 (not at all characteristic or true of me) to 4 (extremely characteristic or true of me). Questions 5, 9 and 11 are noted to be reversed scored. Scores on all items are added to obtain a total score that ranges from 0 to 80 in which higher scores indicate a higher level of social anxiety symptoms. According to Mattick and Clarke (1998), a score of 34 or more indicates social phobia (specific situations of irrational social fears with avoidance and impairment) and a score of 43 or more indicates social anxiety (generalized irrational fears across numerous social situations with avoidance and impairment).

The SIAS has been found to have strong psychometric properties. The SIAS has good internal consistency with Cronbach’s alpha between .88 and 93 (Brown et al., 1997). The SIAS has demonstrated strong test-retest correlation coefficients exceeding .90 after intervals of one month and three months. Mattick and Clarke (1998) found that the SIAS is positively correlated with scores on other social anxiety measures including the Fear of Negative Evaluation Scale, the Social Avoidance and Distress Scale, the Social Phobia subscale of the Fear Questionnaire and the Interaction Anxiety and Audience Anxiety Scales. In addition, Ries et al. (1996) found that the SIAS was positively correlated with scores on the Social Phobia and Anxiety Inventory. For
discriminant validity, Mattick and Clarke (1998) found that patients with social phobia scored higher than community controls and those with agoraphobia or simple phobia on the SIAS.

**Beck Depression Inventory- Second Edition (BDI-II).** The Beck Depression Inventory- Second Edition (BDI-II, Beck, Steer and Brown, 1996) is a 21 item self-report measure that assesses acute depression. The BDI-II is used to assess the prevalence and severity of depressive symptoms experienced over the past two weeks. The questions assess feelings of sadness, failure, guilt and punishment and measures changes in appetite, pleasure, concentration, energy, sleep and interest in sex. Participants are instructed to rate how much each symptom affects them on a 4-point scale from 0 (no symptoms) to 3 (severe symptoms). Scores on all items are added to obtain a total score that ranges from 0-63 in which higher scores indicate a higher level of depressive symptoms. A score between 0-13 indicates a minimal level of depression, 14-19 indicates a mild level of depression, 20-28 indicates a moderate level of depression and 29-63 indicates a severe level of depression.

The BDI-II has been found to have sound psychometric properties. The BDI-II has demonstrated good internal consistency with a Cronbach’s alpha between .92 and .93 (Osman, et al., 2008). The BDI-II has been found to significantly and moderately correlate with self-report measures of depression, such as the Reynolds Adolescent Depression Scale, (r=.84), hopelessness, such as the Beck Hopelessness Scale (r=.62), anxiety, such as the Beck Anxiety Inventory (r=.53) and suicidal-related behaviors (r=.57) demonstrating good convergent validity. In addition, the BDI-II has been found to
correlate more with measures such as depression and self-esteem compared to measures of anger and conduct problems demonstrating strong discriminant validity.

**Procedure**

Participants who fit the inclusion criteria were contacted by e-mail. Participants were provided with additional information on the study and were asked to provide their availability for the upcoming weeks. Participants were then asked to meet a member of the research team at The Mood Disorders research laboratory on campus. Meetings were conducted individually to ensure confidentiality in the study. At the meeting, the participant was provided with a research packet containing the following: informed consent, treatment protocol, a campus map, contact information for The Counseling and Psychological Services Center and information on the Research on Anxiety and Depression (R.O.A.D.) research team.

The researcher explained and discussed all aspects of the study as stated in the informed consent. The participant was provided with adequate time and opportunity to ask any questions pertaining to the study. Upon thorough understanding of this information, the participant was asked to sign and date the informed consent form if they wished to enroll. The researcher signed and dated the consent form, and the informed consent document was given to the participant. Upon completion of the informed consent, the participant was asked to complete the pre-test online.

