The role of personality factors in differentiating the severity of panic-related avoidance.

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THE ROLE OF PERSONALITY FACTORS IN
DIFFERENTIATING THE SEVERITY OF PANIC-RELATED AVOIDANCE

by

Stacey Lea Burnard

A Thesis
Submitted to the Faculty of Graduate Studies and Research
Through the Department of Psychology
in Partial Fulfillment of the Requirements for
the Degree of Master of Arts at the
University of Windsor

Windsor, Ontario, Canada
1996
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- Canadian Studies: 0583
- Environment: 0539
- Environment: 0540
- History: 0539
- History: 0540
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- Labor: 0511
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- Agriculture: 0473
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- Plant Genetics: 0469
- Animal Physiology: 0517
- Plant Physiology: 0517
- Wildlife Technology: 0746

**Biology**
- General: 0300
- Anatomy: 0309
- Biostatistics: 0308
- Botany: 0309
- Biochemistry: 0309
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- Ecology: 0599
- Embryology: 0329
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- Heredity: 0573
- Histology: 0410
- Immunology: 0327
- Microbiology: 0599
- Molecular Biology: 0547
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- Geology: 0376
- Geology: 0376

**GEOCHEMISTRY**
- Geochemistry: 0399

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- Aerospace: 0528
- Agricultural: 0530
- Analytical: 0531
- Biological: 0541
- Chemical: 0542
- Civil: 0543
- Computers and Information: 0544
- Electric and Magnetic: 0545
- Hydraulic: 0546
- Industrial: 0547
- Maritime: 0794
- Mechanical: 0548
- Nuclear: 0549
- Petroleum: 0765
- Sanitary: 0554
- Geotechnical: 0438
- Geotechnical: 0439
- Geological: 0499
- Geotechnical: 0449

**PSYCHOLOGY**
- General: 0521
- Abnormal: 0522
- Clinical: 0523
- Developmental: 0524
- Experimental: 0525
- Industrial: 0526
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- Social: 0531
ABSTRACT

Several factors believed to be associated with the development and degree of agoraphobic avoidance were assessed in 80 panic disorder participants (59 female, 21 male) and 80 university students (48 female, 32 male). The two groups differed significantly on measures of perfectionism, self-efficacy, panic coping and stimulus intensity modulation. The panic disorder participants were divided into four groups, based on the various levels of DSM III-R-defined agoraphobia: none, mild, moderate, or severe. The DSM III-R, rather than the DSM IV was used because the DSM IV does not give sufficient detail to adequately classify agoraphobia according to various levels of severity. These four groups did not significantly differ on any of the measures. Therefore, no conclusions could be drawn on the relationship between severity of agoraphobic avoidance and degree of perfectionism, self-efficacy, panic coping capability and stimulus augmenting-reducing behavior. When subsequently collapsed into two groups, according to degree of avoidance, significant differences were found in panic coping, and the “other-oriented” subscale of the perfectionism measure. No medication or gender effects were found to be significant. These results support previous findings that indicate ineffective coping styles, as well as other personality factors, are associated with panic disorder and agoraphobic individuals. In particular, further research is warranted in the area of perfectionism.
DEDICATION

I dedicate this thesis to all those who endured this struggle with me, and for all the agoraphobics and panic disorder individuals who struggle everyday of their lives. Special thanks to all those who participated and assisted me with the research, and to my chairperson, Dr. Kathy Laffreniere and the other committee members, Dr. Charlene Senn and Dr. Sharon McMahon, who continued to read this thesis even as the years rolled on.
# TABLE OF CONTENTS

**ABSTRACT**

**DEDICATION**

**LIST OF TABLES**

**CHAPTER**

<table>
<thead>
<tr>
<th>I.</th>
<th>INTRODUCTION</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Panic</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Panic Disorder</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Agoraphobia</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Panic Disorder and Agoraphobia</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Personality Factors</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Stimulus Intensity Modulation</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Self-Efficacy</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Panic Coping</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Perfectionism</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Purpose of the Current Study</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Hypotheses</td>
<td>17</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>II.</th>
<th>METHOD</th>
<th>19</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Participants and Recruitment</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Measures</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Procedure</td>
<td>24</td>
</tr>
</tbody>
</table>

| III. | RESULTS | 26 |

<table>
<thead>
<tr>
<th>IV.</th>
<th>DISCUSSION</th>
<th>42</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Descriptive Findings</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>Limitations of the Study</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>Implications for Further Research and Therapeutic Interventions</td>
<td>51</td>
</tr>
</tbody>
</table>

| REFERENCES | 54 |

| FOOTNOTES | 64 |

| APPENDIX A: Advertisement | 65 |
| APPENDIX B: Diagnostic Questionnaire | 66 |
| APPENDIX C: Vando R-A Scale | 70 |
TABLE OF CONTENTS (Cont'd.)

APPENDIX D: MPS 75
APPENDIX E: Self-Efficacy Scale 78
APPENDIX F: Panic Attack Questionnaire 80
APPENDIX G: Research Information and Consent Form 83
APPENDIX H: Instructions 84
VITA AUCTORIS 85
LIST OF TABLES

Table 1: Reliability Analysis of Scales and Subscales  
Table 2: Distribution of Males and Females by Clinical Grouping  
Table 3: Effect of Gender on Dependent Measures  
Table 4: Partial Correlation: Partialing out Age  
Table 5: The Means of Situations Avoided and Feared  
Table 6: The Means of Coping Strategies  
Table 7: Correlation Coefficients among Dependent Variables  
Table 8: T-tests Comparing the Community and University  
Samples on 4 Scales  
Table 9: MANOVA Comparing the Community and University  
Samples on MPS subscales  
Table 10: T-tests Comparing 2 Clinical Groups on 4 Measures  
Table 11: MANOVA with 2 Clinical Groups on MPS subscales
CHAPTER I

INTRODUCTION

According to the DSM IV (APA, 1994), both panic disorder and agoraphobia are classified as anxiety disorders. Generally, the unifying feature of these two disorders is the experience of panic attacks. Panic attacks are primarily a physiological sensation consisting of shortness of breath, depersonalization (an alteration in the perception or experience of self), dizziness, heart palpitations, sweating, and nausea or abdominal distress (DSM IV, APA, 1994). Except for these physiological sensations associated with panic attacks, relatively little is known about agoraphobia or panic disorder. No generalized theory has been documented to account for the development of, or the personality factors underlying, either of these disorders. Although over 95% of those who present with agoraphobia also have a current diagnosis of panic disorder (DSM IV, APA, 1994), the exact relationship between these two disorders is unknown (Buller, Wolfgang, & Benkert, 1986).

