PANIC DISORDER: CONSUMER PREFERENCES AND IMPLICATIONS FOR
REHABILITATION COUNSELORS

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The present study examined the characteristics of panic disorder and current treatments available for individuals seeking management of their panic-related symptoms. Panic disorder and agoraphobia, their impact on quality of life, and areas of dysfunction in various life domains for individuals with panic disorder are presented. Also presented is an overview of rehabilitation counseling and its scope of practice, as it relates to possible areas of treatment and rehabilitation of individuals with panic disorder. Participants in the study were persons with panic disorder who were surveyed on treatments currently or previously received for panic-related symptoms, and their perceptions of the value or effectiveness of these services. These participants will then be asked about services they had not received, but perceived to be of possible value in coping with panic disorder symptoms and dysfunction as a consequence of panic symptoms in significant life areas. Services provided in the rehabilitation counseling scope of practice will be discussed in relation to survey responses, as well as implications for rehabilitation counselors.
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Panic Disorder: Consumer Preferences and Implications for Rehabilitation Counselors

Panic disorder is an anxiety disorder in which an individual experiences recurrent panic attacks. These attacks involve a measurable period of fear or anxiety which includes a variety of cognitive and physiological manifestations, reaching a peak of symptom experience for the individual within a period of 10 minutes or less (American Psychiatric Association & American Psychiatric Association, 2000; Rapee & Barlow, 2001).

Although many individuals experience panic attacks, not all are diagnosed with panic disorder. There are three existing forms of panic attacks: unexpected or uncued attacks which do not occur as a result of a situation or trigger; cued or situationally bound attacks associated with some type of cue which provokes anxiety, and; situationally predisposed attacks which occur in association with a cue or situation, although not consistently every time an individual is exposed to the cue (Hersen, Turner, & Beidel, 2007). An individual enduring worry about future panic attacks or possible harm caused by attacks for at least 1 month, and who experiences the unexpected form of attacks, qualifies for the diagnosis of panic disorder (Rapee & Barlow, 2001) (See Appendix A).

Individuals must experience unexpected attacks to be diagnosed as having panic disorder, but may also experience the other types of attacks. The frequency and severity of attacks is variable among those diagnosed, but to qualify as a “full blown” attack, the individual must experience four or more cognitive or somatic symptoms from the Diagnostic Statistical Manual-IV-Text Revision (DSM-IV TR) symptom list. If three or fewer of these
symptoms are experienced by the individual, they are said to be having a limited symptom attack (American Psychiatric Association & American Psychiatric Association, 2000). Common symptoms experienced by an individual with panic disorder who is having a panic attack may include autonomic arousal (ie, rapid heart rate), feelings of terror or loss of control, shaking or trembling, dizziness, sweating, or paresthesias (American Psychiatric Association & American Psychiatric Association; Hersen, Turner, & Beidel, 2007).

Individuals diagnosed with panic disorder may or may not experience accompanying diagnoses or symptoms of agoraphobia, a form of phobic avoidance (Rapee & Barlow, 2001). In general, agoraphobia can accompany panic disorder and involves a fear of being in places where escape could be difficult if necessary or where they may be unable to find help in the event of an unexpected panic attack. Often, individuals with agoraphobia will avoid public places, especially crowded ones. However, some individuals compensate for their agoraphobic fears by having a person or object with them that gives them a sense of safety in feared situations (Hersen et al., 2007). (See Appendix A for complete DSM-IV-TR criteria for Panic Disorder and Agoraphobia).

Prevalence and Patterns of Panic Disorder

Panic disorder affects women more often than men. Women are diagnosed with panic disorder without agoraphobia twice as often as men, and are diagnosed with panic disorder with agoraphobia three times as often as men (American Psychiatric Association & American Psychiatric Association, 2000). The age of onset of panic disorder varies, but often falls between late adolescence and the mid-thirties. Lifetime prevalence rates among the general population for panic disorder are 1 – 2%, and one year prevalence rates are 0.5 – 1.5% (American Psychiatric Association & American Psychiatric Association). Family
patterns of panic disorder indicate a possible genetic component involved in the development of the condition. An individual is eight times more likely to develop panic disorder if a first degree relative, such as a sibling, has the disorder. If the age of onset of panic disorder is before the age of 20 in a first degree relative, an individual’s chance of developing panic disorder jumps to 20 times more likely than those individuals without familial tendencies (American Psychiatric Association & American Psychiatric Association). Studies of twins also support the theory of a genetic component of panic disorder however; it is probable that any genetic tendency may be general to all anxiety disorders, rather than specific to panic disorder development (Rapee & Barlow, 2001).

Another significant association with panic disorder is that of smoking and nicotine dependence. Isensee, Wittchen, Stein, Hofler, and Lieb (2003) found that panic attacks and panic disorder were highly correlated with smokers ranging from “occasional” to “nicotine dependent.” The study also found that prior accounts of regular smoking or nicotine dependence were associated with greater risk for new development of panic attacks. Other common issues linked to panic disorder include high incidence of alcohol or substance abuse, reduced levels of physical and emotional well-being, reduced ability to complete everyday tasks, and increased rates of suicide attempts (Carpiniello et al., 2002).

Although some information has been discovered about patterns and prevalence, the course of panic disorder has not been widely researched. However, retrospective data indicates that panic disorder is a chronic condition with variances in symptom severity over time. This chronic nature of panic disorder may be partially due to lack of appropriate interventions (Leahy & Dowd, 2002). Although empirically supported treatments have been established in the treatment of panic disorder, such as medication and psychotherapy, current
research suggests that clinicians often rely on clinical observation for development of practices and treatments for panic disorder rather than empirically tested interventions (Stewart & Chambless, 2007). This manner of treatment choice by professionals may not include input from consumers, and may impact upon outcomes and the quality of life for individuals with panic disorder.

Panic Disorder and Quality of Life

Quality of life is “a measure of the optimum energy or force that endows a person with the power to cope successfully with the full range of challenges encountered in the real world” (Anderson, Anderson, & Glanze, 1994, pg.1319). The impact of panic disorder on quality of life for affected individuals is significant in various areas. The disorder is costly for those diagnosed with it due to their increased utilization of healthcare services and associated fees, such as co-payments, which in turn is costly to society as well. Reduced levels of occupational efficiency or ability to effectively complete job tasks, and loss of days on the job due to panic and agoraphobic symptoms are also costly and of major importance to those with panic disorder (Roy-Byrne, Craske, & Stein, 2006).

Several factors have been found to be associated with poorer quality of life within the population of individuals with panic disorder. Yen et al. (2007) found that factors such as low levels of social support and being single were correlated with lower quality of life scores in individuals with panic disorder. Because lower functioning levels within work and home life areas were found to be associated with panic disorder, the authors suggest that an associated decline in familial support may occur. Yen et al. found that to decrease these issues, clinicians should consider not only treatment for the individual with panic disorder,
but also education and skills training for family members to assist the individual in coping with symptoms.

In addition to factors associated with poorer quality of life for individuals with panic disorder, the nature of the disorder itself may impact quality of life scores. Telch and Schmidt (1995) found that patients’ levels of anxiety and phobic avoidance were more predictive of their quality of life than was the frequency of their panic attacks. These results were verified by baseline, 9-week, and 6-month follow-up measures. The study also supported previous findings that individuals with panic disorder have impairments in various life areas, including their functioning levels within home and family environments, as well as social and leisure environments (Telch & Schmidt). Compared with other clinical populations of medical and psychiatric conditions, including social anxiety, alcoholism, and schizophrenia, individuals with panic disorder have been found to be impacted as significantly as, if not more than the other populations, in measures quality of life (Simon et al., 2002; Telch & Schmidt). The significant impact of panic disorder on affected individuals has led to a great deal of research about the characteristics, treatment, and origins of the disorder. In the next section, several theories of etiology are used to help explain the development of panic symptoms.

Theories of Etiology

Psychological theories of the etiology of panic range widely in the literature, and these diverse theories affect the clinical treatment models chosen by mental health professionals.

Psychoanalytic theory. One of the oldest psychology theories is psychoanalysis, which posits the source of panic. This theory is based on the notion that panic symptoms
arise as a result of an individual’s personality traits, previous life experiences, and perception of his or her parents (Dattilio & Salas-Auvert, 2000). This theory integrates unconscious processes and the need to bring those processes to consciousness in order to alleviate panic symptoms. Life transitions are viewed as possible triggers for panic in this theory when coupled with personality traits such as obsessive-compulsiveness, dependence, or perfectionism. Separation anxiety is also seen as a possible trigger (Dattilio & Salas-Auvert). Busch, Milrod, and Singer (1999) have indicated strong underlying feelings of anger or rage are present in clients with panic disorder as representative of the psychoanalytic view of conscious and unconscious knowledge. They posit that individuals feel their attacks come unexpectedly in panic disorder only because they are unaware of the unconscious, or at least partially unconscious, aspects of their own anger about which emotional symptoms may occur. Although psychoanalytic theory is the basis for some clinicians’ treatment of individuals with panic disorder, it is acknowledged that this theory and treatments based upon it lack significant amounts of empirical research and support (Busch et al.).

Cognitive theory. The cognitive theories explain panic based largely on the work of D.M. Clark (1997) and Beck, Emery, & Greenburg (1985) as characteristic of catastrophizing and a misinterpretation of bodily sensations and the heightened perception of danger or threat associated with the sensations. These sensations and misinterpretations are thought to be essential to the genesis and unremitting nature of panic disorder, and cause eventual panic responses (Dattilio & Salas-Auvert, 2000; Leahy & Dowd, 2002). Dattilio & Salas-Auvert explain that there is not a precise neurobiological device that results in all panic attacks, but rather that cognitive misinterpretations can be caused by internal cues brought on by things such as exercise or mitral valve prolapse, or by external cues, such as inhalation of carbon
dioxide, exposure to a sudden fear stimulus, or cardiovascular changes due to air pressure differences. Researchers subscribing to cognitive theories to explain panic disorder hypothesize that individuals who experience panic attacks misinterpret non-harmful autonomic bodily sensations as signals that a catastrophe, either physical or mental in nature, is going to immediately occur. Although, in reality, there is not a true threat or danger to the individual, the catastrophic thoughts often lead to more physical sensations in the body, which then produce more catastrophic misinterpretations, cycling and building up until the individual eventually has a panic attack (Bouton, Mineka, & Barlow, 2001). These individuals then develop heightened vigilance and sensitivity to non-harmful bodily sensations as a result of their panic response. This theory is supported by research showing the connection between cognitive misinterpretations and ensuing panic. For example, Clark found an increased incidence of panic in a laboratory setting when catastrophe words and bodily sensation words were presented in pairs to induce catastrophic cognitions. Another study supported the cognitive theory by showing that individuals with panic disorder were more likely to misinterpret bodily sensations as signals of immediate physical or mental catastrophe than both persons with other anxiety disorders and persons without anxiety disorders (Clark).

Certain situations exist that are in contrast to the notion that catastrophic misinterpretations are crucial to the development and continuance of panic disorder. These instances are problematic for the cognitive theory of panic being accepted as the sole explanation for the disorder. For example, some individuals with panic disorder experience nocturnal panic attacks, and some also report no preceding catastrophic cognitions relative to
their panic attacks, suggesting that the cognitive misinterpretation and bodily sensation cycle may not explain all types of panic (Bouton et al., 2001).

**Fear of Fear Theory.** Another cognitive (or conditioning) theory that can explain panic is the fear of fear model introduced by Goldstein and Chambless (1978). This model may also be referred to as a conditioning theory of panic since its basis involves interoceptive conditioning. It is somewhat related to Beck’s (1992) and Clark’s (1997) cognitive theory. The fear of fear model states that an individual who experiences a panic attack begins to regard low-level somatic feelings as associated directly with higher levels of anxiety and panic. The low-level somatic feelings are thus turned into conditioned stimuli, eliciting worry about having a panic response from the individual whenever they are experienced (Bouton et al., 2001; Hersen et al., 2007). Essentially, the “fear of fear” arises as a result of the individual’s experience of panic attacks (Hersen et al.). Fear of may also be a notable theory due to some evidence that, in cognitive treatment of individuals with panic disorder, reduction of fear of fear has been found to mediate the effects of treatment on global disability scale scores (Smits, Powers, Cho, & Telch, 2004).

Criticisms for the fear of fear model center around the conditioning aspects of the theory. For example, if truly a conditioned stimulus, the low-level somatic feelings should actually elicit a worry/panic response each time they are felt. However, they are not always consistently associated with an individual having a subsequent panic attack (Clark, 1988).

**Anxiety Sensitivity Theory.** The anxiety sensitivity model suggests that panic disorder builds upon the fear of fear model, and involves the inherent beliefs or traits of individuals regarding anxiety and panic. Persons with this inherent belief system feel that experiencing panic or anxiety will cause physical, psychological, or social harm that lasts long after any
current feelings of distress associated with a panic attack (McNally, 1994; Reiss, 1991). Unlike other theories explaining panic, this model views anxiety sensitivity as a stable trait, and does not rely on cognitive misinterpretations of bodily sensations. Rather, it posits that individuals with panic disorder often do not misinterpret sensations at all, and may actually be able to correctly identify causes of their bodily sensations. As a result, people with panic disorder still may panic due to their inherent belief of the sensations causing long-term physical or psychological harm to them that is not immediate, but more evident over time (Bouton et al., 2001; Hicks et al., 2005).

Research supporting the anxiety sensitivity theory includes a large scale study that found anxiety sensitivity scores to be positively correlated with risk for the development of panic disorder in adolescents (Hayward, Killen, Kraemer, & Taylor, 2000), as well as studies by Schmidt, Lerew, and Jackson (1997, 1999) which found anxiety sensitivity to be a specific predictor of panic, as opposed to a general predictor of anxiety or depression (Schmidt et al. 1999).

One study on adolescent development of panic disorder also found that negative affect was even more positively correlated with risk for development of panic disorder, which calls into question whether anxiety sensitivity is specifically a factor in the development of panic (Bouton et al., 2001).

*Modern Learning Perspective Theory.* One of the newer models explaining panic disorder is the modern learning perspective theory introduced by Bouton, Mineka, and Barlow (2001). This model asserts that both psychosocial and biological vulnerabilities are necessary elements in the development of panic disorder. The theory also values early conditioning experiences as a possible part of panic development, although it indicates that
the extent of conditioning varies among individuals and depends on various factors including previous experiences with the conditioned stimuli and unconditioned stimuli. The theory expands on previous definitions of panic disorder, proposing that both panic and anxiety are distinct parts of panic disorder. The utility of anxiety is hypothesized to be preparation of the body for an impending catastrophe, while panic is said to help cope with a crisis already happening to the individual (Bouton et al.). The interaction between these two separate phenomena is synergistic in this model, exacerbating panic attacks, and putting anxiety into the role of antecedent to panic. This portion of the theory is supported by several studies in which anxiety is found to frequently precede panic attacks (Barlow, 1988; Basoglu, Marks, & Sengun, 1992; Kenardy, Fried, Kraemer, & Taylor, 1992). In addition to anxiety as the antecedent predictor of panic, the modern learning theory suggests that panic itself may become a conditioned response to environmental or internal cues, cutting out anxiety as a factor in the process of panic attack development (Bouton et al.).

Current Treatments of Panic Disorder

Currently, the most commonly used treatments for panic disorder include pharmacotherapy and/or psychotherapy, both of which contain numerous varieties of treatments. Opinions differ as to which treatment should be utilized, and also about whether or not combination therapy is a viable first-line treatment method.

Psychopharmacology. Among the drugs most used for the treatment of panic disorder are selective serotonin reuptake inhibitors (SSRIs), and serotonin norepinephrine uptake inhibitors (SNRIs). Additional categories of drugs used in the treatment of panic disorder include tricyclic antidepressants (TCAs), benzodiazepines (BZDs), monoamine oxidase inhibitors (MAOIs), anticonvulsants, and atypical antipsychotic drugs (Hoffman &
SSRIs including types of paroxetine, sertraline, and fluoxetine, as well as a form of venlafaxine (an SNRI) have been approved as treatments for panic disorder by the U.S. Food and Drug Administration (Hoffman & Mathew, 2008). The goal of treatment with psychopharmacology is to entirely eliminate panic attacks since partial alleviation of attacks can translate to continued issues regarding social impairment and continued evasion of distressing situations (Katon, 2006). Panic disorder is among the most responsive of the anxiety disorders to pharmacotherapy, and interestingly, has a high response rate to placebo drug treatments as well (Hoffman & Mathew).

Although BZDs, and TCAs have been found as effective as SSRIs in the alleviation of panic disorder symptoms and related anxiety, SSRIs are recommended as the best medication options because they are more tolerable to patients, and also have greater levels of safety (Heuer, Mathew, & Charney, 2009).