The participant was instructed that if they had future questions or concerns, that they were to contact the Principal Investigator and Study Coordinator. The participant was notified that the Principle Investigator and Study Coordinator were not available at all times. In the case of emergencies, researchers provided participants with a campus
map indicating the location of the Counseling & Psychological Services Center on campus. In addition, they were provided with the telephone number for the counselor on-call. Participants were advised to utilize these services during times of emergency.

Interested participants were provided with detailed information pertaining to compensation for partaking in this study in the informed consent. Participants were instructed that there were no costs and that they were not paid for their participation in this research study. They were told that the self-help manual *The Shyness & Social Anxiety Workbook, Second Edition* (Antony & Swinson, 2008) were provided to them free of charge. In addition, participation in the study in its entirety allowed the participant to be entered into a raffle to receive a $25 VISA gift card. They were instructed that a winner would be chosen at random using an online database which randomly selected one of the participants from this study. Lastly, they were told that participation in this raffle was voluntary and they could choose to not participate in this study at any time.

In addition, participants were provided with information on the R.O.A.D. research team at Rowan University. Participants were notified of the undergraduate and graduate students and research coordinator who would be assisting with the treatment program. In addition, they were informed as to who would have access to their participant identification number and corresponding data.

Upon completion of the informed consent, participants were provided with detailed information pertaining to their assigned condition. The participants were randomly assigned to one of two conditions, the treatment condition or the waitlist control condition. Matched sampling was utilized in the present study to ensure balanced distribution of demographics and symptom severity in each group.
Participants assigned to the treatment condition (n=5) were provided with the self-help book and a copy of the treatment protocol. The treatment protocol provided participants with a weekly overview of the chapter(s) they would be assigned to read, the page numbers of the chapter(s) in the text, the content within the chapter(s) and the designated assignments within the chapter(s). They were instructed that they would be receiving weekly e-mails from socialanxietystudy1@gmail.com, which was created solely for the purpose of this study. Each week the participants received an e-mailed with the assigned module, and tasks to be completed. Participants assigned to the waitlist control condition (n=5) were instructed that they would receive the same self-help book and treatment nine weeks into the study. Refer to Figure 2 for the participant flow and drop-out rates at each stage of the study.
224 individuals applied to participate in the study

26 fulfilled the inclusion criteria

10 completed the Pre-test measures

10 participants were randomized to either the treatment condition or the waitlist condition

Treatment Condition
n= 5

Dropout
n=0

Waitlist Control Condition
n= 5

Dropout
n=1

Figure 2. Participant flow at each stage of the study.
Treatment

The participants in the treatment condition were provided with the self-help book *The Shyness & Social Anxiety Workbook, Second Edition* (Antony & Swinson, 2008). This self-help book is based on Cognitive Behavioral Therapy (CBT) principles with a focus on psychoeducation, cognitive principles, such as acknowledging faulty cognitions, and behavioral principles, such as in vivo exposure tasks. This self-help book provides interactive activities including problem solving through difficult situations, symptom diaries and social anxiety thought records to ensure adequate understanding of the material. The intended population for this self-help book is for those suffering primarily from social anxiety. According to the text, the cognitive and behavioral strategies and techniques used in the book are deemed effective in treating depression and other mental health conditions as well.

*The Shyness & Social Anxiety Workbook, Second Edition* (Antony & Swinson, 2008) consists of eleven chapters with over 250 pages worth of text. For the purpose of the study, the workbook was divided into nine modules. Each module was to be completed over the course of one week. Previous research has demonstrated the effectiveness, ease and benefits of reading one module a week of a self-help manual for those suffering from mental health symptoms.

Each week, upon completion of the assigned module, participants were asked to complete several assignments including exposure tasks, quizzes and small essay questions. The assignments corresponded to the self-help module designated for that week. All of the assignments were anticipated to be completed in less than one hour. The
assignments were designated to promote learning, ensure adequate understanding of the material and ensure adherence to treatment.