The purpose of this study was twofold: to examine a number of personality factors that may differentiate panic disorder and agoraphobic individuals from a university student population, and to examine these same factors in an effort to explain the relationship between panic disorder and agoraphobia.

The significance of this research is to provide additional support, along with new insights, to the field of panic disorder and agoraphobia. Also, given that the underlying
mechanisms of the major component of treatment of these two disorders, exposure therapy (allowing the individual to enter a situation where a panic attack can be experienced), are not well understood and only moderately effective (Emmelkamp, 1982). It is hoped that this research may prompt interest into the exploration of possible alternative treatment modalities.

Panic

According to Rapee, Mattick, & Murrell (1986), panic represents a primitive coping strategy represented by discrete periods of intense fear. Panic attacks are primarily physiological, but irrational cognitions, such as fears of dying, of going crazy or of losing control, are also prominent (DSM IV, APA, 1994). Some panic attacks seem to occur out-of-the-blue, whereas others are either cued by involuntary physiological sensations or by irrational cognitions (Rapee, Ancis, & Barlow, 1988; Rapee, Mattick, & Murrell, 1986), or by external stimuli (Rapee & Murrell, 1988), some of which may be subliminal to the individual.

While the precipitating factors behind an initial panic attack are not well understood, it is generally agreed that stress, whether positive or negative, seems to play a significant role. Interpersonal conflict seems to be especially significant in some research studies (Last, Barlow, & O'Brien, 1984; Shean, 1990). Moreover, a traumatic childhood accompanied by the loss of a parent, or an anxious family environment characterized by unemotional, highly demanding and overly critical parents, are prevalent personal situations common to many panic-prone individuals. This parental style is commonly referred to as “affectionless control” (Alfin, 1987; Free, Winget, & Whitman, 1993; Silove, 1996). Early experience with a lack of control over one's environment has been
linked to anxiety disorders such as panic and generalized anxiety (Barlow, 1991). At the same time, however, both family and twin studies indicate that panic also has genetic components (Crowe, Noyes, & Persico, 1988).

Regardless of the etiology, people who are plagued with panic experience a decreased quality of life in terms of emotional trauma. Panickers tend to self-medicate in their attempts to cope with panic, which places them at risk for secondary problems, specifically substance abuse, depression and additional anxiety disorders (Brown & Cash, 1990; Chambless, 1985; Zitrin, Klein, Woerner, & Ross, 1983; Norton, Dorward, & Cox, 1986; Sheehan, 1982).

**Panic Disorder**

Estimates of the proportion of the population who experience an occasional panic attack range from 7% to 35% (Norton, Harrison, Hauch, & Rhodes, 1985; Telch, Lucas, & Nelson, 1989b). Four percent to seven percent of the general population are diagnosed with panic disorder. The diagnostic criteria for panic disorder is either four panic attacks within a four week period, or one or more attacks that are followed by a period of at least a month of persistent fear of having another attack (DSM-III-R, APA, 1987). In fact, a central feature of panic disorder is the persistent fear of having another attack or what is referred to as a “fear of fear” (Goldstein & Chambless, 1978; Reiss, Peterson, Gursky, & McNally, 1986).

While it is generally agreed that clinical, or clinically diagnosed, and nonclinical panickers experience the same physiological symptoms during a panic attack, clinical panickers have more panic episodes, report greater intensity of sensations, and are more likely to report fears of derealization (a subjective sense that the environment is strange or
unreal) and of impending doom. In frequent panickers respond with less anxiety or fear to the physiological sensations and are less apprehensive about the occurrence of a future panic attack (Brown & Cash, 1990; Norton, et al., 1985; Rapee, et al., 1988; Telch et al., 1989b).

Most people who experience an occasional panic attack are reacting to what could objectively be described as a fearful stimulus, such as a test or examination. However, people classified with panic disorder (with or without agoraphobia) seem to possess an irrational fear of the environment and thus easily feel unsafe. These individuals tend to panic in what could objectively be construed as relatively innocuous situations, as well as in fearful situations (Arntz, Rauner, & Van Den Hout, 1995; Beck, Emery, & Greenberg, 1985; Clark, 1986).

What seems to be highly significant for panic to occur is the anticipation of, and apprehension over the recurrence of anxiety (Goldstein & Chambless, 1978). Individuals with a history of panic attacks learn to anxiously anticipate the possibility of further panic attacks and have an exaggerated appraisal of the negative consequences of anxiety (Rachman & Bichard, 1988; Schmidt, Jacquine, & Telch, 1994).