In the beginning stages of pharmacotherapy treatment for panic disorder, BZDs may be coupled with SSRIs to more quickly alleviate initial symptoms or side effects such as agitation or jitteriness (Katon, 2006). Katon also suggests that, since individuals with panic disorder often have a heightened alertness for labeled drug side effects, that SSRIs be introduced in small doses with slow and steady increases over time. Furukawa, Watanabe, & Churchill (2007) conducted a meta-analysis of 23 research studies examining pharmacotherapy and psychotherapy treatments for panic disorder and found that combining psychotherapy and pharmacotherapy as treatment initially was more effective than either treatment by antidepressant or psychotherapy alone, as long as the medication was continually received as a treatment. Either psychotherapy alone or psychotherapy combined
with pharmacotherapy for panic disorder was found by the meta-analysis as appropriate options for first-line treatments.

More specifically, a study conducted by Barlow, Gorman, Shear, and Woods (2000) found evidence that although antidepressants combined with cognitive behavioral therapy are initially more effective, after treatment study discontinuation cognitive behavioral therapy only or combined with a placebo was more effective in treating panic disorder than antidepressants combined with cognitive behavioral therapy.

Several issues arise when psychopharmacology is considered as a treatment modality for panic disorder. Amid the greatest of issues to consider is the relatively high rate of nonresponse to pharmacotherapy. Among persons treated for panic disorder, between 20 and 40% are nonresponsive to drug treatments (Slaap & Den Boer, 2001). Slaap et al. found that nonresponse is often found in those with a long duration of panic disorder, and also in those who have accompanying symptoms of agoraphobic avoidance. However, even more predictive of nonresponse than duration of illness or presence of agoraphobia, was the existence of a comorbid personality disorder, necessitating the consideration of combination therapy including psychotherapy and medication, or treatments other than pharmacotherapy when proven to be ineffective.

Another issue surrounding the use of pharmacotherapy in treatment of panic disorder is the possibility of negative effects of drug therapy on treatment outcomes. For example, Westra, Stewart, Teehan, Johl, Dozois, & Hill (2004) found that in tests of incidental memory and recall for information presented in a cognitive behavioral therapy group, individuals with panic disorder who were regular users of BZDs performed significantly poorer on memory and recall tests than did non-medicated, demographically and
symptomatically similar individuals with panic disorder. Therefore, it is hypothesized that this correlation may be the cause of lower success rates in cognitive behavioral therapy for those patients who receive additional BZD treatment.

*Cognitive behavioral therapy.* Panic disorder treatment often includes the use of psychotherapy. The most widely researched type is cognitive behavioral therapy, which has gained a strong empirical base of research studies and positive outcomes (Otto, Smits, & Reese, 2004). The focus of treatments based on cognitive behavioral theory is largely cognitive restructuring, and challenging catastrophic thoughts associated with bodily sensations (Leahy & Dowd, 2002). Individuals with panic disorder are taught to identify both internal and external signals that activate panic attacks and also to transform their emotional responses to the signals. This goal is generally achieved in cognitive behavioral therapy through education about panic disorder symptoms, restructuring of maladaptive cognitions related to panic, desensitization to misinterpreted bodily sensations through exposure activities, gradual departure from the use of safety behaviors such as avoidance of feared situations or utilization of a safety person or object, and also through breathing retraining exercises (Margraf, Barlow, Clark, & Telch, 1993).

Of particular significance is the effectiveness of cognitive behavioral therapy for individuals who are non-responsive to pharmacotherapy treatments, who wish to seek treatment without drug therapy, or those who need to bolster treatments with pharmacotherapy (Otto et al., 2004). In addition, research has indicated that cognitive behavioral therapy is significantly more effective than supportive psychotherapy for panic symptoms as well as for general anxiety, including group formats (Beck, 1992; Otto et al.). Studies have also found that cognitive behavioral group therapy significantly improves the
proposed underlying mechanism of the panic cycle, the “fear of fear,” greatly improving scores on global deficit scales for those with panic disorder (Smits et al., 2004).

Sharp, Power, & Swanson (2004) conducted a study comparing group and individual formats of cognitive behavioral therapy for panic disorder, in which both the group and individual clients achieved clinically significant improvements in symptom reduction on measures of anxiety, depression, and agoraphobic avoidance compared to a waiting list control group, with the individual therapy patients showing significantly better outcomes on the measures than the group therapy patients and waiting list control group patients. The study also found that almost every person in the wait list control group (95%) stated a preference for receiving individual treatment over group treatment. The treatment outcomes were sustained at a 3 month follow up point, with the gap between outcomes in the individual and group therapy patients becoming smaller due to a smaller group of individual treatment patients showing clinically significant changes in the repeated outcome measures (Sharp et al.).

Treatment outcome sustainability is another important facet of cognitive behavioral therapy. Beyond the 3-month follow up by Sharp et al. (2004), comparing individual and group interventions, other studies have shown even longer-term positive outcomes on measures of panic, agoraphobic avoidance, and depression. Kenardy, Robinson, and Dobb (2005) found that in a 6-8 year follow up study of clients with panic disorder receiving cognitive behavioral therapy, 57.1% of the clients were panic-free in the follow up years.

Another study by Craske et al. (2006) examining the durability of cognitive behavioral therapy outcomes focused on the facets of treatment associated with better outcomes at 3 and 12 month follow-ups. The results of the study showed that clients
receiving a higher number of cognitive behavioral treatment sessions within the acute phase (first 3 months) of treatment were more likely to show lower signs of anxiety sensitivity at 3 months post treatment, and also at 12 months post treatment, no matter what their baseline level of impairments was (Craske et al.). In addition, the number of 15-minute follow up phone calls from clinicians to clients was positively correlated with better outcomes. A greater number of follow up calls over a 9-month period was associated with better scores on measures of anxiety sensitivity, agoraphobic avoidance, and depression (Craske et al.).

Other studies of cognitive behavioral therapy have examined not only treatment outcomes, but various formats of therapy tailored for specific patient needs. For example, Deacon and Abramowitz (2005) conducted intensive, brief, two-day cognitive behavioral therapy sessions for individuals in a rural setting, who traveled significant distances for treatment. Clients receiving the brief therapy showed clinically significant improvements in reduction of hypervigilance, reduction of anxiety sensitivity, and reduction of depression and anxiety at one month follow-up testing. Over half of the clients were completely panic-free at the one month follow-up, as well, suggesting that brief forms of cognitive behavioral therapy may have important lasting effects (Deacon & Abramowitz).

Another study (Bitran, Morissette, Spiege, & Barlow, 2008) of brief cognitive behavioral therapy focused on a specific client group was conducted using an 8-day treatment program entitled sensation-focused intensive treatment, which includes elements of cognitive restructuring along with interoceptive and situational exposure to panic triggers. The program was geared toward individuals with panic disorder who also have moderate to severe agoraphobia. Persons completing the program were found to have reduction in symptoms immediately after treatment and also at 1 to 6 month follow up screenings (Bitran
et al.). Comorbidity did not hinder outcomes and clients with a comorbid condition did not sustain any losses in treatment gains. Improvements were noted in levels of anxiety and bodily sensation sensitivity, agoraphobia, panic symptoms, and social anxiety symptoms. The authors hypothesized that the treatment gains would be generalizable and adapted by participants outside of the treatment setting due to the focus on reactions to their internal emotions and cues, as well as reactions to external circumstances (Bitran et al.).

Other approaches utilizing cognitive behavioral treatment techniques include the use of virtual reality to simulate exposure to feared situations. This technique is applicable for individuals with panic disorder and agoraphobia and a study conducted by Botella et al. (2007) found that outcome scores of a 9-week trial of virtual reality exposure in reductions of number of panic attacks, anxiety sensitivity, and phobic avoidance were comparable to outcome scores of another test group receiving in vivo exposure therapy. Another positive outcome of the study was that the treatment gains by clients were maintained at a 12 month follow-up assessment.

Although few studies have been conducted which address the relationship between varying cultures and cognitive behavioral therapy outcomes, one study did find significant treatment outcomes for African American women receiving an 11-session cognitive behavioral group therapy treatment as compared to a wait list group. The women in the treatment group were diagnosed with panic disorder and mild agoraphobia. The study found that treatment outcomes were similar to previous findings of studies with Caucasian Americans with similar conditions undergoing cognitive behavioral treatments employing interoceptive exposure techniques (Carter, Sbrocco, Gore, Marin, & Lewis, 2003). In addition, the clinicians expanded the therapy group’s discussion of treatment adherence and
obstacles to rehabilitation to encompass culturally bound beliefs and expectations of the group participants. Themes discussed included the view among African Americans that showing of extreme emotions is a sign of weakness, as well as the effects of being African American in job settings and the related stressors that may intensify symptoms.

*Other psychotherapy methods.* The treatments evolving from psychoanalytic theory include a great amount of attention to conquering dependency and separation issues which are seen as rooted in childhood events (Dattilio & Salas-Auvert, 2000). Unlike cognitive behavioral therapies for panic disorder, psychoanalytic methods have not been thoroughly supported by empirical data. Busch et al. (1999) outlined a psychodynamic program for panic disorder treatment focused on addressing issues such as the conscious and unconscious mental life, defense mechanisms, and transference. The program description contained a case vignette to which psychodynamic methods were applied. The authors acknowledged the lack of empirical data supporting the psychoanalytic perspective, but maintained that the nature of the treatment prevented it from being more formally operationalized (Busch et al.).

Another example of a lesser documented treatment for panic disorder is eye movement desensitization and reprocessing (EMDR). The treatment involves participant identification of an anxiety provoking thought followed by eye movements directed by the clinician. This is followed by processing thoughts that come up followed again by eye movements until the thoughts that surface are no longer panic cues or anxiety related (Goldstein, de Beurs, Chambless, & Wilson, 2000). Individuals in one study receiving EMDR were compared to both a group receiving attention-placebo treatment of association and relaxation therapy, and a control group. Although outcomes were somewhat better for EMDR than the control group, EMDR did not show better treatment outcomes than the
attention-placebo group. The authors affirm that the existence of more solidly researched and empirically sound techniques make EMDR a non-recommended treatment in the realm of panic disorder and agoraphobia (Goldstein et al.).

Summary of Research Literature

According to the overview of literature, cognitive behavioral therapies appear to be the most effective treatments provided for panic disorder, and may at times be coupled with pharmacotherapy treatment methods. However, beyond pharmacotherapy and psychotherapy, there is a shortage of literature about other adjunct or more holistic treatments for the symptoms of individuals with panic disorder, nor has any literature focused on rehabilitation treatment to improve functional outcomes for significant areas including vocational, financial, and psychosocial issues.

Description of Rehabilitation Counseling

One of the growing fields in mental health geared toward rehabilitation for psychiatric populations is rehabilitation counseling. Rehabilitation counseling is defined by the Commission on Rehabilitation Counselor Certification (CRCC, 2003) as:

a systematic process which assists persons with physical, mental, developmental, cognitive, and emotional disabilities to achieve their personal, career, and independent living goals in the most integrated setting possible through the application of the counseling process. The counseling process involves communication, goal setting, and beneficial growth or change through self-advocacy, psychological, vocational, social, and behavioral interventions. (p.1)

The scope of practice for certified rehabilitation counselors contains a number of services aimed at providing a holistic rehabilitation program for consumers. It includes:

- assessment and appraisal; diagnosis and treatment planning;
- career (vocational) counseling; individual and group counseling treatment interventions focused on facilitating adjustments to the medical and psychosocial impact of disability; case management, referral, and service coordination; program evaluation and research; interventions to remove
environmental, employment, and attitudinal barriers; consultation services among multiple parties and regulatory systems; job analysis, job development, and placement services, including assistance with employment and job accommodations; and the provision of consultation about and access to rehabilitation technology. (p.1-2)

This scope of practice, coupled with the training and background of rehabilitation counselors emphasizing holistic outcomes in areas of individuals’ medical, psychosocial, emotional, and vocational functioning, could allow for the integration of current treatments for panic disorder, such as individual or group counseling, into the practice of rehabilitation counselors as well as an opportunity for additional services typically provided by rehabilitation counselors including vocational/career counseling, and job placement/training assistance. By integrating these treatments, rehabilitation counselors may help individuals to reduce deficits in quality of life associated with panic disorder.

Purpose of the Study

The purpose of the study was to examine the types of treatments received by individuals with panic disorder; the participants’ perceptions of the value of services that they have received; and their perception of the value of other services that they would like to receive. Services that may be provided to individuals with panic disorder by Certified Rehabilitation Counselors through the rehabilitation scope of practice were examined within this context including career or vocational counseling, individual or group counseling, and case management. The research project also examined the association between quality of life scores and panic disorder treatments received. Research questions include:

- Which services received by consumers are believed to be most effective?
Which services not yet received by consumers are perceived as needed and valuable; and are these services ones which may be provided within the rehabilitation counseling scope of practice?

Is there a positive correlation between consumers’ ratings of service effectiveness and their quality of life scores?

It is predicted that average service effectiveness ratings of participants will be positively correlated with the quality of life scores of participants in the study.

Method

Participants and Recruitment

All participants recruited for the study were at least 18 years old, and were involved in at least one form of active treatment or rehabilitation for their panic symptoms, including but not limited to, psychopharmacological treatment, psychotherapy treatment, or regular attendance at support group meetings. Research study recruitment materials were sent to various mental health treatment centers and panic disorder support groups within the Triangle and Triad areas in North Carolina, as well as online support groups/forums, and email listservs (See Appendix E for complete listing of sites receiving recruitment information). These recruitment sites were found through internet searches for local mental health services and support groups/forums, as well as flyers posted for support groups. Additional sites were known by the researcher through previous work experiences in mental health settings. The study flyer and information letter sent to sites contained specific information about participant recruitment, the voluntary nature of the study, and how to contact the researcher in order to participate in the research study (See Appendix C for IRB application containing flyer and information letter). The researcher provided study information to the therapists,
doctors, and facilitators at participating agencies. To recruit participants, each clinician was supplied with informational flyers to distribute to all willing participants. All participants had the option of being entered into a drawing to win one of five $20.00 gift cards by providing personal contact information to which the gift card would be mailed if they were chosen as a gift card winner. Provision of this information was completely optional, and all participants had the right to remain anonymous if they preferred. In order to protect the privacy of those participants providing contact information, the online program utilized for the survey was encrypted, and participant information was kept in a password-protected spreadsheet on a computer which was also password-protected, and gift cards mailed to the winners of the drawing were sent in unmarked envelopes. The primary researcher was the only individual with access to identifying information of participants.

All participants had to give voluntary consent to participate in the research survey before they were included in the study (See Appendix D for survey format containing consent form). In addition, all research methods and processes for recruitment and data analysis were approved by the Office of Human Research Ethics - Institutional Review Board (IRB) of the University of North Carolina at Chapel Hill before any recruitment or data collection took place. The IRB application for this research study is included in Appendix B.

 Procedures

The researcher’s email address and phone contact information were included on informational flyers distributed to support groups and mental health centers. Participants contacted the researcher via email or phone to indicate interest in completing the survey. A survey link was sent to the participants via email (Alternative formats of the survey were also
made available; however, no participants requested accommodation). Participants were asked to follow the survey link provided in the email to access the survey.

After reading a consent form explaining their rights and associated risks of the study, participants indicated, by checking a box in the online version of the survey that they voluntarily agreed to participate in the study. Participants then completed a demographics information sheet comprised of questions about their diagnosis (including any co-occurring conditions), and demographics such as age, gender, and marital status to provide information for participant profiles.

Next, the participants completed a brief questionnaire measuring quality of life, followed by a short survey on treatments they have received, their perception of the value or efficacy of received services, and also their perception of the value or need for services which they have not previously received. The services listed on the survey included areas of practice that were reasonably expected to fall within the scope of rehabilitation counseling. This was anticipated to identify options in which rehabilitation counselors may effectively treat consumers with panic disorder, as well as consumer preferences and needs relative to their practice. Lastly, the participants viewed a disclosure statement at the end of the survey, explaining the purpose of the study in greater detail, and providing contact information of the researcher and her adviser in case of concerns or questions related to the study. Participants were also given the opportunity to voluntarily provide contact information as a condition for entry into a drawing to win one of five $20.00 gift cards.

After completion of the study, five entries containing individual participants’ contact information were randomly chosen from all participants’ numbers in a drawing, and gift cards were mailed to the selected participants’ contact addresses. The results of the study
were made available in a one-page summary handout written in layman’s terms for any participant requesting the results.

Measure

The Quality of Life Enjoyment and Satisfaction Questionnaire-Short Form (Q-LES-QSF; Endicott, Nee, Harrison, & Blumenthal, 1993) was used to assess participants’ quality of life. The measure consists of 16 self-report items designed to address consumers’ life satisfaction in various domains. The Q-LES-QSF utilizes a five-point Likert scale format, with internal consistency of scale items being demonstrated for various psychiatric conditions (Endicott et al.; Mick, Faraone, Spencer, Zhang, and Biederman, 2008; Ritsner, Kurs, Gibel, Ratner, & Endicott, 2005). For example, Mick et al. found Cronbach’s alpha scores of .88 and .84 for their treatment and control groups, respectively, on the Q-LES-QSF, supporting the internal reliability of the measure. See Appendix F for the original version of Q-LES-QSF form integrated into the online survey.