The first module consisted of the first two chapters of the text. The first chapter titled “Shyness and Social Anxiety” focused primarily on psychoeducation and allowed the reader to reflect upon how their social anxiety may have impacted their life thus far. The second chapter title “Why Do You Have These Fears?” also focused on psychoeducation and having the client consider the etiology, nature and contributing factors towards their symptoms of social anxiety. To strengthen the information presented in these two chapters, six fill-in-the-blank questions and the Three Components of Social Anxiety form are included as tasks to be completed.

The second module consisted of the third chapter titled “Getting to Know Your Social Anxiety.” This module allowed the client to heighten their understanding of their social anxiety. In addition, it allowed the client to begin planning their focus areas for treatment. This module contained assigned tasks of the Feared Social Situations Worksheet, Your Social Anxiety Variables, Your Anxiety Provoking Beliefs and fourteen fill-in-the blank questions on topics including avoidances, expectations of treatments and safety behaviors.

The third module consisted of the fourth and fifth chapters of the text. The fourth chapter titled “Making a Plan for Change” educated the client of their readiness for change and to begin treatment and the different treatment options available to treat social anxiety. The assigned tasks for this module included One Month and One Year Goals, Record of Previous Treatments and four fill-in-the blank questions. The fifth module
titled “Medication for Social Anxiety and Social Anxiety Disorder” provided the reader with psychoeducation on various medications to treat social anxiety.

The fourth module consisted of the sixth chapter titled “Changing Your Anxious Thoughts and Expectations.” This module placed an emphasis on the cognitive piece of treatment. In this module, the reader learned about the various types of anxious thinking. To further enhance the reader’s understanding of the information presented, the reader was assigned to complete the Decatastrophizing Form, Social Anxiety Thought Record and a Form for Examining the Evidence.

The fifth module consisted of the seventh chapter titled “Confronting Your Fears through Exposure.” This module introduced the reader to the behavioral technique of in vivo and imaginal exposure and prepared the reader for beginning exposure to feared social situations.

The sixth module consisted of the eighth chapter titled “Exposure to Social Situations.” This module provided the reader with various social and performance exposure situations including public speaking, socializing, meeting new friends, speaking to authorities, drinking, eating and writing in front of others, dating, being the center of attention and conflict with others. To further clarify the information presented, this module included two fill-in-the blank questions, two questionnaires and an Exposure Monitoring Form.

The seventh module consisted of the ninth chapter titled “Exposure to Uncomfortable Sensations”. This module provided additional practice with exposure with internal physical sensations including a pounding heart, dizziness and sweating. As with
the previous module, this module included a Symptom Exposure Testing Form and Symptom Exposure Diary.

The eighth module consisted of the tenth chapter titled “Communicating More Effectively”. This module taught the reader various techniques to communicate more effectively with others and skills to give presentations and for public speaking.

Lastly, the ninth module consisted of the eleventh chapter titled “Maintaining Your Improvements and Planning for the Future”. This module focused on the termination of treatment. The text included many vital components including the maintenance of gains and additional resources for the reader.

Each week participants were e-mailed the module and tasks to be completed. At the end of the nine weeks, participants were e-mailed an online link containing the BDI-II, the SIAS and a comment box for any questions, comments or concerns and their experience on the self-help modules. All responses were provided to the participants within 48 hours. The therapist would respond by answering questions, clarifying any concerns, providing feedback, reinforcing all efforts and providing motivation. It is estimated that each e-mail took approximately five minutes to complete for each participant.

**Therapist**

The therapist consisted of one graduate student in the last year of a master’s program. The therapist was responsible for maintaining therapeutic contact with all participants in the study.
Chapter 3

Results

Dropouts

One participant (10%) dropped out before the post-treatment assessment. The participant who dropped out was assigned to the waitlist control condition and ceased to continue with the study after the fifth week. Reasons for dropping out during treatment are unknown as the participant could not be reached. The participant who dropped out of the study was not included in statistical analyses.