Various models have been proposed to account for the development of panic disorder. Among them, the well documented cognitive model (Beck et al., 1985; Clark, 1986) contends that a cognitive misattribution occurs. A person experiencing a panic attack catastrophizes, focuses on the fear, and misinterprets the source of the physiological symptoms as serious physical or mental diseases. There seems to be an inability, on the part of the panicker, to reappraise this interpretation. As such, these symptoms may be construed as life threatening.
The cognitive approach proposes that panic attacks are not only precipitated by physiological reactions arising from cognitive misinterpretations of a stimulus, but also that a cognitive schema is responsible for the maintenance of panic attacks (Barlow, 1988; Clark, 1986; Mogg, Bradley, Millar, & White, 1995; Rapee et al., 1986; Sanderson, Rapee, & Barlow, 1989). A number of researchers suggest that panickers are more likely to respond with anxiety to stimuli because they possess a "fear or danger schema" or a dysfunctional cognitive style that is easily activated (Beck, 1976; Beck, et al., 1985; Clark, 1986).

An attentional bias seems to be prevalent in anxiety disorders such that pathologically fearful individuals show a heightened readiness to perceive and encode fear cues (Arntz, 1995; Barlow, 1988; Becker, Rinck, & Margraf, 1994; Clark, 1986). A number of psychophysical studies involving the Stroop colour-naming word tests have confirmed, through delayed latencies to visual stimuli, that individuals with panic disorder may exhibit a cognitive bias to attend selectively to stimuli that pertain to physical threat (Asmundson, Sandler, Wilson, & Walker, 1992; Ehlers, Margraf, Davies, & Roth, 1988). This "selective abstraction" constrains the panicker's evaluation of a situation such that she/he focuses on cues of danger and ignores indications of safety (Ganellen, Matuzas, Uhlenhuth, Glass, & Easton, 1986; Mogg et al., 1995).

**Agoraphobia**

According to the DSM III-R (APA, 1987) and IV(APA, 1994), agoraphobia is defined as a fear of being in places or situations from which escape might be difficult or embarrassing, or in which help might not be available in the event of a panic attack. Common agoraphobic situations 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 car. As a result, the person either restricts travel, needs a companion when away from home, or endures agoraphobic situations despite intense anxiety. Agoraphobia is diagnosed as being mild, moderate, or severe depending on the extent that the individual can travel from his/her home (DSM III-R, APA, 1987).

Although the majority of agoraphobic individuals experience panic symptoms, the anxiety associated with panic attacks is merely an associative fear to the phobic anxiety, or the feared situation. The central fear for the agoraphobic individual is being in a situation from which escape might be difficult or embarrassing, or in which help may not be available in the event of having a panic attack (DSM IV, APA, 1994; Thyer, Himle, Curtis, Cameron, & Neese, 1985; Turner, Williams, Beidel, & Mezzich, 1986). In contrast, the panic attack itself, with the natural corollary of fears of dying or doing something crazy, is the central fear for the panic disorder patient (DSM IV, APA, 1994).

As previously indicated, the majority of individuals with agoraphobia also have panic disorder (DSM IV, APA, 1994), but the relationship between the two disorders is unclear (Buller et al., 1986). Panic attacks are usually involved in the pathogenesis of agoraphobia, and agoraphobia without panic attacks is rare (Franklin, 1987; Garvey & Tuason, 1984; Goldstein & Chambless, 1978; Thyer et al., 1985; Zitrin et al., 1983). Accordingly, the current organization of the DSM IV (APA, 1994) reflects the central role of panic attacks in agoraphobia, as agoraphobia is subsumed within the panic disorder classification.
Panic Disorder and Agoraphobia

While a lifetime prevalence or occurrence of panic disorder is approximately 2%, when agoraphobia is included, the lifetime prevalence for panic disorder increases to between 5% to 8% of the general population (Norton et al., 1985; Telch et al., 1989b). Panic disorder is about equally common in males and females, whereas panic disorder with agoraphobia is estimated to be anywhere between two to four times more common in female clinical populations (Boyd, Rae, Thompson, & Burns, 1990; Chambless, 1985; Clum & Knowles, 1991; Norton et al., 1985; Oei, Wanstall, & Evans, 1990).

Whether or not panic disorder with agoraphobia and panic disorder without agoraphobia are in fact subcategories of a core endogenous anxiety disorder remains unclear. What is clear is that agoraphobia represents a more severe behavioral response, avoidance, than does panic disorder. Klein (1981) suggests that agoraphobia reflects a more severe or chronic psychopathology, based on a higher frequency of panic, and that a temporal relationship exists between panic episodes and the development of avoidance behaviors. Agoraphobia may develop after a series of panic attacks that have been cued by particular situations that have become associated with anticipatory anxiety (Garvey & Tuason, 1984; Thyer et al., 1985; Turner et al., 1986). Unfortunately, Klein’s hypothesis fails to explain the incidences of agoraphobia without a history of panic attacks, and does not account for the sizable percentage of individuals with panic who do not develop agoraphobia (Craske, Sanderson, & Barlow, 1987).

Craske and Barlow (1988) maintain that avoidance is not a simple function of panic severity or occurrence, but rather a style of responding to the anticipation of panic which is dependent upon individual differences. In other words, panic and avoidance are two
different coping styles, or responses to fear. Moreover, Craske, Sanderson, and Barlow (1987) assert that it is not necessarily true that agoraphobic individuals with panic have a longer history of panic than panic disorder patients, as some individuals panic for many years without developing avoidance patterns. These researchers questioned the validity of Klein’s studies given that they were based on retrospective data. These authors also contend that even if avoidance is often preceded by panic, this does not justify the assumption that panic is always followed by avoidance.

While disagreement exists, a number of researchers support Craske, Sanderson, and Barlow's (1987) refutation of the “severity hypothesis.” Irrespective of the type of measurement used: number of panic symptoms; frequency of panic attacks; or severity of the panic itself, these researchers contend that patients with either clinical diagnosis experience the same degree of severity of panic attacks (Barlow et al., 1985; Craske & Barlow, 1988; Fleming & Faulk, 1989; Telch, Brouillard, Telch, Agras, & Taylor, 1989a). Moreover, it is generally agreed that the physiological sensations of a panic attack are essentially the same between the two clinical groups (Adler, Craske, Kirshenbaum, & Barlow, 1989; Craske & Barlow, 1988; Fleming & Faulk, 1989; Rapee & Murrell, 1988; Telch et al., 1989a).