In addition to the Q-LES-QSF, questions regarding participant demographics, treatments received, treatments valued but not received, and participants’ experiences and opinions about panic disorder treatment were self-reported in the online survey. The survey contained closed-ended and open-ended questions regarding several types of treatments or services for panic disorder.

Scoring of the Q-LES-QSF. The Q-LES-QSF is scored by a combined raw score calculated from the first 14 items. This raw score is converted to a maximum possible percentage score by dividing the total raw score (minus the minimum score) by the maximum raw score (minus the minimum possible raw score of 14). If items are unanswered, the raw score of maximum and minimum numbers are changed to represent the actual number of
items scored. Participants lacking 1/3 or more of the answers on the questionnaire are typically excluded from data totals and analysis results (Endicott, 1993).

Results

Participant Demographics

Twenty three individuals requested instructions to participate in the study via email to the researcher. Through one support group website, a view counter also showed that 6 individuals viewed the recruitment information posted to the online support forum. However, of these requests and views of survey information, only 15 individuals completed the research survey. Thirteen of the 15 participants responded to the study via email through advertisement on the UNC email listserv, while one responded through advertisement on an online forum, and one responded through advertisement at a mental health treatment center. The participant group was a convenience sample which consisted of fourteen females (93.3%) and one male (6.7%). Their ages ranged from 20 to 45 years, with an average age of 26.7 years. The educational level (number of years) ranged from 14 to 25 years (2 years of college to doctoral level), with an average education level of 17.25. Three responses were not averaged due to apparent misinterpretation of the question. These responses were 3, 4, & 4, and may possibly have been participants’ number of college education years. Nine of the participants (60%) were single, two (13.3%) were married, one (6.7%) divorced, and three (20%) listed marital status as “other.” The responses for “other” on the marital status question were specified as separated, engaged, and in a same sex relationship for over five years. For religious affiliation, five participants (33.3%) indicated they were protestant, five (33.3%) indicated no religious affiliation, one (6.7%) indicated agnostic, and four (26.7%) indicated “other.” Answers specified in the “other” category included belief in a higher spirit,
non-practicing Catholic, humanist, and agnostic with Buddhism. Twelve of the participants (80%) were Caucasian, two (13.3%) were Hispanic, and one participant (6.7%) was African American. The main cities of residence for participants were in the Triangle areas of Raleigh, Durham, & Chapel Hill which have an overall ethnic/racial representation of these groups ranging from 45.5-77.9% Caucasian residents, 11.4-43.8% African American residents, and 3.2-8.6% Hispanic residents (U.S. Census Bureau, 2000). A more demographically representative sample would have strengthened the study. Twelve of the 15 participants (80%) indicated they have a co-occurring diagnosis in addition to panic disorder. These diagnoses included eating disorders, mood disorders, and anxiety disorders. Mood disorders were the most highly reported co-occurring condition, with 6 participants out of the 15 total participants (40%) reporting a co-occurring mood disorder. Five out of the 15 participants reported at least two co-occurring conditions in addition to panic disorder. Figure 1 contains the proportions of reported co-occurring conditions.
Figure 1. Co-occurring conditions reported by participants (n=12).

Among the responses on the number of panic attacks experienced weekly, the results ranged from zero to five attacks, with an average number of 1.4 attacks, and a median of 1.5 attacks per week. The severity of the average attack experienced by individuals (from "not severe at all" to "extremely severe") was rated as "moderately severe" by 11 participants (73.3%), “very severe” by 3 participants (20%), and “extremely severe” by 1 participant (6.7%). Although three participants indicated they had not been formally diagnosed with panic disorder, their self-reported responses to the survey indicated that they all three meet full criteria for panic disorder. Each participant reported experiencing five or more symptoms during a panic attack, with 15 participants (100%) reporting symptoms of “palpitations, pounding heart, or accelerated heart rate,” and 13 participants (86.7%)
reporting the symptom of “feeling dizzy, unsteady, lightheaded, or faint.” Figures 2 and 3 show the number of participants who reported experiencing somatic and cognitive symptoms.

Figure 2. Somatic symptoms reported by participants when experiencing a panic attack (n=15).
Figure 3. Cognitive symptoms reported by participants when experiencing a panic attack (n=15).

Treatment and Panic-Related Effects Responses

A descriptive analysis of data related to the research questions on treatment was performed in order to examine the reported opinions and experiences of the participants. Quality of life scores were also calculated as described above to address the research questions. Due to the small sample size in this study (15 total respondents), inferential statistical analysis was not performed.

Medication ratings. Of 15 participants, 13 (86.7%) indicated that they have received medication for panic symptoms, and all but one of these 13 participants (92.3%) rated medication as “moderately effective” to “very effective” with only one participant of the 13 (7.7%) rating medication as “not at all effective” for dealing with panic symptoms. One of
the two participants who indicated that they had not received medication for panic symptoms, rated their perception of medication as potentially “very effective” in dealing with their symptoms. Figure 4 shows the complete ratings of effectiveness provided by participants receiving medication.

![Participant Ratings of Medication Effectiveness](image)

**Figure 4.** Ratings of effectiveness: Participants receiving medication (n=13).

*Individual therapy ratings.* Fourteen of the 15 participants (93.3%) indicated that they also received individual therapy to deal with panic symptoms. Among these 14 participants, 7 (50%) indicated that they felt individual therapy was “moderately effective” in dealing with panic symptoms, while only one individual (7.1%) thought therapy was not at all effective. One of the participants had not received individual therapy at all, and revealed a perception that individual therapy would be “not at all effective” as a treatment. Figure 5 includes results of responses about effectiveness of individual therapy.
Figure 5. Ratings of effectiveness: Participants receiving individual therapy (n = 14).

Group therapy/counseling ratings. In contrast, only one respondent out of 15 (6.7%) had participated in group therapy or counseling for panic disorder, and rated the treatment as “moderately effective” in dealing with panic symptoms. Among the 14 participants (93.3%) who did not receive group therapy for panic symptoms, eight (57.2%) perceived group therapy as “slightly effective” or “moderately effective”, while two of these participants (14.3%) perceived it as “very effective.” Figure 6 below shows the responses on perceived efficacy of group therapy/counseling for the 14 participants who are not receiving group therapy.
Figure 6. Ratings of perceived effectiveness: Participants’ perception of group therapy (n = 14).

Vocational/career services ratings. Only one of the participants (6.7%) reported any participation in vocational rehabilitation services, job coaching, or career counseling for work-related concerns as part of their panic disorder treatment. This respondent reported that career/vocational counseling was “not at all effective” in dealing with panic symptoms. However, of the remaining 14 participants who had not received any career/vocational services, 5 (35.7%) indicated they believe that these job-related counseling services would be “moderately effective” in dealing with their panic symptoms, while 4 (28.6%) indicated they believed these services would be “mildly effective” in dealing with panic symptoms. Figure
7 shows the complete ratings of perceived effectiveness of vocational or career counseling services for the 14 participants who had not received these services.

Figure 7. Ratings of effectiveness: Participants’ perception of career/vocational counseling (n = 14).

Of several community-based services provided in the state of North Carolina that were listed in the survey (case management, community support services, community support team, and assertive community treatment), none of the respondents reported participation in these services. However, five participants (35.7%) indicated that they perceived these types of services to be “mildly effective” in dealing with panic symptoms, while three (20%) indicated they felt the community-based services would be “not at all effective.” Two participants (13.3%) indicated this question was non-applicable to their
situation, and one participant (6.7%) did not answer the question. Figure 8 represents the responses to the perceived efficacy of community-based mental health services.

![Figure 8](image_url)

Figure 8. Ratings of perceived effectiveness: Participants’ perception of community-based mental health services (n = 14).

*Support group ratings.* Only one out of 15 respondents (6.7%) reported participating in a support group to deal with their panic symptoms, and rated the treatment as “very effective” in dealing with their symptoms. Of the other 14 participants (all of whom have not participated in a support group), 8 participants (57.1%) rated their perceived efficacy of a support group as “moderately” to “completely effective” in dealing with panic symptoms. See Figure 9 for complete results on perceived efficacy of support group participation in dealing with panic symptoms.
Most effective treatment (open-ended responses). The survey also included several open-ended questions regarding symptoms, issues, and treatment of panic disorder. In response to the open-ended question, “What treatment has been most effective in decreasing the number or severity of the panic attacks you experience?” nine participants (66.7%) endorsed some form of prescription medications as part of the most effective treatment used, while one participant (6.7%) indicated natural medicine as most effective. Several participants indicated more than one type of treatment as most effective. Responses to this question are presented in Figure 10.
Figure 10. Treatments indicated as most effective in decreasing number and severity of panic attacks (n = 15).

As indicated in the results, medication was the most highly reported effective treatment. However, the medications used by participants were often used in conjunction with other treatments and supports such as individual therapy, and varied widely among the participants. Some prescription medications reported by participants included SSRIs such as Setraline (Zoloft) and Paroxetine (Paxil); BZDs such as Lorazepam (Ativan), Alprazolam (Xanax), and Clonazepam (Klonopin); atypical antipsychotics including Quetiapine (Seroquel), and Ziprasidone (Geodon). Use of lithium was also reported.

Additional supports/services. In an open-ended question about other supports and services, including professional or informal supports, 14 participants (93.3%) indicated specific additional supports and services. Twelve out of the 15 total participants (80%)
specified family as a support, while nine (60%) also indicated friends as a source of support. Other sources of support the respondents identified included professors, psychiatrists, therapists, self-help books, internet (blogs, chat rooms), dialectical behavior therapy, and holistic treatments including reiki, acupuncture, and theta healing. Six of the participants out of 15 (40%) rated these supports and services as very effective, while one participant (6.7%) considered them to be completely effective. Within the sample, three (20%) reported the supports and services to be mildly effective, and 3 others (20%) rated the supports and services as moderately effective. Another two participants (13.3%) rated the question as non-applicable to them.

The participants were also asked to identify additional supports which they had not received and yet expected to be helpful to their condition. The supports they identified included journaling to help others and self, exposure therapy, intense professional counseling, or rigorous cognitive behavioral therapy, family support, and general education on the disorder itself.

*Difficulty in receiving treatment.* When asked about the most difficult part of receiving treatment for panic disorder, 14 of 15 participants answered the question. Several challenges were reported: facing the fear of panic attacks (especially in public places) and being unable to get to treatment because of panic. In addition, finding good therapists, lack of progress, and fragmentation of care were cited as problems or challenges to quality treatment for panic disorder.

*Panic-related job/career issues.* Panic-related problems with work and career were also reported by 14 of the participants. These issues included avoidance and missed days of work and being unable to work at all for several years. Participants also expressed a fear of
attending meetings, and going to work when feeling at risk of having an attack. One participant wrote, “It makes me have to make up excuses for why I have to suddenly get up from my desk and run out of the room to be alone. People thought something was going on and wanted to know what and why - I didn't have a good explanation.” Other issues included changes in career paths due to panic symptoms. For example, one participant who expressed a desire to be a doctor was unable to pursue this career path, as a result of the onset of panic attacks in hospital settings. Another participant reported having to do home-based work due to panic symptoms, while yet another participant indicated that panic impacted future career options, stating, “It has affected opportunities available to me to travel during graduate school as well as the radius I am willing to travel to move to begin my new career. I also much consider how I can get to work without driving on highways from where I live, or if any meetings will be off-site or even out of town, etc.” One participant wrote that panic impacted her job/career by causing “the challenge to overcome the fear of having a panic attack in front of an audience. To some degree, I have cowered at opportunities I would have otherwise taken.”

In reply to the open-ended question, “What have you done to cope with panic disorder in your job/career?” responses ranged widely. Several participants noted taking medications, attending therapy/counseling, self-help, and relaxation, and one person replying, “Faced my fears by exposing myself to the uncomfortable situation and working to calm myself.” Other participants indicated less coping in the workplace, responding, “Nothing good. Hid it.” and “Unsure, have suffered many consequences.”

Panic-related relationship issues. Participants indicated a variety of panic-related issues within their relationships. Eleven noted increased isolation, strained relationships, or
detachment from friends, significant others, and public places in general, with one participant stating, “Tremendously. I can no longer touch people, even to the extent of just brushing against someone by accident. I’m scared of people in general.” However, two participants noted that their panic symptoms had drawn them closer to friends/significant others. One individual wrote, “It’s made my relationship with my husband closer and increased our communication.”

Coping with panic-related issues in relationships also varied among participants. Seven participants indicated that they coped with panic by telling friends about their panic, by explaining the attacks, and by telling friends and family how to help them cope during an attack. One of these participants stated, “prepared my loved ones for what to do to help me cope with an attack.” Others stated that they had not tried many positive coping techniques. One participant stated, “Honestly, not much, other than discontinue trying to form relationships at all.”

**Panic-related behavior changes.** According to 14 participants, panic symptoms have also caused them to make changes in their behavior. Some respondents indicated the changes included avoiding social situations, carrying medication at all times, limiting travel and driving, abstaining from caffeine or alcohol, and avoiding certain situations and places such as spending time alone, riding in elevators, being among crowds, or in places where one would feel trapped.

**Perceived efficacy of services not received.** The support group treatment option was rated the most valuable or effective service not yet received; the next most valuable being group counseling and vocational/career counseling services, which were ranked equally effective according to the participants’ opinions.
Services within the rehabilitation counseling scope of practice. Results suggest that the services rated more valued by sample participants are those that are typically provided by Certified Rehabilitation Counselors under related areas in the scope of practice. These areas are: group counseling treatment interventions (rated “moderately” to “completely effective” by six participants), career or vocational counseling (rated “moderately” to “very effective” by six participants), which may include services such as job analysis/development/placement services including assistance with job placement and accommodations, and assistance in removal of employment barriers (CRCC, 2003). Also the preference of participants for support groups is congruent with psychiatric rehabilitation principles which promote the use of peer support and psychosocial development using support group approaches.

Quality of Life and Service Ratings

The survey also included a quality of life measure (Endicott et al., 1993) which was completed by all 15 participants. This section asked participants to rate quality of life in different areas over the past week. The overall score scale ranges from 0% to 100%, with 100% being the highest quality of life score, and 0% being the lowest. Past research utilizing community control groups have had community norm scores of 83% on the Q-LESQ-QSF, with individuals scoring within 10% of the norm defined as within normal quality of life range (Rapaport, Clary, Fayyad, & Endicott, 2005). In the current study, the participants’ scores ranged from 29% to 95%, with five participants scoring in the range of 50% or less, and six participants scoring from 51% to 75%. The remaining four participants scored in the range of 82-95% on the Q-LES-QSF. The mean score for the participants was 62%, with a standard deviation of 20.62, falling below the normal quality of life range established by Rapaport et al. Each participant’s average rating of service efficacy (both received and
perceived) was calculated (from 1 = not at all effective to 5= completely effective), and was plotted with his or her quality of life score, resulting in a slightly negative correlation with two substantially outlying scores. See Figure 11 below for complete results.

![Figure 11: Average Ratings of Service Effectiveness & Quality of Life Scores (n = 15).](image)

**Discussion**

The main findings of the study included medication being rated as the most highly effective treatment by participants. The treatments not received by participants that were perceived as potentially effective in dealing with panic symptoms included support groups, group counseling, and vocational career counseling. Each of these services falls within the scope of practice for rehabilitation counselors. Contrary to the hypothesis stating that quality of life scores would be positively correlated with participants’ ratings of service
effectiveness, the participants’ ratings of service effectiveness were actually slightly negatively correlated with quality of life scores.

*Research question 1.* The first research question of the study focused on those services received by consumers that are considered by consumers to be most effective. The results of the survey showed the participants rated medication as the most effective formal treatment by far that they have received for panic disorder, with 12 of 15 participants (80%) rating medication as “moderately” or “very effective.” (Six (40%) of the participants rated medication as “moderately effective” in dealing with panic symptoms, while six others (40%) rated medication as “very effective” in dealing with panic symptoms.) Medication was also one of the most highly utilized treatments (n=13). However, due to the wide range of medications used by participants, the study results give limited information about which types of medications worked best overall, and since a high number of participants (12) reported co-occurring conditions, it cannot be fully ascertained how differently the medications (or combinations of medications) may affect individuals dealing with multiple conditions beyond panic disorder.