Statistical Analyses

Significance testing of group differences between pre-treatment scores and post-treatment scores was conducted by means of an independent samples t-test. Statistical analyses were conducted using the Statistical Package for the Social Sciences (SPSS) version 21.

Descriptive Statistics

Data on group statistics for social anxiety scores on the SIAS are presented in Table 2. The treatment condition had a mean pre-test score of 48.20 and a mean post-test score of 34.40 on the SIAS. The waitlist condition had a mean pre-test score of 51.75 and a mean post-test score of 46.50 on the SIAS.

Data on group statistics for depressive scores on the BDI-II are presented in Table 3. The treatment condition had a mean pre-test score of 20.80 and a mean post-test
score of 13.80 on the BDI-II. The waitlist condition has a mean pre-test score of 16.25 and a mean post-test score of 12.25 on the BDI-II.

Table 2.

*SIAS Mean Scores*

<table>
<thead>
<tr>
<th>Group</th>
<th>Pre-test Score</th>
<th>Post-test Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment</td>
<td>48.20</td>
<td>34.40</td>
</tr>
<tr>
<td>Waitlist</td>
<td>51.75</td>
<td>46.50</td>
</tr>
</tbody>
</table>

Table 3.

*BDI-II Mean Scores*

<table>
<thead>
<tr>
<th>Group</th>
<th>Pre-test Score</th>
<th>Post-test Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment</td>
<td>20.80</td>
<td>13.80</td>
</tr>
<tr>
<td>Waitlist</td>
<td>16.25</td>
<td>12.25</td>
</tr>
</tbody>
</table>
Participants in the treatment condition had a mean SIAS score reduction of 13.80 points with a standard deviation of 28.50. Participants in the control condition had a mean SIAS score reduction of 5.25 points with a standard deviation of 7.93. The differences between these two groups was not statistically significant at the .05 level ($t(7)$=.575, $p$=.103).

Participants in the treatment condition had a mean BDI-II score reduction of 7.00 points with a standard deviation of 17.13. Participants in the control condition had a mean BDI-II score reduction of 4.00 with a standard deviation of 8.76. The differences between these two groups was also not statistically significant at the .05 level ($t(7)$=.316, $p$=.156).

**Clinical Significance**

A change score was created in order to evaluate change and clinical progress. The change score was the difference in scores between Time 1, the pre-test score, and Time 2, the post-test score. As noted, for the SIAS, a total score of 34 or more indicates social phobia (specific situations of irrational social fears with avoidance and impairment) and a score of 43 or more indicates social anxiety (generalized irrational fears across numerous social situations with avoidance and impairment). Prior to beginning the study, one participant in the treatment condition did not meet the cutoff for social phobia or social anxiety, one participant scored in the social phobia range and three scored in the social anxiety range on the SIAS. Upon completion of the self-help treatment, three participants did not meet the cutoff for social phobia or social anxiety, one participant scored in the social phobia range, and one participant scored in the social anxiety range on the SIAS.
The SIAS change score for the treatment condition demonstrates a decrease, stabilization or increase in social anxiety symptoms upon completion of the self-help treatment.

Prior to the start of the study, one participant in the waitlist condition scored in the social phobia range and four participants scored in the social anxiety range on the SIAS prior to the start of the study. After nine weeks of not receiving any form of treatment, one participant did not meet the cutoff for social phobia or social anxiety, three participants scored in the social anxiety range on the SIAS and one participant dropped out. The SIAS change score for the waitlist condition demonstrated a stabilization, decrease or increase of symptoms when not receiving the self-help treatment.

As noted, for the BDI-II, a total score between 0-13 indicates a minimal level of depression, 14-19 indicates a mild level of depression, 20-28 indicates a moderate level of depression and 29-63 indicates a severe level of depression. As depicted in Table 6, two of the participants in the treatment condition scored in the minimal depression range, one participant in the moderate depression range, and two participants in the severe depression range on the BDI-II prior to receiving treatment. Upon completion of the self-help treatment, four of the participants scored in the mild depression range, and one participant scored in the severe depressive range on the BDI-II. The BDI-II change score for those in the treatment condition demonstrated a stabilization or decrease in symptomology upon completion of the self-help treatment.