Although the symptomatology and symptom severity appear to be the same regardless of diagnosis, agoraphobic individuals do experience more anxiety surrounding a panic attack. Specifically, individuals diagnosed with agoraphobia have been found to: 1) experience more agoraphobic fear or phobic anxiety (Thyer et al., 1985; Turner et al., 1986); 2) possess a higher degree of anticipatory anxiety or panic expectancy (Adler et al., 1989; Craske & Barlow, 1988; Mavissakalian, 1988; Telch et al., 1989a; Turner et al., 1989).
1986); and 3) be more anxious over the consequences of panic or experience more
“anxiety sensitivity” than panic disorder patients (Ganellen et al., 1986; Reiss et al., 1986;
Taylor, 1995; Telch et al., 1989a). In particular, agoraphobic individuals have been found
to be more socially anxious (Fisher & Wilson, 1985), to be more concerned about the
social consequences of panicking (Fleming & Faulk, 1989; Telch et al., 1989a), and to be
more concerned about losing control as a result of a panic attack (Belfer & Glass, 1992;

**Personality Factors**

Individuals who experience panic are at a higher risk for secondary problems.
Moreover, it is contended that the degree of agoraphobic avoidance is related to a greater
degree of other psychopathology (Chambless, 1985; Rapee & Murrell, 1988). In
particular, the literature has also typically described agoraphobic individuals as more likely
to possess personality traits of unassertiveness, dependency, social anxiety, and depression
(Fodor, 1974; Goldberg, 1993; Goldstein & Chambless, 1978; Telch et al., 1989a).

Social anxiety is a trait that has been consistently associated with agoraphobic
individuals (Goldstein & Chambless, 1978). It could be speculated that avoidance of
social situations (malls, etc.) may be more likely if the individual believes panic will lead to
intense social ridicule. A dependent personality, as well as an external locus of control
(Cloitre, Heimberg, Liebowitz, & Gitow, 1992; Van der Molen, Van den Hout, &
Halfens, 1988) have also been consistently correlated with severity of agoraphobic
avoidance. Most agoraphobic individuals rely on the company of others in order to enter
feared situations (DSM IV, APA, 1994). Also, it may well be that a tendency to see that
panic attacks may be produced by external factors will more likely result in avoidance.
Finally, the depression commonly associated with agoraphobic individuals seems largely due to the impairment in functioning resulting from severe phobic avoidance, as well as the demoralization associated with the inability to manage panic.

It is generally agreed that anxiety disorder patients exhibit a heightened readiness to perceive fear cues. It is also agreed that agoraphobic individuals are relatively more cognizant of cues that trigger panic attacks (Fitzgerald, & Phillips, 1991; Rapee & Murrell, 1988; Street, Craske, & Barlow, 1989), and experience a higher degree of anticipatory anxiety than panic disorder patients. Accordingly, it could be suggested that these two clinical groups are more sensitive to stimuli than the general population, with the agoraphobic group exhibiting the most sensitivity or elevated attentiveness to the environment. Because this “fear schema” is so prevalent with anxiety disorder patients, perhaps panic-prone individuals excessively scan their environment in an effort to detect any hint of danger (Beck, 1976; Clark, 1986). If so, perhaps these individuals are stimulus augmenters as measured by stimulus intensity modulation.

**Stimulus Intensity Modulation**

Individuals with anxiety disorders are, by definition, in a state of higher arousal than the general population. Moreover, panic-prone individuals have been hypothesized to possess a fearful schema (Beck, 1976; Clark, 1986). For these two reasons, panic-prone individuals are more anxious than the general population. As agoraphobia has been linked to the perception of situational and cognitive panic cues (Rapee & Murrell, 1988), it is proposed that severity of agoraphobic avoidance is directly related to extent of hypervigilance, or excessive scanning of the environment.
It is possible that the general population is as equally vigilant to panic cues as agoraphobic individuals, but that they simply do not associate fear with as many cues (Fisher & Wilson, 1985; Mathews, Gelder, & Johnson, 1981). This does not seem plausible, however, as hypervigilance is generally associated with chronic heightened arousal or anxiety.

A number of researchers (Barlow, 1988; Belfer & Glass, 1992; Clark, 1986; Mathews et al., 1981) subscribe to the cognitive-attentional model, which suggests that panic-prone individuals, and in particular agoraphobic individuals, are overattentive to and more fearful of internal body sensations. In turn, they begin to catastrophize, resulting in an inability to realistically appraise the panic sensations. They excessively scan their internal physical environments for any signs of arousal. This suggests that individuals who suffer from panic attacks are characterized by a high concern regarding physical well-being, which may cause them to be vigilant for minor variations in somatic function that they believe signal the onset of an attack.

It is contended that agoraphobic individuals anticipate more panic than panic disorder individuals because they are more aware of the possible panic cues. Moreover, as agoraphobic individuals are more concerned about the consequences of panicking than panic disorder individuals, they may be more alert to stimuli signaling the possibility of becoming anxious (Reiss et al., 1986).

While agoraphobic individuals, by definition, fear inescapable situations, their coping strategies range from altering the situation to increase the chances of escape if need be, to alternatively avoiding the situation(s) altogether. By definition, severity of agoraphobia is based on number of places avoided. It seems reasonable to conclude that
mild agoraphobic individuals are not as attentive to stimuli, and thus they do not associate fear with as many cues, nor subsequently avoid the situations associated with the cues. Given that the literature suggests that individuals with panic disorder experience the same frequency of attacks as agoraphobic individuals, it is suggested that they are less sensitive to situational cues or they would show greater avoidance.