The results also revealed that a majority of participants had not received formal treatments beyond medication and individual psychotherapy. Individual therapy, the other highly utilized formal treatment (n=14), was rated “moderately” to “very effective” by nine participants (with two (14.3%) participants rating it “very effective” and “moderately effective” rating by seven (50%) participants utilizing individual therapy), indicating that medication was considered more effective but that individual therapy was regarded as effective by a good number of the participants overall.
Among the informal or additional treatments and supports (such as family, friends, self-help) received by participants, 12 individuals specified family as a support. Six of the participants rated these additional supports as “very effective” and one rated the additional supports as “completely effective.” Given the small sample size, the results do not generalize beyond this sample; however the results suggest greater emphasis on use of family and social support involvement is needed in the education and counseling of consumers with panic disorder.

*Research question 1 implications/recommendations:* Due to the high response rates indicating family as a support for dealing with panic disorder, rehabilitation counselors may consider family psychoeducation and use of support groups as an intervention that may provide the gateway for greater family involvement, support, and understanding of panic disorder. Through this involvement, families may become a part of counseling-related treatments, and also build resilience for the family as a natural support. Although predominantly used with families of individuals with schizophrenia, and sometimes persons with dual diagnosis consumers (diagnosed with mental illness and substance abuse), the family psychoeducation model may be easily adapted for use with other psychiatric disorders (SAMHSA, 2008). This fits well with the panic disorder population when considering past research linking high co-morbidity of smoking, alcohol, and substance abuse with panic disorder (Carpiniello et al., 2002; Isensee et al., 2003). When adapted for use with individuals with panic disorder, this type of intervention can involve single or multiple families, and involves provision of concrete facts directly related to the individual’s panic disorder. Multifamily groups center on topics such as increasing the amount of social support for families by linking them to other similar families by providing a forum for
presenting issues and learning problem-solving from other families, and allowing for mutual
exchange of support and resources within the group (SAMHSA). These processes help to
reduce isolation, stigmatization, and psychological stress experienced by family members in
order to prevent their detachment and potential discouragement for being a natural support
system (SAMHSA). Goals of the groups also include reduction of families’ expressed
emotion including: lack of support for the family member with panic disorder, perceived
criticism, and unrealistic expectations of the family member with panic disorder (SAMHSA).

The family psychoeducation model has three main phases. Phase one involves engagement
of practitioners, consumers, and their families as well as family education about panic
disorder and support. Phase 2 involves activities designed to increase consumers’
community functioning through the use of group-based problem-solving for social
development and vocational rehabilitation of consumers. The third phase consists of a
molding process that solidifies the group as a lasting social network to provide consumers
and families with lasting natural supports (SAMHSA).

Since individual therapy/counseling was also indicated as effective, rehabilitation
counselors should consider this as an adjunct portion of the treatment of individuals with
panic disorder. According to the research literature review from this study, cognitive
behavioral methods are most effective for treating panic disorder, and could be utilized
within the rehabilitation counseling scope of practice for those counselors sufficiently trained
in providing cognitive behavior therapy (CBT). CBT may also be offered in group or
individual formats, and may include several different components. The counselor may work
with to educate the consumer about the nature and treatment of panic disorder, and may work
on related thought restructuring techniques used when consumers experiencing anxiety about
cues or bodily sensations that may trigger an attack (Datillio & Salas-Auvert, 2000).

Breathing retraining or relaxation techniques may also be taught, and exposure therapy may be implemented to reduce panic reactions (Datillio & Salas-Auvert). Rehabilitation counselors trained in using these techniques have a unique opportunity to utilize exposure therapy within vocational settings, and address consumers’ panic-related work issues such as situational fears and triggers within the workplace. Counselors may also work on exposure techniques in the workplace to aid consumers in practicing and utilizing coping techniques and thought restructuring in actual work environments, and determining vocational adaptations that may be needed. Determining the work-related accommodations needed by consumers with panic disorder may include a job analysis or job shadowing activity to assist the counselor and consumer in determining stress factors related to panic in the workplace. Applicable accommodations may include job restructuring to reduce stress experienced in the workplace through eliminating or replacing some of the job duties required or job modifications such as offering flexible scheduling or breaks in the event of a panic attack (Brodwin, Parker, & DeLaGarza, 2003).

*Research question 2.* The second research question pertained to services not yet received by consumers that are perceived as needed and valuable; and which may be services provided within the rehabilitation counseling scope of practice. The participants’ ratings suggest that consumers may engage in services such as support groups, group counseling, and vocational or career services. These findings need to be replicated with a larger study sample if they are to be generalizable, but implications for possible rehabilitation counseling interventions for individuals with panic disorder could apply to this study sample.
Research question 2 implications/recommendations: Support groups are primarily peer-facilitated, but rehabilitation counselors can serve as an advocate for consumer involvement and/or formation of new support groups, and may also serve as a referral source for consumers interested in participating in this type of treatment. For individuals in rural areas, or panic-related social fears, online support groups and forums may provide a safe environment for consumer involvement and interaction.

Group counseling services may also be provided by rehabilitation counselors and may include family involvement, as in the previously discussed family psychoeducational model, or group formats of the CBT treatments mentioned earlier. Although facilitated by a counselor or other professional, these groups still offer skill development, therapeutic interaction, and fostering of supports that achieves the same result.

Since various work-related panic issues were reported by participants, vocational/career services are an especially important area of consideration for rehabilitation counselors who serve this population. As previously noted, psychological counseling methods such as CBT may be combined with vocational/career services to provide optimal functioning and social/vocational integration for individuals with panic disorder. Rehabilitation counselors could provide these types of services through job development and marketing of consumers with potential employers. On-the-job assessments to determine consumer capabilities and needs may be performed with the counselor and consumer, and use of employer education about panic disorder may be provided (Hagner, 2003). These components can inform a consumer about potential stressors of the job, and can make the rehabilitation counselor aware of areas of need to be discussed with the employer for job accommodations. Employer education can provide reassurance about the non-life
threatening nature of attacks, and also prepare employers for proper management of incidents involving the consumer’s panic attacks on the job. This may help employers to be more accepting of individuals experiencing panic symptoms and also eliminate employers’ fears about work injury or acquired disability as a result of a panic attack. Rehabilitation counselors may also provide a link as a long-term resource for employers and consumers if additional assistance is needed to maintain employment.

Research question 3. The third research question of the study examined whether more effective average service ratings and better quality of life scores were positively correlated. Although the hypothesis that a positive correlation existed between these variables was introduced, a scatterplot of the average service ratings of participants, along with participants’ quality of life scores revealed a slightly negative correlation exists between these two variables within this participant group. This correlation requires further study through research with a larger group of participants, but suggests a notable trend for the participant group. (Severity and frequency of panic attacks were considered as a variable in quality of life as well, but no specific trend was observed.) One interesting finding was that the individual with the highest quality of life score (at 95%) also rated the efficacy of services fairly low with an average service rating of 2.43, indicating services fell between the “mildly effective” and “moderately effective” ratings. However, this individual did report that self-help, exposure therapy, and friends/family were “very effective” in addressing his panic disorder symptoms, and that he/she perceived support groups and vocational/career services as potentially “moderately effective.”

Research question 3 implications/recommendations. The participants with higher quality of life scores generally indicated a preference more self-help or support groups as a
means of dealing with symptoms rather than reliance on formal treatments. This finding may reinforce the notion that family involvement and group treatments such as group counseling or support groups could contribute to greater quality of life for individuals with panic disorder. Rehabilitation counselors serving this population may, again, encourage support group participation, family psychoeducation, and group counseling or therapy to promote self-sufficiency, family skills, and greater social support networks.

*Coping Skills.* Results suggest that many participants rely on social supports such as family and significant others. However, several other participants indicated little or no active coping for panic-related work or relationship issues. This wide range of coping reveals the need for counseling strategies such as the thought restructuring and relaxation techniques used in CBT for individuals with panic disorder. Again, group counseling or therapy and family involvement maybe considered for individuals with panic disorder, especially those with lower active levels of coping (Datillio & Salas – Auvert, 2000; SAMHSA, 2003). Individual counseling or therapy may provide an environment for initial skill building and support in conjunction with the other treatments.

*Quality of life and consumer opinion.* The most widely utilized treatments reported by participants in this sample were medication and psychotherapy. However, there is a shortage of literature about clients’ self-reported opinions on the efficacy of treatments. The current study identified that, although medication and psychotherapy were most commonly used, participants do value and perceive other treatments to be potentially effective in treating their panic symptoms. Yen et. al (2007), found that quality of life deficits were associated with poor family and social support, and recommendations were given for family involvement to aid individuals with panic disorder in development and use of coping skills.
The participants in the study seemed to concur with Yen’s (2007) recommendation, listing family and friends as the most frequent additional or informal support or treatment for panic symptoms. Although social, home and family, leisure, occupational, and financial deficits in quality of life scores have also been found in research involving individuals with panic disorder, (Roy-Byrne, Craske, & Stein, 2006; Telch & Schmidt, 1995; Yen, et. al, 2007), and were also reported in varying degrees by participants in the current sample, services such as group therapy (which could add a social or leisure component), vocational or career counseling, and community-based mental health services were each reported as received services by one or no participants in this sample. This again suggests that the aforementioned services such as vocational counseling and job placement services, family involvement through family psychoeducation, and group counseling/therapy or support group participation may be important in efforts to improve specific areas of function/quality of life for individuals with panic disorder.

Limitations

There were several limitations to the research study. First, the sample size was insufficient to conduct any statistical analysis, which is a significant drawback to this study, and prevented the chance for external validity. Despite repeated recruitment attempts, only a small number of responses from interested individuals were received, and there was a 65% follow-through rate on completion of the survey by individuals requesting participation. One reason for this might have been that the recruitment methods required participants to call or email the principal investigator to receive either the web address or a hard copy of the survey. This mixed method may have been a deterrent to those uncomfortable about contact with new people or reaching out for new services, or those who do not have access to internet...
or phone. It may also cause anxiety in those who wish to remain completely anonymous (not giving email address or home address), and then further elicitation of anxiety is possible through completion of the survey, which contained items about panic symptoms and participants’ issues related to panic. A basic level of reading and computer literacy was also required to complete the questions on the survey which may have excluded some individuals. This may be resolved in future research by providing phone or face-to-face interviewing.

Although the recruitment efforts aimed to reach individuals through support groups, treatment centers, and online forums or listservs, the majority of the respondents came from the UNC listserv email only. This affected validity of the study in several ways. Since the participants came from a listserv, rather than being referred from a treatment setting, it is possible that some participants claimed to have a diagnosis when they did not. Also, the majority of participants were associated with a university setting, indicating that most of the individuals were likely at a functional level less severe than others in the panic disorder population. This lesser severity would preclude the need for community-based services such as assertive community treatment or community support services. It also means that these individuals likely had more resources than the general PD population in areas of treatment and support (private therapy, university-related services, and parental support). This, again with the small sample size, makes the study results non-generalizable and also questionable in accuracy. Since the participant group was also a convenience sample, which was not representative of the recruitment areas (Caucasians were overrepresented, and African Americans were underrepresented), the validity of the study as well as the likelihood that these results could be reliably replicated among other groups was also greatly hindered. Although obtaining a representative sample would be difficult without a very large sample,
this still affects the validity of the results. The majority (60%) of the participant sample consisted of individuals who were of single marital status which could also have biased the survey results, since single status has been found to be associated with poorer quality of life (Yen et al., 2007).

The format of the survey involved total self-report of symptoms and quality of life, so the accuracy of answers was totally based on the individual’s opinion. Since this study was based on participant opinion, self-report was appropriate for views on services, but opinions may differ on diagnosis and severity of symptoms. Consumers’ reported opinions of services were likely to be based on services from various agencies, therapists, and doctors, so the varying knowledge and quality of different service providers may have influenced consumers’ ratings more so than the actual aim of the treatments listed in the survey. The treatment received by participants, as a variable, was not standardized for the sample, and differences in treatment received by participants could have also contributed to less validity and reliability of the survey. Consumers receiving services may also have different levels of experience or length of time in services, so this factor may have affected consumer ratings of services, as well. In the current study, services were not defined for individuals on the survey form, compounding this problem. In particular, participants may not have been aware that group counseling/therapy usually involves a counseling professional, while support groups are largely peer-led in nature; and also that community support services is a less intense community-based mental health service than community support team. Using descriptions to clarify the definition and aims of services or using face-to-face methods to ensure clarity in the understanding of services could be useful in future research. Another way to address this issue would be to ask further questions on the survey instrument about
participants knowledge of the services were while providing the definition and purpose of the identified services.

The sample demographics also limited the validity of the survey outcomes. The ratio of female to male participants did not allow for comparisons between groups of different factors, such as severity of panic, quality of life scores, and ratings of different types of treatments. This sample was also not representative of the gender ratios present in the overall population of individuals with panic disorder. Women are twice as likely as men to develop panic disorder and three times as likely as men to develop the condition with the co-occurrence of agoraphobia, but this sample was a 14:1 rather than 2:1 or 3:1 gender ratio. This allows for the possibility that differences between males and females could not accurately be determined in the study. The ages of the participants were of a limited range, as well as the number of ethnic groups represented, which also prevented comparisons of these groups and any attempts at characterizing differences of opinion about treatment effectiveness among various demographic groups.

Another limitation of the survey was the original design of the majority of the questionnaire items. The questionnaire utilized several likert-type scales, and had not been standardized among a large sample to insure the internal validity of the scales. Among the questions, there were some issues with understanding of questions. Specifically, some individuals indicated only three or four years of education, possibly meaning they have completed three or four years of college, but this is unknown. Changes needed include the inclusion of a reference scale with these types of questions, such as listing “12 = high school graduate.” Some other questions may have not been getting at the true issue of panic-related symptoms. For example, the survey question asking if vocational/career counseling had
helped with panic symptoms may have been more informative if vocational or career services were asked about in context of improving quality of life instead. The online self-report format of the survey prevented some experimenter control in not being able to clarify these types of questions or assist participants in completing the survey. This also prevented the experimenter from being able to ask more extensive questions and glean more information on individual experiences of the participant related to their symptoms and treatment. A mixed methods approach combining survey methods with face-to-face interviews may have provided more flexibility for questioning or probing of participants, and also a chance for questions from the participants about the study to be clarified by the researcher.

**Future Directions**

Future directions of research on perceived efficacy of services and opportunities for Rehabilitation Counselors to serve people with panic disorder should include more mixed methods with diagnostic interviewing and face to face procedures to examine consumer beliefs and attitudes in greater depth as well as a more longitudinal survey to investigate consumers’ quality of life and service experiences over time. The current study showed more of a snapshot of current consumers’ ratings of service and a review of short-term quality of life indicators. Future studies should also include uniformity of treatment/service experience in which service interventions from investigators/teams are at the same level and quality for all consumers in the study. This would remove the difference in services which might have affected consumer opinions in this study. Longer recruitment time enabling a researcher to work with agencies and treatment centers directly providing treatment services (some of which require agency IRB approval and affiliation agreements) would enhance the chances of obtaining a more representative sample, and would eliminate the factor of being
unsure of formal panic disorder diagnosis. Another important facet of the respondents’ experiences involves a high level of reported co-occurring conditions. Examining future research results in light of these issues could provide more insight about the co-occurring condition effects on individuals in different life domains, and in their perception of services. Future studies on the impact of panic directly on vocational functioning through in-vivo studies would further enhance the knowledge of rehabilitation counselors working with affected individuals.

Conclusion

Overall, the data from the current study indicate that the sample group had more involvement in formal treatments including medication and individual therapy than the other treatments such as vocational and career services, group counseling, community based mental health services, and support groups. However, many participants indicated that although they had not received these services, they felt they would be valuable in addressing their panic disorder.

Rehabilitation Counselors should be aware of the limited exposure that individuals with panic disorder may have had to vocational, community based, or support group services, and should also bear in mind that consumers may also be open to a variety of services to aid them in dealing with panic symptoms and increasing their quality of life. The related services provided within the scope of practice for Certified Rehabilitation Counselors including career and vocational services, support group facilitation, and individual/group counseling can be utilized in various formats to reach the areas of need indicated by individuals, and can be guided by their input, such as the information provided by participants in the current study.
Bringing family and social supports into treatment settings as recommended by quality of life studies, as well as the current participants’ responses, may enhance the treatment services provided. The training of Rehabilitation Counselors in both counseling and vocational treatment services presents a unique set of skills which may be valuable in providing holistic treatment services to increase the quality of life in areas that are problematic for most individuals with panic disorder while integrating and respecting their opinions of treatments and services.
Appendix A

DSM-IV-TR Criteria for Panic Disorder

300.01 Panic Disorder Without Agoraphobia:

A. Both (1) and (2):

1. recurrent unexpected Panic Attacks

2. at least one of the attacks has been followed by 1 month (or more) of one (or more) of the following:
   
   persistent concern about having additional attacks
   
   worry about the implications of the attack or its consequences (e.g., losing control, having a heart attack, "going crazy")
   
   a significant change in behavior related to the attacks

B. Absence of Agoraphobia

C. The Panic Attacks are not due to the direct physiological effects of a substance (e.g., a drug of abuse, a medication) or a general medical condition (e.g., hyperthyroidism).