Prior to the start of the study, two of the participants in the waitlist control condition scored in the minimal depression range, one scored in the mild depression range, one scored in the moderate depression range and one scored in the severe depression range on the BDI-II. After nine weeks of not receiving any form of treatment,
two participants scored in the minimal depression range, one participant scored in the mild depression range, one participant scored in the moderate depression range on the BDI-II and one participant dropped out. The BDI-II change score for those in the waitlist condition demonstrated a stabilization, decrease or increase in symptomology after nine weeks of not receiving any form of treatment.
### Table 4.

*Change Scores: Treatment Condition*

<table>
<thead>
<tr>
<th>Participant ID</th>
<th>SIAS Change Score</th>
<th>BDI-II Change Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Decrease 27 points</td>
<td>Decrease 23 points</td>
</tr>
<tr>
<td>2</td>
<td>No change</td>
<td>No change</td>
</tr>
<tr>
<td>5</td>
<td>Decrease 37 points</td>
<td>Increase 5 points</td>
</tr>
<tr>
<td>6</td>
<td>Increase 13 points</td>
<td>Decrease 2 points</td>
</tr>
<tr>
<td>8</td>
<td>Decrease 20 points</td>
<td>Decrease 18 points</td>
</tr>
</tbody>
</table>

### Table 5.

*Change Scores: Waitlist Condition*

<table>
<thead>
<tr>
<th>Participant ID</th>
<th>SIAS Change Score</th>
<th>BDI-II Change Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>No change</td>
<td>No change</td>
</tr>
<tr>
<td>4</td>
<td>Decrease 13 points</td>
<td>Decrease in 16 points</td>
</tr>
<tr>
<td>7</td>
<td>DROPPED OUT</td>
<td>DROPPED OUT</td>
</tr>
<tr>
<td>9</td>
<td>Increase 3 points</td>
<td>Increase 2 points</td>
</tr>
<tr>
<td>10</td>
<td>Decrease 12 points</td>
<td>Increase 1 point</td>
</tr>
</tbody>
</table>
Chapter 4

Summary, Conclusions and Recommendations

Summary

The aim of this study was to investigate whether a guided self-help treatment is beneficial for college students suffering from comorbid social anxiety and depressive symptoms and whether the treatment is superior to time. It was hypothesized that those in the treatment condition would experience a significant reduction in social anxiety and depressive symptoms over the course of the nine week treatment. In addition, it was hypothesized that these gains would be greater than gains experienced by participants in the wait-list control condition. The results of the present study did not support the hypotheses noted.

Conclusions

This research study aimed to replicate previous research studies examining the efficacy of self-help on those suffering from social anxiety symptoms. The results of this study found that participants in the treatment group who had access to the self-help book demonstrated more symptomatic reduction compared to participants in the control condition, although results were not statistically significant. Previous research has demonstrated the effectiveness in self-help material in significantly reducing social anxiety symptoms.

In addition, the present study sought out to extend the research literature on self-help material for those suffering from comorbid social anxiety and depressive symptoms. As noted, little research has been conducted on the efficacy of self-help for those
suffering from co-morbid social anxiety and depressive symptoms. As a result, the present study has enhanced the understanding of self-help and its ability to treat those suffering from such symptoms.