The current study suggests that a stimulus intensity control mechanism or sensory processing may explain this stimulus sensitivity that seems to be a prevalent feature of panic-prone individuals. Asenath Petrie (1967), and more recently Barnes (1985), proposed a theory of individual differences in stimulus intensity modulation or perceptual reactance. Stimulus intensity modulation is proposed to be a central control mechanism similar to cortical arousal. In her investigations of individual differences in response to pain, Petrie classified stimulus augmenters as people who are sensitive to pain or environmental stimulation, and stimulus reducers as those not sensitive to pain or environmental stimulation. Petrie argued that stimulus intensity modulation is a pervasive personality trait that mediates responses not only to pain but to a wide variety of stimuli.

The manner in which an individual processes pain perceptually, as reflected in her/his pain tolerance, is related to a more general phenomenon of how she/he processes stimulation in all sensory modalities. Individuals who are high on pain tolerance are characterized by reducing incoming stimulation. They enjoy a high level of sensory stimulation. Conversely, if those low on pain tolerance are characterized by augmenting incoming stimulation, then it would be expected that they would be relatively bombarded by average levels of stimulation. Stimulus augmenters are more sensitive to all environmental stimuli (Barnes, 1985).
Self-Efficacy

Self-efficacy is the perception that one's coping ability is effective, and is influenced by successful coping. Perceived self-efficacy to exercise control over potential threats plays a central role in warding off anxiety (Bandura, Adams, Hardy, & Howells, 1980; Bandura, 1988). Self-efficacy has been found to be negatively correlated with anxiety arousal (Bandura, 1988; Smith, 1989).

Individuals who believe they can exercise control over potential threats are less likely to engage in apprehensive thinking and are not as perturbed by these threats. A prior history of mastery or accomplishment, and thus expectations of personal efficacy, determines whether coping behavior will be initiated, and thus has a strong impact on responding to stressful events (Bandura et al., 1980). In particular, individuals with positive appraisals of their capabilities to contend with panic or to execute effective coping strategies to manage panic may be less likely to panic, or to develop extensive panic-related avoidance.

In contrast, both clinical groups exhibit a dysfunctional coping style in which they either panic and/or constrain their lives by avoiding panic situations. According to Brown & Cash (1990) panic disorder and agoraphobic individuals have been found to rely more than nonpanickers on less effective coping strategies such as wishful thinking and emotion-focused, rather than problem-focused, coping.

While most theories of agoraphobia assume that the person is helpless and low in self-sufficiency, few explicitly examine the concept of self-efficacy, preferring to focus on panic expectancy and anxiety sensitivity, and related behavioral measures to evaluate therapeutic change. It is surprising that self-efficacy scales are rarely used in panic and
agoraphobic research despite evidence that self-efficacy consistently predicts therapeutic changes in phobic, including agoraphobic behavior (Bandura, 1986; Southworth & Kirsch, 1988; Williams & Watson, 1985).

Self-efficacy scales clearly tap into cognitive functioning by measuring self-perceptions of coping capabilities. However, studies that examine self-efficacy usually measure the behavioral or mobility attributes of agoraphobic individuals (Kinney & Williams, 1988). Not surprisingly, these researchers discover that severity of phobic avoidance is correlated with lower levels of self-efficacy. By measuring the number of places avoided as an index of self-efficacy, one is confusing coping style, or perceived capability to enter fear-provoking situations (shopping malls, public transportation systems, etc.) with appraisals of self-efficacy. To measure perceived self-efficacy, a self-efficacy measure must be employed, rather than relying on degree of avoidance behavior.

Avoidance behavior and panicking are both simply ineffective coping styles, neither of which can be assumed to be more representative of self-inefficacious behavior than the other. As Rachmann, Craske, Tallman, and Solyon (1986) effectively demonstrated, avoidance need not be a negative coping strategy for dealing with panic attacks. Their study revealed that escaping and/or avoiding while still fearful, in comparison to remaining in the fearful situation, does not necessarily lead to increased fear and to increased avoidance.

From the previous studies it can probably be safely deduced that the two clinical groups are less able to manage anxiety or panic. It is of interest to this investigation, however, to determine whether differences in self-efficacy are simply situation-specific panic situations, or generalize to non fearful situations.
Panic Coping

Although it has been reported that agoraphobic individuals have lower perceived self-efficacy in coping with panic, it is unclear what type of efficacy was in fact measured in most studies (Fisher & Wilson, 1985). Only Telch et al. (1989a) clearly indicated the use of a panic management measure. They suggested that belief in one’s ability to cope effectively with panic is combined with one’s estimation of panic likelihood and expectation/appraisal of negative panic consequences to determine avoidance. Minimum avoiders are more confident in their ability to cope with panic than are extensive avoiders. As their study didn’t comment on the panic disorder population, but rather focused on groupings of severity levels of agoraphobia, it may be revealing to examine the panic coping ability of both clinical groups.

Perfectionism

Perfectionism is most commonly defined as the tendency to maintain and strive towards unrealistic goals and standards for one’s self (Hewitt & Flett, 1991). Perfectionists selectively attend to and overgeneralize failure, employing overly critical self-evaluations. Rigid thinking individuals, they strive for precision and engage in all-or-none thinking, whereby only total success or failure are possible outcomes (Frost, Lahart, & Rosenblate, 1990; Hewitt & Flett, 1991).