D. The Panic Attacks are not better accounted for by another mental disorder, such as Social Phobia (e.g., occurring on exposure to feared social situations), Specific Phobia (e.g., on exposure to a specific phobic situation), Obsessive-Compulsive Disorder (e.g., on exposure to dirt in someone with an obsession about contamination), Posttraumatic Stress Disorder (e.g., in response to stimuli associated with a severe stressor), or Separation Anxiety Disorder (e.g., in response to being away from home or close relatives) (American Psychiatric Association, 2000, pg. 440).
300.21 Panic Disorder With Agoraphobia:

A. Both (1) and (2):

1. recurrent unexpected panic attacks
2. at least one of the attacks has been followed by 1 month (or more) of one (or more) of the following:
   persistent concern about having additional attacks
   worry about the implications of the attack or its consequences (e.g., losing control, having a heart attack, "going crazy")
   a significant change in behavior related to the attacks

B. The presence of Agoraphobia

C. The Panic Attacks are not due to the direct physiological effects of a substance (e.g., a drug of abuse, a medication) or a general medical condition (e.g., hyperthyroidism).

D. The Panic Attacks are not better accounted for by another mental disorder, such as Social Phobia (e.g., occurring on exposure to feared social situations), Specific Phobia (e.g., on exposure to a specific phobic situation), Obsessive-Compulsive Disorder (e.g., on exposure to dirt in someone with an obsession about contamination), Posttraumatic Stress Disorder (e.g., in response to stimuli associated with a severe stressor), or Separation Anxiety Disorder (e.g., in response to being away from home or close relatives) (American Psychiatric Association, 2000, pg. 441).
DSM-IV-TR Criteria for Panic Disorder Components: Panic Attacks and Agoraphobia

Panic Attack

A discrete period of intense fear or discomfort, in which four (or more) of the following symptoms developed abruptly and reached a peak within 10 minutes:

- palpitations, pounding heart, or accelerated heart rate
- sweating
- trembling or shaking
- sensations of shortness of breath or smothering
- feeling of choking
- chest pain or discomfort
- nausea or abdominal distress
- feeling dizzy, unsteady, lightheaded, or faint
- derealization (feelings of unreality) or depersonalization (being detached from oneself)
- fear of losing control or going crazy
- fear of dying
- paresthesias (numbness or tingling sensations)
- chills or hot flushes

Panic attacks are not considered a “stand alone” diagnosis, but do occur as main component of panic disorder (American Psychiatric Association, 2000, pg. 432).

Agoraphobia
Anxiety about being in places or situations from which escape might be difficult (or embarrassing) or in which help may not be available in the event of having an unexpected or situationally predisposed Panic Attack or panic-like symptoms. Agoraphobic fears typically involve characteristic clusters of situations that include being outside the home alone; being in a crowd or standing in a line; being on a bridge; and traveling in a bus, train, or automobile. The situations are avoided (e.g., travel is restricted) or else are endured with marked distress or with anxiety about having a panic attack or panic-like symptoms, or require the presence of a companion. Agoraphobia is also not considered a “stand alone” diagnosis, but can also occur as component of panic disorder.

Consider the diagnosis of Specific Phobia if the avoidance is limited to one or only a few specific situations. Consider Social Phobia if the avoidance is limited to social situations.

The anxiety or phobic avoidance is not better accounted for by another mental disorder, such as Social Phobia (e.g., avoidance limited to social situations because of fear of embarrassment), Specific Phobia (e.g., avoidance limited to a single situation like elevators), Obsessive-Compulsive Disorder (e.g., avoidance of dirt in someone with an obsession about contamination), Posttraumatic Stress Disorder (e.g., avoidance of stimuli associated with a severe stressor), or Separation Anxiety Disorder (e.g., avoidance of leaving home or relatives) (American Psychiatric Association, 2000, pg. 433).
What is the purpose of this form?

This application is to seek initial IRB approval for a research study.

What parts of this application should you submit?

- For all studies, submit Part A, which consists of these sections:
  Part A.1. Contact Information, Agreements, and Signatures
  Part A.2. Summary Checklist
  Part A.3. Conflict of Interest Questions and Certification
  Part A.4. Questions Common to All Studies
  Part A.5. The Consent Process and Consent Documentation (including Waivers)

- For studies that involve direct interaction with human subjects (any contact with subjects including questionnaires, interviews, focus groups, observation, treatment interventions, etc), submit:
  Part B. Questions for Studies that Involve Direct Interaction with Human Subjects

- For studies that use existing data, records or human biological specimens, submit:
  Part C. Questions for Studies using Existing Data, Records or Human Biological Specimens

Note: You should submit Parts B or C only as applicable. If the study involves both direct interaction and use of existing materials, use both Parts B and C in addition to Part A.

Who can serve as principal investigator (PI)?

The PI is the person who will personally conduct or supervise this research study. Under most circumstances, this will be a faculty member. For IRB communication purposes, a trainee/student may be listed as PI. However, a faculty advisor must be identified, who holds ultimate responsibility for ensuring that this project complies with all University, regulatory, and fiscal requirements.

→ See next page for additional instructions
---- Instructions – Do not submit this page with your application ----
Complete submission instructions can be found at http://ohre.unc.edu/submission_instructions.php. 
All application and consent materials must be copied or printed on one side only. See the checklist on page 1 of the application itself for items to include and number of copies.

Some applications require additional review prior to the IRB submission. Examples include the Clinical and Translational Research Center (formerly the GCRC and CCCT facilities) http://gcrc.med.unc.edu/investigators/admin/gcrcapp.htm) or the Oncology Protocol Review Committee (PRC; http://cancer.med.unc.edu/research/prc/default.asp). See their web sites for details.

Many schools, departments, centers and institutes in Academic Affairs have local review committees that review before the IRB. See http://ohre.unc.edu/submission_instructions.php for a list of these units or consult your own unit for details.

Address for all Applications and Other Correspondence

IRB
CB# 7097, Medical Building 52
105 Mason Farm Road
Chapel Hill, NC  27599-7097

Types of Review

There are three levels of IRB Review (full board, expedited, and exempt), determined by the nature of the project, level of potential risk to human subjects, and the subject population. The type of review applicable to a particular study is determined by the IRB. Regardless of the kind of review, all applications use the same submission form.

Exempt and expedited review can be given to studies that constitute no more than minimal risk to the human subjects, i.e., the risk one experiences in daily living. These reviews are done in the IRB office on a continual basis.

Full board review is required for studies that involve greater than minimal risk or vulnerable populations that require special protection by the IRB. These require review by the convened IRB. See http://ohre.unc.edu/guide_to_irb.php for additional guidance.

--- Instructions – Do not submit this page with your application ----

OFFICE OF HUMAN RESEARCH ETHICS
Institutional Review Board

APPLICATION FOR IRB APPROVAL OF
HUMAN SUBJECTS RESEARCH
Version 10-Oct-2008

Part A.1. Contact Information, Agreements, and Signatures
Date: 4/11/09

Title of Study: Panic Disorder: Consumer Preferences and Implications for Rehabilitation Counselors

Name and degrees of Principal Investigator: Cheri Meadows Dawson, BS, MA (currently MS candidate)
Department: Division of Rehabilitation Counseling & Psychology Mailing address/CB #: 7205
UNC-CH PID: 703490647 Pager: n/a
Phone #: (336) 301-4574 Fax #: n/a Email Address: cheri_meadows@med.unc.edu

For trainee-led projects: __ undergraduate X graduate __ postdoc __ resident __ other
Name of faculty advisor: Dr. Charles Bernacchio
Department: Division of Rehabilitation Counseling & Psychology Mailing address/CB #: 7205
Phone #: (919)843-4730 Fax #: (919)966-9007
Email Address: charles_bernacchio@med.unc.edu

Center, institute, or department in which research is based if other than department(s) listed above:

Name of Project Manager or Study Coordinator (if any):
Department: Mailing address/CB #:
Phone #: Fax #: Email Address:

List all other project personnel including co-investigators, and anyone else who has contact with subjects or identifiable data from subjects. Include email address for each person who should receive electronic copies of IRB correspondence to PI:

Name of funding source or sponsor (please do not abbreviate):
x not funded ___ Federal ___ State ___ industry ___ foundation ___ UNC-CH ___ other (specify):

For industry sponsored research (if applicable):
Sponsor’s master protocol version #: Version date:
Investigator Brochure version #: Version date:
Any other details you need documented on IRB approval:

RAMSeS proposal number (from Office of Sponsored Research):

Checklist of Items to Include with Your Submission

Include the following items with your submission, where applicable.
Check the relevant items below and include one copy of all checked items 1-11 in the order listed.
Also include two additional collated sets of copies (sorted in the order listed) for items 1-7.

Applications must “stand alone” and should provide all information requested, i.e., complete answers must be contained in the application. While you may reference other documents with supporting information, do not respond solely by stating “see attached.”

Applications will be returned if these instructions are not followed.

<table>
<thead>
<tr>
<th>Check</th>
<th>Item</th>
<th>Total No. of Copies</th>
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<tbody>
<tr>
<td>□</td>
<td>1. This application. One copy must have original PI signatures.</td>
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<tr>
<td>□</td>
<td>2. Consent and assent forms, fact or information sheets; include phone and verbal consent scripts.</td>
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<td>□</td>
<td>3. HIPAA authorization addendum to consent form.</td>
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<td>□</td>
<td>4. All recruitment materials including scripts, flyers and advertising, letters, emails.</td>
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<tr>
<td>□</td>
<td>5. Questionnaires, focus group guides, scripts used to guide phone or in-person interviews, etc.</td>
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<td>□</td>
<td>6. Documentation of reviews from any other committees (e.g., Clinical and Translational Research Center (CTRC), Oncology Protocol Review Committee, or local review committees in Academic Affairs).</td>
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<td>□</td>
<td>7. Protocol, grant application or proposal supporting this submission, if any (e.g., extramural grant application to NIH or foundation, industry protocol, student proposal). This must be submitted if an external funding source or sponsor is checked on the previous page.</td>
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<td>□</td>
<td>8. Addendum for Multi-Site Studies where UNC-CH is the Lead Coordinating Center.</td>
<td>1</td>
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<td>□</td>
<td>9. Data use agreements (may be required for use of existing data from third parties).</td>
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<tr>
<td>□</td>
<td>10. Only for those study personnel not in the online UNC-CH human research ethics training database (<a href="http://cfx3.research.unc.edu/training_comp/">http://cfx3.research.unc.edu/training_comp/</a>): Documentation of required training in human research ethics.</td>
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<td>□</td>
<td>11. For drug studies, Investigator Brochure if one exists. If none, include package insert for previously approved uses.</td>
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</table>
**Principal Investigator:** I will personally conduct or supervise this research study. I will ensure that this study is performed in compliance with all applicable laws, regulations and University policies regarding human subjects research. I will obtain IRB approval before making any changes or additions to the project. I will notify the IRB of any other changes in the information provided in this application. I will provide progress reports to the IRB at least annually, or as requested. I will report promptly to the IRB all unanticipated problems or serious adverse events involving risk to human subjects. I will follow the IRB approved consent process for all subjects. I will ensure that all collaborators, students and employees assisting in this research study are informed about these obligations. All information given in this form is accurate and complete.

_____________________________________________  __________________________
Signature of Principal Investigator Date

**Faculty Advisor if PI is a Student or Trainee Investigator:** I accept ultimate responsibility for ensuring that this study complies with all the obligations listed above for the PI.

_____________________________________________  __________________________
Signature of Faculty Advisor Date

Note: The following signature is not required for applications with a student PI.

**Department or Division Chair, Center Director (or counterpart) of PI:** (or Vice-Chair or Chair’s designee if Chair is investigator or otherwise unable to review): I certify that this research is appropriate for this Principal Investigator, that the investigators are qualified to conduct the research, and that there are adequate resources (including financial, support and facilities) available. If my unit has a local review committee for pre-IRB review, this requirement has been satisfied. I support this application, and hereby submit it for further review.

_____________________________________________  __________________________
Signature of Department Chair or designee Date

_____________________________________________  __________________________
Print Name of Department Chair or designee Department
### Part A.2. Summary Checklist

**Are the following involved?**

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
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<tr>
<td>A.2.1. Existing data, research records, patient records, and/or human biological specimens?</td>
<td></td>
<td>x</td>
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<tr>
<td>A.2.2. Surveys, questionnaires, interviews, or focus groups with subjects?</td>
<td>x</td>
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<tr>
<td>A.2.3. Videotaping, audiotaping, filming of subjects, or analysis of existing tapes?</td>
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<td>x</td>
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<tr>
<td>A.2.4. Do you have <strong>specific plans</strong> to enroll subjects from these vulnerable or select populations:</td>
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<tr>
<td>a. UNC-CH students or UNC-CH employees?</td>
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<td>b. Non-English-speaking?</td>
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<td>c. Decisionally impaired?</td>
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<td>x</td>
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<td>d. Patients?</td>
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<td>e. Prisoners, others involuntarily detained or incarcerated, or parolees?</td>
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<td>x</td>
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<tr>
<td>f. Pregnant women?</td>
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<td>g. Minors (less than 18 years)? If yes, give age range:</td>
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<td>A.2.5. a. Are sites outside UNC-CH engaged in the research?</td>
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<td>x</td>
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<tr>
<td>b. Is UNC-CH the sponsor or lead coordinating center for a multi-site study?</td>
<td>x</td>
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<tr>
<td>If yes, include the <a href="#">Addendum for Multi-site Studies</a>.</td>
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<td>If yes, will any of these sites be outside the United States?</td>
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<td>If yes, is there a local ethics review committee agency with jurisdiction?</td>
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<td>(provide contact information)</td>
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<td>A.2.6. Will this study use a data and safety monitoring board or committee?</td>
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<tr>
<td>If yes: UNC-CH School of Medicine DSMB? (must apply separately)</td>
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<td>Lineberger Cancer Center DSMC?</td>
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<td>Other? Specify:</td>
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<td>A.2.7. a. Are you collecting sensitive information such as sexual behavior, HIV status, recreational drug use, illegal behaviors, child/physical abuse, immigration status, etc?</td>
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<td>b. Do you plan to obtain a federal Certificate of Confidentiality for this study?</td>
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<td>A.2.8. a. <strong>Investigational</strong> drugs? (provide IND #)</td>
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<td>x</td>
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<tr>
<td>b. Approved drugs for “non-FDA-approved” conditions?</td>
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<tr>
<td>All studies testing substances in humans must provide a letter of acknowledgement from the <a href="#">UNC Health Care Investigational Drug Service</a> (IDS).</td>
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<td>A.2.9. Placebo(s)?</td>
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<td>A.2.10. <strong>Investigational</strong> devices, instruments, machines, software? (provide IDE #)</td>
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<td>A.2.11. Fetal tissue?</td>
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<tr>
<td>A.2.12. Genetic studies on subjects’ specimens?</td>
<td></td>
<td>x</td>
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<tr>
<td>A.2.13. Storage of subjects’ specimens for future research?</td>
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<tr>
<td>If yes, see instructions for <a href="#">Consent for Stored Samples</a>.</td>
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<tr>
<td>A.2.14. Diagnostic or therapeutic ionizing radiation, or radioactive isotopes, which subjects would not receive otherwise?</td>
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<tr>
<td>If yes, approval by the <a href="#">UNC-CH Radiation Safety Committee</a> is required.</td>
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<td>Question</td>
<td>Yes/No</td>
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<td>A.2.15. Recombinant DNA or gene transfer to human subjects?</td>
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<tr>
<td>If yes, approval by the <strong>UNC-CH Institutional Biosafety Committee</strong> is required.</td>
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<tr>
<td>A.2.16. Does this study involve UNC-CH cancer patients?</td>
<td>x</td>
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<tr>
<td>If yes, submit this application directly to the <strong>Oncology Protocol Review Committee</strong>.</td>
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<tr>
<td>A.2.17. Will subjects be studied in the Clinical and Translational Research Center (CTRC)? If yes, obtain the <strong>CTRC Addendum</strong> and submit completed application (IRB application and Addendum) directly to the CTRC. The CTRC includes facilities located on the 3rd floor of the Main Hospital (formerly GCRC) and Ground floor Burnett-Womack (formerly CCCT).</td>
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<tr>
<td>A.2.18. Will gadolinium be administered as a contrast agent?</td>
<td>x</td>
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</tbody>
</table>
Part A.3. Conflict of Interest Questions and Certification

The following questions apply to all investigators and study staff engaged in the design, conduct, or reporting results of this project and/or their immediate family members. For these purposes, "family" includes the individual’s spouse and dependent children. “Spouse” includes a person with whom one lives together in the same residence and with whom one shares responsibility for each other’s welfare and shares financial obligations.