The results of this study further demonstrated the ability to treat comorbid mental health disorders at the same time. Furthermore, it depicted that the use of a self-help book for alleviating social anxiety can be equally effective in reducing co-occurring depressive symptoms. As mentioned, *The Shyness & Social Anxiety Workbook: Second Edition* (Antony and Swinson, 2008) is a CBT self-help book aimed at alleviating social anxiety symptoms. The text focuses on fears and anxiety experienced in interpersonal and social situations. The text briefly educates the reader on the high potential for co-occurring mental health disorders to exist, such as depression. There is no information pertaining to targeting the reader’s potential depressive symptoms. As depicted in the present study, upon completion of this self-help book, those in the treatment condition who had reductions in social anxiety symptoms also had corresponding reductions in depressive symptoms. As a result, further studies should investigate the potential to alleviate co-occurring mental health disorders by solely targeting one disorder.

The present study further demonstrated the feasibility of self-help compared to in-person therapy. For scores on the SIAS, three participants (60%) in the treatment condition experienced reductions in scores, one participant (20%) neither benefited nor got worse and one participant (20%) experienced an increase in social anxiety symptoms. For scores on the BDI-II, three participants (60%) in the treatment condition experienced reductions in scores, one participant (20%) neither benefited nor got worse and one participant (20%) experienced an increase in depressive symptoms.
The percentage of participants who appeared to have a reduction in symptoms, an increase in symptoms and no symptom change upon completion of this study corresponds to that found in previous research studies. According to Barlow (2014), research has demonstrated that in person CBT is effective in alleviating social anxiety symptoms in 75% of the population. The results of this study further question the notion of self-help as an equally effective treatment modality for mental health symptoms.

**Limitations**

The present study has been noted to have the following limitations. The first limitation worth note is the sample utilized in the study. The sample consisted primarily of Rowan University females, with a mean age of 22 years-old, whom identified as Caucasian, and Non-Hispanic of Latino. As a result, the limited sample may make it difficult to generalize the findings of this study to a larger and broader population. For future studies, it is recommended that a broader sample be utilized, including that of age, gender, race, ethnicity and level of education. A broader sample could allow for a stronger external generalization of the findings to a larger population.

The second limitation is the sample size. The sample utilized for this randomized clinical trial was ten participants, five in the treatment condition and five in the waitlist condition. This sample size is considered relatively small and limited for a randomized clinical trial. Previous studies examining the efficacy of self-help material have had a sample size of at least 20 participants. For future studies, it is advised to have a larger sample size to further understand and generalize the findings.
The third limitation noted within this study is the exclusion criteria. Participants were excluded from the study if they endorsed suicidal ideation, had a history of psychosis and/or substance abuse. These participants were not eligible to partake in the study and were provided with other mental health resources. It is very common for those experiencing depressive and/or anxious symptoms to endorse suicidal ideation and to abuse substances. As a result, the present sample may not adequately represent the desired population and may limit the generalizability of the findings.

In addition, participants were able to participate in the study if they had access to a computer with internet. As a result, this may have decreased the opportunity for students to participate in the study. For future studies, it is recommended to consider alternative means of contact with participants, including that of postal services and in-person contact, to decrease the need for computer and internet access.

The last limitation worth note is the inability to monitor treatment compliance. Participants in this study were recommended, but not instructed, to post their responses for the assignments for each module in the comment box online. Very few participants elected to provide their responses for their assignments. For future studies, it is recommended to include a means of monitoring treatment compliance and checking the quality of their responses.

**Future Directions**

As previously noted, the present study had a small sample size which limited the generalizability of the findings. As a result, additional data is being collected. The present
study is a part of larger research project examining the effectiveness of self-help books for college students with social anxiety and depressive symptoms.

For the larger research project, the research team will be examining the variability in data, and suitability of treatment. As discussed, based on SIAS and BDI-II scores, participants in the present study appeared to get better, worse or had no change in social anxiety and depressive symptoms upon completion of the self-help treatment. As a result, the research team will be further examining the variability in treatment. One potential predictor of treatment effectiveness is The Stages of Change. *The Shyness & Social Anxiety Workbook: Second Edition* (Antony & Swinson, 2008) utilizes CBT which is an action oriented treatment. In the larger project, the research team will analyze the potential relationship between a participant’s stage of change and their treatment outcomes.
References