Three types of perfectionism have been identified: self-oriented perfectionism, or maintaining high standards for self; other-oriented perfectionism, or imposing high standards on others; and socially-prescribed perfectionism, or perceiving others to have unrealistic standards for one’s own behavior (Hewitt, Flett, & Holigrocki, 1988).
It is widely believed that perfectionism is related to lower levels of adjustment. Perfectionism has been found to be related to depression (Flett, Hewitt, & Dyck, 1989), and neuroticism (Hewitt, Flett, & Blankstein, 1991). A number of studies have found a strong relationship between anxiety and perfectionism (Flett et al., 1989; Hewitt & Flett, 1991; Hewitt et al., 1991; Hewitt, Flett, Turnbull-Donovan, & Mikail, 1991). At times linked to obsessive-compulsive disorder (Frost et al., 1990; Mallinger, 1984; Rhéaume, Freeston, Dugas, Letarte, & Ladouceur, 1995), as well as Type A behavior (Flett et al., 1989) perfectionists not only prefer order and organization, but seem to sometimes possess an anxious disposition.

No research has been found that directly analyses the relationship between perfectionism and panic disorder or agoraphobic avoidance. But the research on perfectionism and neuroticism, and especially on obsessive-compulsive behavior, strongly suggests that perfectionism may play a role.

While it is obvious that these two clinical groups ineffectively manage panic, a number of studies have identified a perceived lack of control over the environment as central to panic attacks (Ley, 1989; Rapee, et al., 1986; Sanderson, et al., 1989). According to Mallinger (1984), the obsessive-compulsive is perfectionistic in his/her attempts to maintain control over threats by reducing the risk of harm and thereby ensuring safety. Similarly, it is assumed in the current study that panic disorder and agoraphobic individuals may attempt to combat what they perceive to be a threatening, uncontrollable, environment. While the obsessive-compulsive engages in ritualistic behaviors in the hopes of attaining perfection, perhaps the panic-prone individuals, unable to achieve order and predictability in all environments, either panic or retreat to a safe and
predictable environment, such as home. If perfectionism is found to be inherent in these two clinical disorders it may be considered to be employed as an attempt to maintain organization and order in the environment. This perfectionistic tendency may be quite pronounced in the severe agoraphobic individuals who constrain their activities to the limited number of situations in which they can maintain some semblance of order and organization.

Purpose of the Current Study

It is contended by the investigator that personality factors may not only differentiate panic disorder and agoraphobic populations from the general population, but may also provide insights into the relationship between panic disorder and agoraphobia. Some of the factors in this study: perfectionism, stimulus intensity modulation and self-efficacy, have not been studied in relation to the distinction between these two clinical disorders. Also, agoraphobia and panic disorder have not specifically been analyzed in terms of differences in the abilities of sufferers to manage panic.

The present study attempts to determine whether a convenience sample from community self-help groups differs from a university sample in terms of the variables of perfectionism, stimulus intensity modulation, self-efficacy and panic coping. Within the clinical (community) sample the relationship between severity level of agoraphobia and the above-mentioned variables will also be examined.

Hypotheses

Four hypotheses will be tested.

Hypothesis 1. It is predicted that participants who report greater avoidance will present themselves as augmenters, according to the stimulus intensity modulation model,
compared to those who experience less marked avoidance, and those who have panic disorder. It is also predicted that the clinical group will show a greater tendency to be augmenters in comparison to the university sample.

**Hypothesis 2.** It is predicted that participants who report greater avoidance will be more perfectionistic, on a global scale, as well as on the subscales, than those who experience less marked avoidance, and those who experience panic-disorder. It is also expected that the clinical group as a whole will exhibit more perfectionism on both the global scale and subscales, than the university sample.

**Hypothesis 3.** It is expected that the clinical group will be less self-efficacious than the university sample and that increased levels of avoidance will be associated with lower self-efficacy.

**Hypothesis 4.** It is expected that participants who report more severe levels of agoraphobia will demonstrate less panic coping ability than less severe agoraphobic individuals and panic disorder individuals. It is also expected that the clinical group will demonstrate less panic coping ability than the university sample.
CHAPTER II

METHOD

Participants and Recruitment

All participants were treated in accordance with APA ethical principles as monitored by the University of Windsor. A total of 205 questionnaires were distributed and 187 were returned, indicating a response rate of 91%. Ninety of the remaining 187 questionnaires were obtained from the student sample. Four of these questionnaires contained insufficient responses to be considered valid. Ninety-seven questionnaires were obtained from the community sample. Due to insufficient information, eight were considered invalid. Also, fifteen of these respondents could not be classified into any of the four clinical groupings, as outlined in the study. The resulting sample size for the study was 180. Due to revisions to one of the questionnaires, as well as a lack of response on the part of some of the participants, the type of medication used by members of the community sample was obtained on only 27 participants.

Eighty participants were gathered from selected panic disorder community self-help groups, and from newspapers, in Toronto, Ontario (30), Detroit, Michigan (20), and the Lower Mainland of British Columbia (30). Six of the Toronto sample consisted of university students who were reclassified into the community sample because they met the diagnostic criteria for panic disorder or agoraphobia. The severe agoraphobic individuals (n = 20) were recruited through the local newspaper. The advertisement stated that a
graduate psychology student was interested in recruiting individuals for a study on panic and agoraphobia, and was willing to come to the home (Appendix A).

These eighty participants were classified into four groups of 20, according to the DSM III-R-defined severity levels of agoraphobia (none, mild, moderate, and severe). Eighty undergraduate psychology students were recruited from the University of Windsor, Ontario, and used as the comparison group.

The community groups that were approached did not conform to the typical demographic characteristics of self-help groups (Lieberman & Snowden, 1993). In fact, the majority of this sample were women (59), rather than men (21), and the average educational status was less than the comparison group. This is probably because women are more typically afflicted with agoraphobia (and the ratio of women to men in these groups paralleled the statistics for a typical agoraphobic sample). The comparison group was not representative of the general public, given that they were recruited from a university, thereby biasing the average educational level. The university sample was younger ($M = 26.1$, $SD = 6.4$) than the community sample ($M = 36.5$, $SD = 12.4$).