### A.3.1. Currently or during the term of this research study, does any member of the research team or his/her family member have or expect to have:

- (a) A personal financial interest in or personal financial relationship (including gifts of cash or in-kind) with the sponsor of this study?
  - __ yes __ no

- (b) A personal financial interest in or personal financial relationship (including gifts of cash or in-kind) with an entity that owns or has the right to commercialize a product, process or technology studied in this project?
  - __ yes __ no

- (c) A board membership of any kind or an executive position (paid or unpaid) with the sponsor of this study or with an entity that owns or has the right to commercialize a product, process or technology studied in this project?
  - __ yes __ no

### A.3.2. Has the University or has a University-related foundation received a cash or in-kind gift from the sponsor of this study for the use or benefit of any member of the research team?
  - __ yes __ no

### A.3.3. Has the University or has a University-related foundation received a cash or in-kind gift for the use or benefit of any member of the research team from an entity that owns or has the right to commercialize a product, process or technology studied in this project?
  - __ yes __ no

If the answer to ANY of the questions above is yes, the affected research team member(s) must complete and submit to the Office of the University Counsel the form accessible at [http://coi.unc.edu](http://coi.unc.edu). List name(s) of all research team members for whom any answer to the questions above is yes.

**Certification by Principal Investigator:** By submitting this IRB application, I (the PI) certify that the information provided above is true and accurate regarding my own circumstances, that I have inquired of every UNC-Chapel Hill employee or trainee who will be engaged in the design, conduct or reporting of results of this project as to the questions set out above, and that I have instructed any such person who has answered “yes” to any of these questions to complete and submit for approval a Conflict of Interest Evaluation Form. I understand that as Principal Investigator I am obligated to ensure that any potential conflicts of interest that exist in relation to my study are reported as required by University policy.

________________________________________  __________________________
Signature of Principal Investigator          Date

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Faculty Advisor if PI is a Student or Trainee Investigator: I accept ultimate responsibility for ensuring that the PI complies with the University’s conflict of interest policies and procedures.

__________________________________________  _______________________
Signature of Faculty Advisor                        Date
Part A.4. Questions Common to All Studies

For all questions, if the study involves only secondary data analysis, focus on your proposed design, methods and procedures, and not those of the original study that produced the data you plan to use.

Complete answers must be provided. While you may reference other documents with supporting information, do not respond solely by stating “see attached.”

A.4.1. Brief Summary. Provide a brief non-technical description of the study, which will be used in IRB documentation as a description of the study. Typical summaries are 50-100 words. Please reply to each item below, retaining the subheading labels already in place, so that reviewers can readily identify the content.

Purpose: To investigate the currently received treatments and preferences of consumers receiving services for panic disorder, and their perception of the value/efficacy of those services. Also, to examine which services not received by consumers they perceive as being needed/valuable. This will be examined within the scope of practice of Certified Rehabilitation Counselors to address areas of need for training and practice. In addition, quality of life scores will be examined in relation to services received and perception of efficacy by consumers.

Participants: All participants in the study will be at least 18 years old, and will have been diagnosed with panic disorder and/or agoraphobia. The participants will be recruited from various mental health treatment centers, from the UNC email listserv, and panic disorder support groups (face to face groups as well as online support groups/forums).

Procedures (methods): Participants will complete an online survey containing demographic questions, diagnosis related questions, and items concerning their perception of services received or needed for panic disorder symptoms. Participants will also be asked about their quality of life in different arenas to determine if certain treatments are correlated with higher quality of life scores. At the conclusion of the survey, participants may voluntarily provide contact information to be entered into a drawing for one of five $20.00 gift cards.

A.4.2. Purpose and Rationale. Provide a summary of the background information, state the research question(s), and tell why the study is needed. If a complete rationale and literature review are in an accompanying grant application or other type of proposal, only provide a brief summary here. If there is no proposal, provide a more extensive rationale and literature review, including references.

The research involving panic disorder and the role of rehabilitation counselors is virtually non-existent at this time. In addition, there are no current studies examining needs and preferences from a consumer standpoint involving panic disorder and rehabilitation counseling. This is of particular interest because of the quality of life issues surrounding panic disorder that impact consumers in vocational, social, and personal arenas, which are included in the rehabilitation counseling scope of practice areas.

Research questions include:
Which services received by consumers are felt to be most effective and are preferred by them?
Which services not yet received by consumers are perceived as needed and valuable by them; and are these services available within the rehabilitation counseling scope of practice?
Do consumers receiving more services/ones perceived as more effective show better scores in quality of life; or is one type of service associated more positively associated with quality of life scores than other services?

A.4.3. **Subjects.** You should describe the subject population even if your study does not involve direct interaction (e.g., existing records). Specify number, gender, ethnicity, race, and age. Specify whether subjects are healthy volunteers or patients. If patients, specify any relevant disease or condition and indicate how potential subjects will be identified. Researchers are reminded that additional approvals may be needed from relevant “gatekeepers” to access subjects (e.g., school principals, facility directors, hospital or healthcare system administrators).

Participants will be at least 18 years of age, and may be of any gender, race, or ethnic background. The participants will be individuals diagnosed with panic disorder, and a mini questionnaire will be given in the online survey to verify qualifying symptoms. Participants are involved in active treatment, identified for survey by self-selection to voluntarily participate through accessing study information through face to face support groups, mental health centers, or online listserves or support groups. I hope to recruit approximately 50 subjects for the research study.

A.4.4. **Inclusion/exclusion criteria.** List required characteristics of potential subjects, and those that preclude enrollment or involvement of subjects or their data. Justify exclusion of any group, especially by criteria based on gender, ethnicity, race, or age. If pregnant women are excluded, or if women who become pregnant are withdrawn, specific justification must be provided.

Inclusion criteria include panic disorder diagnosis and age 18 and older. Exclusion criteria include being under 18 years of age and/or being non-english speaking.

A.4.5. **Full description of the study design, methods and procedures.** Describe the research study. Discuss the study design; study procedures; sequential description of what subjects will be asked to do; assignment of subjects to various arms of the study if applicable; doses; frequency and route of administration of medication and other medical treatment if applicable; how data are to be collected (questionnaire, interview, focus group or specific procedure such as physical examination, venipuncture, etc.). Include information on who will collect data, who will conduct procedures or measurements. Indicate the number and duration of contacts with each subject; outcome measurements; and follow-up procedures. If the study involves medical treatment, distinguish standard care procedures from those that are research. If the study is a clinical trial involving patients as subjects and use of placebo control is involved, provide justification for the use of placebo controls.

Participants will be recruited through advertisements and announcements at various mental health treatment centers and support groups. Flyers will be provided containing information on the study as well as a website address to log onto for study participation and the phone contact information to request a written survey via US mail. Participants will log on to the website provided on the flyers and will have a secure encrypted connection to the survey, or will receive a written survey in the mail with a pre-paid envelope for return. After completion of a consent form explaining their rights and associated risks of the study,
participants will complete a self-report survey comprised of questions about their diagnosis (including any comorbid conditions), and demographics (such as age, gender, education level, marital status, religion) to provide information about any existing relationship between diagnosis, age, gender, or other characteristics, as well as their perception of services and need for new services. The participants will then complete a questionnaire, including a quality of life measure in order to show their levels of perceived quality of life in different life areas. In the next section of the questionnaire, participants will complete a short survey on treatments received, their perception of the value or efficacy of received services, and also their perception of the value or need for services which they have not previously received. The services listed on the survey will include areas of practice in the scope of rehabilitation counseling (such as group/individual counseling, vocational counseling, case management) in order to show options in which rehabilitation counselors may effectively treat consumers with panic disorder, and consumer preferences and needs relative to their practice. Lastly, the participants will view a disclosure statement at the end of the web application survey, explaining the purpose of the study in greater detail, and providing contact information of the researcher and her adviser in case of concerns or questions related to the study. Participants will also be able to voluntarily provide contact information in order to be entered into a drawing to win one of five $20.00 gift cards. All data will be collected and analyzed by the principal investigator with consultation from faculty advisor. The research study survey will take approximately 15 minutes for participants to complete, and there will be no follow-up contact between the principal investigator and participants except to send gift cards to the drawing winners.

*Copies of the survey are attached at the end of the application materials. The online survey may also be viewed at: https://www.surveymonkey.com/s.aspx?sm=aE1nWloXfNgbnkyp38Ong_3d_3d

A.4.6. Benefits to subjects and/or society. Describe any potential for direct benefit to individual subjects, as well as the benefit to society based on scientific knowledge to be gained; these should be clearly distinguished. Consider the nature, magnitude, and likelihood of any direct benefit to subjects. If there is no direct benefit to the individual subject, say so here and in the consent form (if there is a consent form). Do not list monetary payment or other compensation as a benefit.

The study will likely provide no direct benefit to individual subjects other than offering a forum to voice their preferences and opinions regarding treatment and rehabilitation services for panic disorder. However, the study overall may impact the field of rehabilitation counseling by informing counselors of areas they need to address with consumers in practice, as well as areas of training needed to improve services for individuals with panic disorder. Since rehabilitation counseling is holistic, and person-centered in focus and nature, having consumer-driven practice and training is vital to upholding the core values and functions of the profession, and research of this nature may contribute to the body of knowledge in a way that informs future research and training.

A.4.7. Full description of risks and measures to minimize risks. Include risk of psychosocial harm (e.g., emotional distress, embarrassment, breach of confidentiality), economic harm (e.g., loss of employment or insurability, loss of professional standing or reputation, loss of standing within the community) and legal jeopardy (e.g., disclosure of illegal activity or negligence), as well as known
side effects of study medication, if applicable, and risk of pain and physical injury. Describe what will be done to minimize these risks. Describe procedures for follow-up, when necessary, such as when subjects are found to be in need of medical or psychological referral. If there is no direct interaction with subjects, and risk is limited to breach of confidentiality (e.g., for existing data), state this.

The online survey contains some items referring to symptoms of panic attacks, and therefore the study may contain a slight risk for evoking emotional discomfort to individuals while completing the questionnaire. If participants need any assistance due to distress, contact information will be provided for psychological referral. Data will be kept in secure password protected files in order to maintain confidentiality of all participants. Participants are reminded in the consent form that they can skip any questions they prefer not to answer, and in the survey design, no questions in the online survey are restricted to “must answer” conditions.

A.4.8. **Data analysis.** Tell how the qualitative and/or quantitative data will be analyzed. Explain how the sample size is sufficient to achieve the study aims. This might include a formal power calculation or explanation of why a small sample is sufficient (e.g., qualitative research, pilot studies).

The project will be a pilot study in which the sample participant group will be limited in size. ANOVAs will be employed to quantitatively examine the differences between different treatments received by participants and their relationship with quality of life scores. In addition, qualitative analysis will be utilized to gain more information on consumers’ perspectives on the value/efficacy of different treatment approaches and their experiences in treatment for panic disorder.
A.4.9. **Will you collect or receive any of the following identifiers?** Does not apply to consent forms.

No  x Yes  *If yes, check all that apply:*

a.  x  Names
b.  __  Telephone numbers
c.  __  Any elements of dates (other than year) for dates directly related to an individual, including birth date, admission date, discharge date, date of death. For ages over 89: all elements of dates (including year) indicative of such age, except that such ages and elements may be aggregated into a single category of age 90 and older
d.  x  Any geographic subdivisions smaller than a State, including street address, city, county, precinct, zip code and their equivalent geocodes, except for the initial three digits of a zip code
e.  __  Fax numbers
f.  __  Electronic mail addresses
g.  __  Social security numbers
h.  __  Medical record numbers
i.  __ Health plan beneficiary numbers  

j.  __ Account numbers  

k.  __ Certificate/license numbers  

l.  __ Vehicle identifiers and serial numbers (VIN), including license plate numbers  

m.  __ Device identifiers and serial numbers (e.g., implanted medical device)  

n.  __ Web universal resource locators (URLs)  

o.  __ Internet protocol (IP) address numbers  

p.  __ Biometric identifiers, including finger and voice prints  

q.  __ Full face photographic images and any comparable images  

r.  __ Any other unique identifying number, code, or characteristic, other than dummy identifiers that are not derived from actual identifiers and for which the re-identification key is maintained by the health care provider and not disclosed to the researcher  

A.4.10. **Identifiers in research data.** Are the identifiers in A.4.9 above linked or maintained with the research data?  

__ yes  x no  

A.4.11. **Confidentiality of the data.** Describe procedures for maintaining confidentiality of the data you will collect or will receive. Describe how you will protect the data from access by those not authorized. How will data be transmitted among research personnel? Where relevant, discuss the potential for deductive disclosure (i.e., directly identifying subjects from a combination of indirect IDs).  

The data will be maintained in a secure, password protected file and the online survey is encrypted for security of the web-based application and transfer of data/responses. Analysis of data will not include any personal identifiers, and will be transmitted among research personnel only via deidentified statistical data spreadsheets or in face to face meetings. The student researcher will have only access to identifiers exclusive to the purpose of the drawing.
A.4.12. **Data sharing.** With whom will identifiable (contains any of the 18 identifiers listed in question A.4.9 above) data be shared outside the immediate research team? For each, explain confidentiality measures. Include data use agreements, if any.

- **x** No one
- ___ Coordinating Center:
- ___ Statisticians:
- ___ Consultants:
- ___ Other researchers:
- ___ Registries:
- ___ Sponsors:
- ___ External labs for additional testing:
- ___ Journals:
- ___ Publicly available dataset:
- ___ Other:

A.4.13. **Data security for storage and transmission.** Please check all that apply.

*For electronic data stored on a desktop computer:*
- x Secure network
- x Password access
- x Data encryption
- x Password protected file(s)
- ___ Other comparable safeguard (describe):

*For portable computing devices/external storage devices (e.g. laptop computer, PDA, CDs, memory sticks):*
- x Power-on password
- x Automatic log-off
- x Data encryption
- x Password protected file(s)
- x Other comparable safeguard (describe): if use of memory stick is employed, will be password protected and kept in private safe

*For hardcopy data (including human biological specimens, CDs, tapes, etc.):*
- ___ Data de-identified by research team (stripped of the 18 identifiers listed in question A.4.9 above)
- ___ Locked suite or office
- ___ Locked cabinet
- ___ Data coded by research team with a master list secured and kept separately
- ___ Other (describe):

A.4.14. **Post-study disposition of identifiable data or human biological materials.** Describe your plans for disposition of data or human biological specimens that are identifiable in any way (directly or via indirect codes) once the study has ended. Describe your plan to destroy identifiers, if you will do so.

Once the study has been formally completed, all files containing any personal identifiers will be deleted from desktop and laptop computers as well as from any portable storage devices.
Part A.5. The Consent Process and Consent Documentation (including Waivers)

The standard consent process is for all subjects to sign a document containing all the elements of informed consent, as specified in the federal regulations. Some or all of the elements of consent, including signatures, may be altered or waived under certain circumstances.

- If you will obtain consent in any manner, complete section A.5.1.
- If you are obtaining consent, but requesting a waiver of the requirement for a signed consent document, complete section A.5.2.
- If you are requesting a waiver of any or all of the elements of consent, complete section A.5.3.
- If you need to access Protected Health Information (PHI) to identify potential subjects who will then be contacted, you will need a limited waiver of HIPAA authorization. This is addressed in section B.2.

You may need to complete more than one section. For example, if you are conducting a phone survey with verbal consent, complete sections A.5.1, A.5.2, and possibly A.5.3.

A.5.1. Describe the process of obtaining informed consent from subjects. If children will be enrolled as subjects, describe the provisions for obtaining parental permission and assent of the child. If decisionally impaired adults are to be enrolled, describe the provision for obtaining surrogate consent from a legally authorized representative (LAR). If non-English speaking people will be enrolled, explain how consent in the native language will be obtained. Address both written translation of the consent and the availability of oral interpretation. After you have completed this part A.5.1, if you are not requesting a waiver of any type, you are done with Part A.5.; proceed to Part B.

There will be no children or decisionally impaired adults recruited for participation in the study. There will also not be non-English speaking participants involved in the study. Upon logging on to the online survey, individuals will be shown a screen including all the information contained in a standard written consent for participation. The individual will be asked to indicate their consent for participation by checking yes to continue with the online study. For participants using written format surveys, the same consent will be provided in writing as is presented in the online version. There will be no oral interpretation of the consent provided by the researcher.

A.5.2. Justification for a waiver of written (i.e., signed) consent. The default is for subjects to sign a written document that contains all the elements of informed consent. Under limited circumstances, the requirement for a signed consent form may be waived by the IRB if either of the following is true. Chose only one:

a. The only record linking the subject and the research would be the consent document and the principal risk would be potential harm resulting from a breach of confidentiality (e.g., study topic is sensitive so that public knowledge of participation could be damaging). __ yes __ no

   Explain.

b. The research presents no more than minimal risk of harm to subjects and involves no procedures for which written consent is normally required outside of the research context (e.g., phone survey). X yes __ no
Explain. The study involves an online or written survey in which individuals may choose to identify themselves or not, and does not involve any other personal identifiers, only their preferences and perception of services. If participants decide to enter themselves in the drawing, they must enter contact information for mailing purposes, which will be deleted from files once the study is completed. The online survey program (SurveyMonkey) has been registered for in a data encryption format to protect the participants’ data.