**Measures**

The following self-report measures were administered to the participants:

**Diagnostic Questionnaire (Appendix B).**

As the purpose behind the use of this questionnaire is for group allocation, and to collect demographic information, rather than for therapeutic purposes, a questionnaire developed by the investigator was used. The DSM-III-R-defined severity levels of agoraphobia were used to classify participants¹. The participants made a self-diagnosis by checking off the appropriate category. In order to capture more information than is
available from the DSM-III-R criteria, a listing of commonly avoided places was also included. The diagnostic criteria for panic disorder were also included (four or more panic attacks within a four week period, or one or more attacks followed by a period of at least a month of persistent fear of having another attack) to ensure accurate group assignment.

This questionnaire also included questions aimed at obtaining demographic and other pertinent background data. In addition to gender, age and educational status, information about the use and type of medication was collected.

**Stimulus Intensity Modulation (Appendix C).**

The Vando Reducing-Augmenting Scale (R-A Scale; Vando, 1974) was used to assess stimulus intensity modulation or perceptual reactance. The Vando R-A Scale, measuring stimulus-reducing augmenting behavior, consists of 54 forced choice paired statements describing situations of contrasting stimulus intensity in the various sensory modalities, and takes approximately 15 minutes to complete. Some items are reverse-keyed to reduce response bias, and the items are summed to a score out of 54. Higher scores reflect the stimulus reducing tendency. The Vando R-A Scale is a reliable and valid measure of stimulus intensity modulation. Alpha coefficients have been found to range from .69 to .87, with a test-retest reliability of .74 (Barnes, 1985). Convergent validities of 0.89 and 0.65 have been found between the R-A Scale and pain tolerance and sensation seeking, respectively (Barnes, 1985).

**Perfectionism (Appendix D).**

As it is one of the newest, and most widely used inventories, the Multidimensional Perfectionism Scale (MPS; Hewitt et al., 1988) was employed in this study. This 45-item scale consists of three subscales: self-oriented perfectionism, which entails setting, and
holding standards that are difficult to attain (e.g., “One of my goals is to be perfect in everything I do”); other-oriented perfectionism, which involves high expectations about the capabilities of others (e.g., “I have high expectations for the people who are important to me”); and socially-prescribed perfectionism, which includes perceptions about one’s abilities to meet expectations of significant others (e.g., “My family expects me to be perfect”).

Participants rate their agreement on a 7-point Likert scale with 1 indicating “strongly disagree” and 7 indicating “strongly agree,” and the responses are summed to find the three subscales scores, as well as an overall score of perfectionism. Higher scores reflect higher perfectionism. The MPS takes approximately 20 minutes to complete.

Some items are reverse-keyed in order to reduce response bias. High reliabilities, in terms of internal consistency, have been found for the full-scale ($r = 0.89$), as well as for the subscales (alpha coefficients of .86, .82, and .87 for the self-oriented, other-oriented, and socially-prescribed perfectionism respectively) (Hewitt & Flett, 1991; Hewitt et al., 1988). The subscales possess adequate degrees of test-retest reliabilities (three month test-retest coefficients were .88 for self-oriented perfectionism, .85 for other-oriented perfectionism, and .75 for socially-prescribed perfectionism). Respectable construct validity results have been obtained. Studies analyzing convergent validities have found perfectionism to be related to anxiety, depression and Type A behavior (Hewitt et al., 1988).

**Self-Efficacy (Appendix E).**

Self-efficacy was assessed through the Self-Efficacy Scale (SE-S; Sherer et al., 1982). The Self-Efficacy Scales is a 30 item instrument that assesses an individual’s
perception of his/her self-efficacy. Participants rate their agreement with each item on a 5-point Likert scale, ranging from "strongly agree" to "strongly disagree." Higher scores represent higher self-efficacy beliefs. Some items are reversed-keyed to reduce response bias, and some distracter items are included (e.g. "I like to grow house plants"). It takes approximately 15 minutes to complete.

Research indicates that the S-E scale is both a reliable (alpha coefficient: * of .86), and a valid instrument (Sherer et al., 1982). Studies analyzing convergent validity have found high self-efficacy scores to be associated with an internal orientation, as measured by Rotter's Internal-External Control Scale.

**Panic Coping (Appendix F)**

Panic coping was assessed through a 20-item subscale of the Panic Attack Questionnaire (PAQ; Cox, Norton, & Swinson, 1992). The PAQ describes coping strategies that can be used during a panic attack. If a particular strategy is used, participants rate, on a 5-point Likert scale, ranging from "totally ineffective" to "totally effective," how effective they believe the strategy is for coping with panic attacks. It takes approximately five minutes to complete.

Since the PAQ is a relatively new measure, reliability and validity data were not available. It is used extensively at the Clarke Institute in Toronto, Ontario to measure therapeutic effectiveness. In this study it was also used as a descriptive measure.

In addition to the PAQ, the panic coping subscale of the Panic Appraisal Inventory (PAI; Telch, 1987), was used. This 10-item scale assesses confidence levels in executing certain coping strategies and takes approximately five minutes to complete. The PAI-Panic Coping scale asks participants to rate their confidence in executing panic-coping
behaviors (i.e., use distraction, control breathing, etc.). Each item is rated on a 0 (not confident at all) to 100 (completely confident) scale. This tool can be used to determine therapeutic effectiveness, or an average of the items can be taken to obtain an overall confidence rating.

This scale has adequate test-retest reliability ($r = .81$) and internal consistency (alpha coefficient of .88) (Telch, 1987). Although the scale has high face validity, information on other types of validity was unavailable.

**Procedure**

At the outset of each session the participants were informed that the researcher was conducting this study for her master's thesis research, and that the intention of the research was to analyze personality factors associated with panic attacks and agoraphobia. Participants were advised that they could obtain the results of the study, by contacting the researcher at the Psychology Department of the University of Windsor. Participants who responded by mail were advised of all these instructions through a phone conversation held prior to completing the questionnaires.