If you checked “yes” to either (and you are not requesting a waiver in section A.5.3) consent must be obtained orally, by delivering a fact sheet, through an online consent form, or be incorporated into the survey itself. Include a copy of the consent script, fact sheet, online consent form, or incorporated document.

(online consent form and written consent form are identical except for written form signature/date vs. online checkbox; see alternate phrasing for written/online forms in brackets [ ]).

Dear Participant:

This research study will examine the needs and preferences of individuals with panic disorder (PD). The study focuses on perceptions of how effective treatments for your PD symptoms have been. You will also have the chance to express the unmet needs you have and what services you feel would be valuable that you have not received. Your participation in this study is completely voluntary.

To participate in the study, you will need to indicate your voluntary consent by [checking the box labeled YES at the bottom of the page] [by providing your signature and date at the bottom of the page]. Please read this page completely, so that you are informed of the study components and your rights as a participant. This survey is composed of questions addressing your perception of treatment services you have received or not received for PD. These treatments may include medication, psychotherapy, or support groups. The survey also contains questions about the respondents in this study including demographics and symptoms. Completion of the questionnaires should take no longer than 15 minutes. You are free to answer or not answer any particular question and have no obligation to complete answering the questions once you begin.

Your participation is anonymous unless you decide to provide contact information for a drawing of one of five $20 gift cards. Approximately 50 participants will be recruited for the study. All data obtained in this study will be reported as group data. No individual can or will be identified in the published or presented study outcomes. We plan on publishing the results of this research as well as communicating these results to professional associations in rehabilitation counseling. The only persons
who will have access to these data are the investigators named on this letter.

If you complete this [online] survey soon and choose to do so, you can place your name and address on the indicated page of the survey to be entered into the gift card drawing. Names and addresses will not be included in the analysis of the data collected. Your name will not be associated with your responses as they are to be placed in a data set separate from your survey result page. Please note that indicating your name and address is completely optional. If you feel discomfort in answering any questions, feel free to skip the question and move on.

There are few risks anticipated should you participate in this study. Some questions will ask you to list panic attack symptoms and may elicit an emotional response for some individuals. There are no anticipated individual benefits from being involved with the study. However, there will be professional benefit from this study, as the information we obtain will be communicated to the profession through publication in the literature, presentation at professional meetings and directly dissemination to the professional associations. There is no cost to you and opportunity for financial benefit is limited to the chance drawing of the five $20 gift cards.

You may contact us with any questions at (336) 301-4574, (919) 843-4730, or by email (cheri_meadows@med.unc.edu, charles_bernacchio@med.unc.edu).

All research on human volunteers is reviewed by a committee that works to protect your rights and welfare. If you have questions or concerns about your rights as a research subject you may contact, anonymously if you wish, the Institutional Review Board at 919-966-3113 or by email to IRB_subjects@unc.edu.

Thank you for considering participation in this research study. We hope we can share your views with the greater professional community and use your response to help shape recommendations for addressing the needs of individuals with PD and professional development of rehabilitation counselors to assist consumers in recovery.

Sincerely,

Cheri Meadows Dawson, Graduate Student
Dr. Charles Bernacchio, Professor
UNC Rehabilitation Counseling & Psychology

*If you wish, you may print a copy of this page for your records.
If you have justified a waiver of written (signed) consent (A.5.2), you should complete A.5.3 only if your consent process will not include all the other elements of consent.
A.5.3. **Justification for a full or partial waiver of consent.** The default is for subjects to give informed consent. A waiver might be requested for research involving only existing data or human biological specimens (see also Part C). More rarely, it might be requested when the research design requires withholding some study details at the outset (e.g., behavioral research involving deception). In limited circumstances, parental permission may be waived. This section should also be completed for a waiver of HIPAA authorization if research involves Protected Health Information (PHI) subject to HIPAA regulation, such as patient records.

__ Requesting waiver of some elements (specify; see SOP 28 on the IRB web site):
__ Requesting waiver of consent entirely

If you check either of the boxes above, answer items a-f. To justify a full waiver of the requirement for informed consent, you must be able to answer “yes” (or “not applicable” for question c) to items a-f. **Insert brief explanations that support your answers.**

a. Will the research involve no greater than minimal risk to subjects or to their privacy?  
   Explain.  
   __ yes __ no

b. Is it true that the waiver will not adversely affect the rights and welfare of subjects? (Consider the right of privacy and possible risk of breach of confidentiality in light of the information you wish to gather.)  
   Explain.  
   __ yes __ no

c. When applicable to your study, do you have plans to provide subjects with pertinent information after their participation is over? (e.g., Will you provide details withheld during consent, or tell subjects if you found information with direct clinical relevance? This may be an uncommon scenario.)  
   Explain.  
   __ yes __ not applicable

d. Would the research be impracticable without the waiver? (If you checked “yes,” explain how the requirement to obtain consent would make the research impracticable, e.g., are most of the subjects lost to follow-up or deceased?).  
   Explain.  
   __ yes __ no

e. Is the risk to privacy reasonable in relation to benefits to be gained or the importance of the knowledge to be gained?  
   Explain.  
   __ yes __ no

If you are accessing patient records for this research, you must also be able to answer “yes” to item f to justify a waiver of HIPAA authorization from the subjects.

f. Would the research be impracticable if you could not record (or use) Protected Health Information (PHI)? (If you checked “yes,” explain how not recording or using PHI would make the research impracticable).  
   Explain.  
   __ yes __ no
Part B. Questions for Studies that Involve Direct Interaction with Human Subjects

→ *If this does not apply to your study, do not submit this section.*

<table>
<thead>
<tr>
<th>B.1. <strong>Methods of recruiting.</strong> Describe how and where subjects will be identified and recruited. Indicate who will do the recruiting, and tell how subjects will be contacted. Describe efforts to ensure equal access to participation among women and minorities. Describe how you will protect the privacy of potential subjects during recruitment. For prospective subjects whose status (e.g., as patient or client), condition, or contact information is not publicly available (e.g., from a phone book or public web site), the initial contact should be made with legitimate knowledge of the subjects’ circumstances. Ideally, the individual with such knowledge should seek prospective subjects’ permission to release names to the PI for recruitment. Alternatively, the knowledgeable individual could provide information about the study, including contact information for the investigator, so that interested prospective subjects can contact the investigator. Provide the IRB with a copy of any document or script that will be used to obtain the patients’ permission for release of names or to introduce the study. Check with the IRB for further guidance.</th>
</tr>
</thead>
</table>

The subjects for this study will be recruited through mental health service providers, online support group forums, UNC listserv, or support group leaders assisting individuals with panic disorder. Cover letters explaining the research study and flyer information to the professional/facility will be sent to programs or support groups. Informational flyers will be distributed so that prospective participants can choose to contact the PI for further information on how to log on to the online survey or how to receive a written copy of the research survey.

<table>
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<tr>
<th>B.2. <strong>Protected Health Information (PHI).</strong> If you need to access Protected Health Information (PHI) to identify potential subjects who will then be contacted, you will need a <em>limited waiver of HIPAA authorization</em>. If this applies to your study, please provide the following information.</th>
</tr>
</thead>
</table>

a. Under this limited waiver, you are allowed to access and use only the minimum amount of PHI necessary to review eligibility criteria and contact potential subjects. What information are you planning to collect for this purpose?

b. How will confidentiality/privacy be protected prior to ascertaining desire to participate?

c. When and how will you destroy the contact information if an individual declines participation?

<table>
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<tr>
<th>B.3. <strong>Duration of entire study and duration of an individual subject’s participation, including follow-up evaluation if applicable.</strong> Include the number of required contacts and approximate duration of each contact.</th>
</tr>
</thead>
</table>

The duration of the study for the participants should be no longer than 15 minutes. There is only one required visit to the website for survey completion or one time filling out the written survey, and no follow-up is required unless the participant initiates follow-up for questions regarding the study or its outcomes.
**B.4. Where will the subjects be studied?** Describe locations where subjects will be studied, both on and off the UNC-CH campus.

The subjects will complete the online survey or written survey at a location of their choosing which may include private residences, libraries, or offices. Face to face contact will not be a part of the study.

**B.5. Privacy.** Describe procedures that will ensure privacy of the subjects in this study. Examples include the setting for interviews, phone conversations, or physical examinations; communication methods or mailed materials (e.g., mailings should not indicate disease status or focus of study on the envelope).

Settings for interview/survey completion will be self-selected by participants, and no face to face, email, or telephone contact will be initiated by the investigators. If participants are chosen in the random drawing to receive a gift card, it will be mailed to them at the provided address with no study indications on the envelope. Also, web survey participants will use a program with data encryption to protect their data.

**B.6. Inducements for participation.** Describe all inducements to participate, monetary or non-monetary. If monetary, specify the amount and schedule for payments and if/how this will be prorated if the subject withdraws (or is withdrawn) from the study prior to completing it. For compensation in foreign currency, provide a US$ equivalent. Provide evidence that the amount is not coercive (e.g., describe purchasing power for foreign countries). Be aware that payment over a certain amount may require the collection of the subjects’ Social Security Numbers. If a subject is paid more than $200.00 per year, collection of subjects’ Social Security Number is required (University policy—see SSN Guidance) using the Social Security Number collection consent addendum found under forms on the IRB website (look for Study Subject Reimbursement Form).

The participants in this study may be entered into a drawing to be randomly selected to receive one of five $20.00 gift cards if they so choose. Entry into the drawing is voluntary, as is completion of each question in the survey. Participants may opt out of any question and move on to the next without penalty or withdrawal from the drawing.

**B.7. Costs to be borne by subjects.** Include child care, travel, parking, clinic fees, diagnostic and laboratory studies, drugs, devices, all professional fees, etc. If there are no costs to subjects other than their time to participate, indicate this.

No costs except for time of participation.
The following page is the flyer to be distributed to participants, posted in mental health clinics and posted in support group centers. The text will be the same for email advertisements or ads posted to online support groups. For emails (such as the UNC School of Medicine Listserv), the subject line will read: Individuals with Panic Disorder Needed for Research Study.
Have You Been Diagnosed with Panic Disorder?

We want your opinion!

- Completing a short online survey for a research study about your treatment for panic disorder and your opinions takes only about 15 minutes!

- All qualified participants (age 18 & over, diagnosed with panic disorder) are eligible to voluntarily enter a drawing to win one of five $20.00 gift cards at the end of the survey.

To receive directions on how to complete the online survey, send an email to: cheri_meadows@med.unc.edu

To request a written copy of the survey, call: Cheri Meadows Dawson, graduate student
UNC Division of Rehabilitation Counseling & Psychology
(336) 301-4574
The following information is to be included in letter/phone/email requests to advertise the research study and to distribute flyers:

(For email requests) Subject Line: Individuals with Panic Disorder Needed for Research Study

Dear Mr(s). __________:

I am a graduate student in Rehabilitation Counseling and Psychology at the University of North Carolina at Chapel Hill. I am currently recruiting participants for a research study examining the treatment preferences, outcomes, and quality of life for individuals diagnosed with panic disorder, ages 18 or older. I am interested in learning about past treatments individuals have received, consumer ratings of treatments, quality of life for persons with panic disorder, and their preferences for treatments they have not already received but perceive to be valuable.

Participation involves a short survey which may be completed online or in written format. The survey takes approximately 15 minutes to complete, and participants have the option of providing contact information and being entered to win one of 5 $20.00 gift cards. This option is completely voluntary, and participants may choose to remain anonymous and not participate in the drawing. Participants' identifying information is kept confidential, and participation in the research study survey is completely voluntary. Participants have the right to change their mind about completing the survey at any time, and may skip any part of the survey that they wish not to complete. I am hoping to recruit a total of approximately 50 participants from various locations.

Interested participants can contact the student researcher by email or phone for information on accessing the online or written survey. Online surveys are encrypted to ensure the safety and privacy of participant data, and written surveys will be sent with a pre-paid return envelope enclosed. Participation is limited to individuals who have been diagnosed with panic disorder and are age 18 or older.

I have enclosed informational flyers which may be distributed to any interested participants. My phone number and email address are listed on the flyers, and I may be contacted for additional information about the research study. Thank you for your time and attention in assisting me with this research effort and promoting the input of consumers in research and development of future rehabilitation and recovery efforts.

Sincerely,
Cheri Meadows Dawson,
Graduate Student
UNC Division of Rehabilitation Counseling and Psychology
cheri_meadows@med.unc.edu
(336) 301-4574

APR 22 2009
Appendix C

IRB Letter of Approval

To: Cheri Dawson  
Allied Health Sciences  
CB: 7205

From: Biomedical IRB

Authorized signature on behalf of IRB

Approval Date: 4/22/2009  
Expiration Date of Approval: 4/21/2010

RE: Notice of IRB Approval by Expedited Review (under 45 CFR 46.110)  
Submission Type: Initial  
Expedited Category: 7. Surveys/interviews/focus groups  
Study #: 00-0711

Study Title: Panic Disorder: Consumer Preferences and Implications for Rehabilitation Counselors

This submission has been approved by the above IRB for the period indicated. It has been determined that the risk involved in this research is no more than minimal.

Study Description:

Summary: The study will likely provide no direct benefit to individual subjects other than offering a forum to voice their preferences and opinions regarding treatment and rehabilitation services for panic disorder. However, the study overall may impact the field of rehabilitation counseling by informing counselors of areas they need to address with consumers in practice, as well as areas of training needed to improve services for individuals with panic disorder. Since rehabilitation counseling is holistic, and person-centered in focus and nature, having consumer-driven practice and training is vital to upholding the core values and functions of the profession, and research of this nature may contribute to the body of knowledge in a way that informs future research and training.

Investigator’s Responsibilities:

Federal regulations require that all research be reviewed at least annually. It is the Principal Investigator’s responsibility to submit for renewal and obtain approval before the expiration date. You may not continue any research activity beyond the expiration date without IRB approval. Failure to receive approval for continuation before the expiration date will result in automatic termination of the approval for this study on the expiration date.

When applicable, enclosed are stamped copies of approved consent documents and other recruitment materials. You must copy the stamped consent forms for use with subjects unless you have approval to do otherwise.
You are required to obtain IRB approval for any changes to any aspect of this study before they can be implemented (use the modification form at ohre.unc.edu/forms). Should any adverse event or unanticipated problem involving risks to subjects or others occur it must be reported immediately to the IRB using the adverse event form at the same web site.

Researchers are reminded that additional approvals may be needed from relevant "gatekeepers" to access subjects (e.g., principals, facility directors, healthcare system).

This study was reviewed in accordance with federal regulations governing human subjects research, including those found at 45 CFR 46 (Common Rule), 45 CFR 164 (HIPAA), 21 CFR 50 & 56 (FDA), and 40 CFR 26 (EPA), where applicable.

CC:
Charles Bernacchio, Allied Health Sciences
Appendix D

Panic Disorder Survey Format

Dear Participant:

This research study will examine the needs and preferences of individuals with panic disorder (PD). The study focuses on perceptions of how effective treatments for your PD symptoms have been. You will also have the chance to express the unmet needs you have and what services you feel would be valuable that you have not received. Your participation in this study is completely voluntary.

To participate in the study, you will need to indicate your voluntary consent by checking the box labeled YES at the bottom of the page. Please read this page completely, so that you are informed of the study components and your rights as a participant. This survey is composed of questions addressing your perception of treatment services you have received or not received for PD. These treatments may include medication, psychotherapy, or support groups. The survey also contains questions about the respondents in this study including demographics and symptoms. Completion of the questionnaires should take no longer than 15 minutes. You are free to answer or not answer any particular question and have no obligation to complete answering the questions once you begin.

Your participation is anonymous unless you decide to provide contact information for a drawing of one of five $20 gift cards. Approximately 50 participants will be recruited for the study. All data obtained in this study will be reported as group data. No individual can or will be identified in the published or presented study outcomes. We plan on publishing the results of this research as well as communicating these results to professional associations in rehabilitation counseling. The only persons who will have access to these data are the investigators named on this letter.

If you complete this online survey soon and choose to do so, you can place your name and address on the indicated page of the survey to be entered into the gift card drawing. Names and addresses will not be included in the analysis of the data collected. Your name will not be associated with your responses as they are to be placed in a data set separate from your survey result page. Please note that indicating your name and address is completely optional. If you feel discomfort in answering any questions, feel free to skip the question and move on.

There are few risks anticipated should you participate in this study. Some questions will ask you to list panic attack symptoms and may elicit an emotional response for some individuals. There are no anticipated individual benefits from being involved with the study. However, there will be professional benefit from this study, as the information we obtain will be communicated to the profession through publication in the literature, presentation at professional meetings and directly dissemination to the professional associations. There is no cost to you and opportunity for financial benefit is limited to the chance drawing of the five $20 gift cards.

You may contact us with any questions at (336) 301-4574, (919) 843-4730, or by email (cheri_meadows@med.unc.edu, charles_bernacchio@med.unc.edu).

All research on human volunteers is reviewed by a committee that works to protect your rights and welfare. If you have questions or concerns about your rights as a research subject you may contact, anonymously if you wish, the Institutional Review Board at 919-966-3113 or by email to IRB_subjects@unc.edu.

Thank you for considering participation in this research study. We hope we can share your
Panic Survey

views with the greater professional community and use your response to help shape
recommendations for addressing the needs of individuals with PD and professional
development of rehabilitation counselors to assist consumers in recovery.

Sincerely,

Cheri Meadows Dawson, Graduate Student
Dr. Charles Bernacchio, Professor
UNC Rehabilitation Counseling & Psychology

*If you wish, you may print a copy of this page for your records.

1. Please indicate whether you consent to voluntarily participate in the online study.

☐ Yes, I will voluntarily participate.
☐ No, I prefer not to participate.
### Panic Survey

This section contains items about your demographic information as well as items regarding your experience with Panic Disorder. Please answer each item as accurately as possible.

1. **Gender:**
   - [ ] Male
   - [ ] Female

2. **Age (in years):**
   

3. **Marital Status:**
   - [ ] Single
   - [ ] Married
   - [ ] Divorced
   - [ ] Widowed

4. **Educational Level (number of years):**

5. **Religious Affiliation:**
   - [ ] Christian
   - [ ] Jewish
   - [ ] Muslim
   - [ ] Hindu

6. **Race/Ethnic Background:**

7. **If you have been diagnosed with any other psychiatric conditions besides panic disorder, please list them here:**

8. **How did you hear about this research study?**
   - [ ] Poster
   - [ ] Flyer
   - [ ] Newspaper
   - [ ] Radio
   - [ ] Television
   - [ ] Email
   - [ ] Website
   - [ ] Doctor
   - [ ] Friend
   - [ ] Family
   - [ ] Internet
   - [ ] Other: 

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Panic Survey

1. The Mayo Clinic describes a panic attack as follows: "A panic attack is a sudden episode of intense fear that develops for no apparent reason and that triggers severe physical reactions. Panic attacks can be very frightening. When panic attacks occur, you might think you’re losing control, having a heart attack or even dying."

Have you experienced unexpected panic attacks?

2. After experiencing a panic attack, have you remained worried or concerned about having another attack for at least a month?

3. After experiencing a panic attack, do you worry about the effects of the attack? (For example: on mental or physical health, on social relationships)

4. Have you changed any of your behaviors due to the panic attacks you have experienced?

If yes, what?

5. During a panic attack, I usually experience the following symptoms (check all that apply):
   - palpitations, pounding heart, or accelerated heart rate
   - chest pain or discomfort
   - fear of losing control or going crazy
   - sensations of shortness of breath or smothering
   - fear of dying
   - trembling or shaking
   - sweating
   - chills or hot flushes
   - feeling dizzy, unsteady, lightheaded, or faint
   - feelings of unreality or being detached from oneself
   - paresthesias (numbness or tingling sensations)
   - feeling of choking
   - nausea or abdominal distress

6. Have you ever been formally diagnosed with panic disorder?

7. Do you feel uncomfortable in or avoid (check all that apply):
   - certain situations
   - certain places
   - being alone

8. How many panic attacks do you experience in a week?
9. How severe would you rate the typical panic attack you experience?

<table>
<thead>
<tr>
<th>not severe at all</th>
<th>mildly severe</th>
<th>moderately severe</th>
<th>very severe</th>
<th>extremely severe</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>&gt;</td>
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</tbody>
</table>

10. What treatment has been most effective in decreasing the number or severity of the panic attacks you experience?

11. Why was the treatment indicated above most effective?

12. What has been the most difficult part of going through treatment for panic disorder? Why?

13. How has panic disorder impacted your job/career?

14. What have you done to cope with panic disorder in your job/career?

15. How has panic disorder affected your relationships?

16. What have you done to cope with panic disorder in your relationships?
### Panic Survey

This section contains items regarding your everyday quality of life. Please answer the items as accurately as possible by clicking on the box that is closest to how you feel about each area listed.

1. **Taking everything into consideration, during the past week how satisfied have you been with your ...**

<table>
<thead>
<tr>
<th>Area</th>
<th>Very Poor</th>
<th>Poor</th>
<th>Fair</th>
<th>Good</th>
<th>Very Good</th>
<th>N/A</th>
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<tbody>
<tr>
<td>physical health</td>
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<td>mood</td>
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<tr>
<td>work</td>
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<tr>
<td>household activities</td>
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<tr>
<td>social relationships</td>
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<td>family relationships</td>
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<tr>
<td>leisure time activities</td>
<td></td>
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<td>ability to function in daily life</td>
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<td>sexual drive, interest, and/or performance economic status</td>
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<tr>
<td>living/housing situation</td>
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<tr>
<td>ability to get around without feeling dizzy/unsteady/falling your vision in terms of ability to do work or hobbies overall sense of wellbeing medication overall life satisfaction and contentment during past week</td>
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</table>
5.

In this section, you will be asked about current and/or past treatments you have received for your panic disorder symptoms. Please answer all items as accurately as possible.

1. Have you received (in the past or currently) medications to relieve your panic disorder symptoms?
   ○ Yes
   ○ No

2. Please list each medication you have tried for panic disorder symptoms, and indicate whether each was effective or not.

3. If you answered yes to receiving medication, how valuable or effective would you rate the medications you have received?

   My medicine is/was:
   - not at all effective
   - slightly effective
   - moderately effective
   - very effective
   - completely effective
   - N/A

4. If you answered No to receiving medications, how valuable or effective do you think medication would be to help with your panic symptoms?

   I think medication would be:
   - not at all effective
   - slightly effective
   - moderately effective
   - very effective
   - completely effective
   - N/A
6.

1. Have you participated in individual counseling or therapy to address your concerns or feelings about panic disorder?
   ○ Yes
   ○ No

2. If you answered yes to participation in individual therapy, how valuable/effective do you believe participation was in dealing with your panic symptoms?

<table>
<thead>
<tr>
<th>Individual therapy is/was:</th>
<th>not at all effective</th>
<th>slightly effective</th>
<th>moderately effective</th>
<th>very effective</th>
<th>completely effective</th>
<th>N/A</th>
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3. If you answered No to participation in individual counseling, how valuable/effective do you believe individual counseling could be for dealing with your panic symptoms?

<table>
<thead>
<tr>
<th>I think individual counseling could be:</th>
<th>not at all effective</th>
<th>slightly effective</th>
<th>moderately effective</th>
<th>very effective</th>
<th>completely effective</th>
<th>N/A</th>
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## Panic Survey

### 7.

1. Have you participated in group counseling or therapy to address your feelings or concerns regarding your panic disorder symptoms?
   - [ ] Yes
   - [ ] No

2. If you answered yes to participation in group therapy or counseling, how valuable/effective do you believe participation was in dealing with your panic symptoms?

<table>
<thead>
<tr>
<th>Group counseling or therapy is/was:</th>
<th>not at all effective</th>
<th>slightly effective</th>
<th>moderately effective</th>
<th>very effective</th>
<th>completely effective</th>
<th>N/A</th>
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3. If you answered No to participation in group therapy or counseling, how valuable/effective do you believe participation could be in dealing with your panic symptoms?

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<tr>
<th>I think group counseling or therapy could be:</th>
<th>not at all effective</th>
<th>slightly effective</th>
<th>moderately effective</th>
<th>very effective</th>
<th>completely effective</th>
<th>N/A</th>
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</table>

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Panic Survey

8.

1. Have you worked with any of the following to address work-related concerns involving your panic symptoms (check all that apply)?
   - [ ] vocational rehabilitation counselor
   - [ ] career counselor
   - [ ] job coach

2. If you answered yes to working with a vocational or career counselor, how valuable/effective do you believe participation was in dealing with your panic symptoms?

<table>
<thead>
<tr>
<th>Career or vocational counseling is/was:</th>
<th>not at all effective</th>
<th>slightly effective</th>
<th>moderately effective</th>
<th>very effective</th>
<th>completely effective</th>
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3. If you answered No to participation in career or vocational counseling, how valuable/effective do you believe it could be for dealing with your panic symptoms?

<table>
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<tr>
<th>I think vocational or career counseling could be:</th>
<th>not at all effective</th>
<th>mildly effective</th>
<th>moderately effective</th>
<th>very effective</th>
<th>completely effective</th>
<th>N/A</th>
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### Panic Survey

9.

1. Have you received any of the following services because of your panic symptoms/disorder (check all that apply)?
   - [ ] Case management
   - [ ] Community support services
   - [ ] Community support team
   - [ ] Assertive community treatment
   - [ ] None

2. If you answered yes to receiving any of the services in the question above, how valuable/effective do you believe participation was in dealing with your panic symptoms?

<table>
<thead>
<tr>
<th>The service I received is/was:</th>
<th>not at all effective</th>
<th>mildly effective</th>
<th>moderately effective</th>
<th>very effective</th>
<th>completely effective</th>
<th>N/A</th>
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</table>

3. If you answered No to receiving the services above, how valuable/effective do you believe receiving the services could be for dealing with your panic symptoms?

<table>
<thead>
<tr>
<th>I think the services could be:</th>
<th>not at all effective</th>
<th>mildly effective</th>
<th>moderately effective</th>
<th>very effective</th>
<th>completely effective</th>
<th>N/A</th>
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</tbody>
</table>
1. Have you participated in a support group for people with panic disorder?
   - Yes
   - No

2. If you answered yes to participation in a support group, how valuable/effective do you believe participation was in dealing with your panic symptoms?

<table>
<thead>
<tr>
<th>The support group is/was:</th>
<th>not at all effective</th>
<th>mildly effective</th>
<th>moderately effective</th>
<th>very effective</th>
<th>completely effective</th>
<th>N/A</th>
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</tbody>
</table>

3. If you answered No to participation in a support group, how valuable/effective do you believe participation was in dealing with your panic symptoms?

<table>
<thead>
<tr>
<th>I believe a support group could be:</th>
<th>not at all effective</th>
<th>mildly effective</th>
<th>moderately effective</th>
<th>very effective</th>
<th>completely effective</th>
<th>N/A</th>
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Panic Survey

11.

1. Please indicate any other sources of support or treatment you have received or participated in for panic disorder. These may be professional services/treatments or informal supports (friends, family, etc.)

2. If you have received any additional supports, how effective have they been in helping with your panic symptoms/disorder?

<table>
<thead>
<tr>
<th>not at all effective</th>
<th>mildly effective</th>
<th>moderately effective</th>
<th>very effective</th>
<th>completely effective</th>
<th>N/A</th>
</tr>
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<td>O</td>
<td>O</td>
<td>O</td>
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</tbody>
</table>

My additional supports have been:

3. Please indicate any other sources of support or treatment you have NOT received or participated in for panic disorder, but feel would be helpful to you. These may be professional services/treatments or informal supports (friends, family, etc.)
Panic Survey

12. Thank you!

The purpose of this study is to gain insight into treatment needs and preferences for individuals with panic disorder. In addition, we hope that the responses received will indicate what types of treatments within the scope of practice of Rehabilitation Counselors are most valued and needed by consumers, therefore giving us a clearer picture of what future training and practice directions are necessary to meet consumer needs. If you have any questions related to the online survey you completed or the study outcomes, please feel free to contact the researchers:

Cheri Meadows Dawson
Principal Investigator, Graduate Student
(336) 301-4574
cheri_meadows@med.unc.edu

Dr. Charles Bernacchio
Professor, Faculty Advisor
UNC Rehabilitation Counseling and Psychology
(919) 843-4730
charles_bernacchio@med.unc.edu

Again, all research on human volunteers is reviewed by a committee that works to protect your rights and welfare. If you have questions or concerns about your rights as a research subject you may contact, anonymously if you wish, the Institutional Review Board at 919-966-3113 or by email to IRB_subjects@unc.edu.

Thanks again for your participation!

***Please proceed to the next page if you wish to be entered into the gift card drawing!
Panic Survey

13. To be entered into the drawing, please complete the following:

1. Please enter your contact information. If you are randomly selected, your gift card will be mailed to the address you provide. A confirmation email will be sent to the email address provided.

<table>
<thead>
<tr>
<th>Name:</th>
</tr>
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<tbody>
<tr>
<td>Address:</td>
</tr>
<tr>
<td>Address 2:</td>
</tr>
<tr>
<td>City/Town:</td>
</tr>
<tr>
<td>State:</td>
</tr>
<tr>
<td>ZIP:</td>
</tr>
<tr>
<td>Country:</td>
</tr>
<tr>
<td>Email Address:</td>
</tr>
</tbody>
</table>
Appendix E

Sites Receiving/Distributing Research Study Recruitment Information

Dr. Susan Kennedy (Greensboro, NC - support groups)

BPhoenix Anxiety Disorders Forum (online)

New Leaf Behavioral Health (Raleigh, NC)

UNC Eating Disorders Clinic (Chapel Hill, NC)

Craigslist Psychology Forum (online)

UNC email listserv (Chapel Hill, NC – online)

Mental Health Association of North Carolina (affiliates):

  Forsyth County
  Guilford County
  Central Carolinas
  Wayne County
  Randolph County
  Pitt County
  Stokes County
  Wilson
  Beaufort County
  Rocky Mount
  Orange County

MHA/NC Service Directors & Communication Specialist

MHA Psychosocial and Supported Employment Director (& affiliates)

NAMI Support Group (Elon, NC)
Appendix F

Quality of Life Enjoyment and Satisfaction Questionnaire – Short Form

(original version)

QUALITY OF LIFE ENJOYMENT AND SATISFACTION QUESTIONNAIRE - SHORT FORM*

Q-LES-Q-SF

Jean Endicott, Ph.D**

This questionnaire is designed to help assess the degree of enjoyment and satisfaction experienced during the past week.

Name ___________________________ ID# __ __ __ __ __ __ Date: __/__/____

(3-10)†

Sex: 1 - Male, 2 - Female

(17)†

Age: __ __ __ __ __ __

(18-19)†

Study # __ __ Group __ __ __

(20-21)†

(22-24)†

(70-80 = DA+) (Under Copyright) 6/10/95-R

† Keypunch: Duplicate on all cards.

* The Short Form of the Q-LES-Q has the same content as the General Activities section of the regular Q-LES-Q.

** Developed with the assistance of Wilma Harrison, M.D. and Dianne Schechter, Ph.D. (11/29/90)
Available from Jean Endicott, Ph.D., Department of Research Assessment and Training, Unit 123, 1051 Riverside Drive, New York, NY 10032.
Je10@columbia.edu
(Under Copyright)
<table>
<thead>
<tr>
<th>GENERAL ACTIVITIES</th>
<th>OVERALL LEVEL OF SATISFACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taking everything into consideration, during the past week how satisfied have you been with your ...</td>
<td>Very Poor</td>
</tr>
<tr>
<td>... physical health?</td>
<td>1</td>
</tr>
<tr>
<td>... mood?</td>
<td>1</td>
</tr>
<tr>
<td>... work?</td>
<td>1</td>
</tr>
<tr>
<td>... household activities?</td>
<td>1</td>
</tr>
<tr>
<td>... social relationships?</td>
<td>1</td>
</tr>
<tr>
<td>... family relationships?</td>
<td>1</td>
</tr>
<tr>
<td>... leisure time activities?</td>
<td>1</td>
</tr>
<tr>
<td>... ability to function in daily life?</td>
<td>1</td>
</tr>
<tr>
<td>... sexual drive, interest and/or performance?</td>
<td>1</td>
</tr>
<tr>
<td>... economic status?</td>
<td>1</td>
</tr>
<tr>
<td>... living/housing situation?</td>
<td>1</td>
</tr>
<tr>
<td>... ability to get around physically without feeling dizzy or unsteady or falling?*</td>
<td>1</td>
</tr>
<tr>
<td>... your vision in terms of ability to do work or hobbies?*</td>
<td>1</td>
</tr>
<tr>
<td>... overall sense of well being?</td>
<td>1</td>
</tr>
<tr>
<td>... medication? (If not taking any, check here and leave item blank)</td>
<td>1</td>
</tr>
<tr>
<td>How would you rate your overall life satisfaction and contentment during the past week?</td>
<td>1</td>
</tr>
</tbody>
</table>

* If satisfaction is very poor, poor or fair on these items, please UNDERLINE the factor(s) associated with a lack of satisfaction.

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References


Carpiniello, B., Baita, A., Carta, M. G., Sitzia, R., Macciardi, A. M., Murgia, S. et al. (2002). Clinical and psychosocial outcome of patients affected by panic disorder with or without
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