Testing administration took approximately one and one half hours. The measures were group administered to the university sample at four different time blocks. Students were asked to choose whatever time block suited their schedules. Students were seated two or three seats apart to allow for privacy in completing the questionnaires. Student participants received three credit points toward a required psychology course, for their participation.

The community groups were tested at their various sites. The exception was the severe agoraphobic individuals who were individually assessed in their homes, and those
that responded by mail after completing the questionnaires in their homes. Testing
individuals in the community groups occurred over a period of two years.

All participants were given an envelope that contained the five questionnaires and
the consent form (Appendix G), which ensures the participants’ confidentiality and the
voluntary nature of their participation in the study. An instruction sheet was also provided
(Appendix H), outlining the number of questionnaires and the criteria for completing them
(i.e., that only participants who had experienced panic attacks should fill out the panic
coping questionnaire).
CHAPTER III

RESULTS

Utilizing the DSM III-R (APA, 1987) diagnostic criteria for panic disorder and agoraphobia, the university sample was screened to ensure that the criteria for a true control group existed. One panic disorder, two mild, two moderate and one severe agoraphobic individuals were found and reclassified into their respective clinical groupings. The independent variable, severity of agoraphobic avoidance, consisted of five levels: no panic disorder or agoraphobia (university or nonclinical sample), panic disorder with no agoraphobia, mild, moderate and severe agoraphobia. The dependent variables consisted of four measures: stimulus intensity modulation (R-A Scale; Vando, 1974), self-efficacy (SE-S; Sherer, et al, 1982), perfectionism (MPS: Hewitt & Flett, 1989), including the three subscales (self-oriented, other-oriented and socially-prescribed perfectionism), and panic coping (PAI: Telch, 1987).

The internal reliabilities of all scales were examined (Table 1). Extremely high alphas were found for all of the measures and subscales, in both samples, indicating a high degree of internal consistency in scales and subscales.

Overall there were approximately twice as many female as male participants. There were three times as many women as men in the community sample, and the ratio of women to men in the comparison group was 1.5:1 (Table 2). There were also three times
Table 1

Reliability Analysis of Scales and Subscales

<table>
<thead>
<tr>
<th></th>
<th>Community</th>
<th>University</th>
</tr>
</thead>
<tbody>
<tr>
<td>VANDO</td>
<td>.89</td>
<td>.91</td>
</tr>
<tr>
<td>SE-S</td>
<td>.92</td>
<td>.94</td>
</tr>
<tr>
<td>PAI</td>
<td>.98</td>
<td>.96</td>
</tr>
<tr>
<td>SELF</td>
<td>.93</td>
<td>.97</td>
</tr>
<tr>
<td>OTHER</td>
<td>.89</td>
<td>.96</td>
</tr>
<tr>
<td>SOCIAL</td>
<td>.92</td>
<td>.97</td>
</tr>
</tbody>
</table>

Note. SELF, OTHER, and SOC are the self-oriented, other-oriented and socially-prescribed perfectionism subscales of the MPS.
<table>
<thead>
<tr>
<th></th>
<th>Clinical</th>
<th>Nonclinical</th>
<th>Panic Disorder</th>
<th>Mild Agoraphobia</th>
<th>Moderate</th>
<th>Severe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>21</td>
<td>32</td>
<td>4</td>
<td>6</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Female</td>
<td>59</td>
<td>48</td>
<td>16</td>
<td>14</td>
<td>15</td>
<td>14</td>
</tr>
</tbody>
</table>
as many women as men in all the clinical groupings (Table 2). In order to establish
whether data from men and women could be combined, gender differences in all the
variables were examined. Two-tailed t-tests did not reveal significant gender differences
on any of the dependent measures, except self-oriented perfectionism, $t(78) = 2.03, p < .05$ (Table 3). Males scored significantly higher in self-oriented perfectionism than did females.

The use of medication among the community sample was also assessed to determine
its effect on the dependent measures. Exactly half of the community sample was taking
medication, and this percentage was found within each of the four clinical groupings.
Once again two-tailed t-tests, comparing those taking medication and those not, were
performed on all the dependent variables, and no significant findings resulted. Type of
medication effects were assessed by comparing the 27 respondents who stated the type of
medication that they were using and a random sample of 27 from the remainder of the
community group. Of the respondents asked, 50% taking medication were taking
tranquilizers, 10% were taking antidepressants, and the remaining 40% were taking both.
Type of medication produced no statistically significant results on all the dependent
measures. By far, the majority of participants were taking medication on a continuous
basis (73%), rather than on an “as needed” basis. They were using medication as a
maintenance tool rather than a coping technique.

Age and level of education were assessed to determine if any differences existed
between the community and university sample. Not surprisingly, both variables resulted in
statistically significant results, $t(158) = 6.69, p < .0001$, and $t(158) = -6.06, p < .0001$,
respectively (two-tailed t-tests). The mean age for the community sample was 37 years
Table 3
Effect of Gender on Dependent Measures

<table>
<thead>
<tr>
<th></th>
<th>Females (n=59)</th>
<th>M</th>
<th>SD</th>
<th>Males (n=21)</th>
<th>M</th>
<th>SD</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAI</td>
<td>53.56</td>
<td>16.58</td>
<td></td>
<td>52.14</td>
<td>24.98</td>
<td></td>
<td>-0.24</td>
</tr>
<tr>
<td>VANDO</td>
<td>20.20</td>
<td>8.93</td>
<td></td>
<td>23.81</td>
<td>10.71</td>
<td></td>
<td>1.51</td>
</tr>
<tr>
<td>MPS</td>
<td>185.02</td>
<td>42.65</td>
<td></td>
<td>196.71</td>
<td>35.18</td>
<td></td>
<td>1.13</td>
</tr>
<tr>
<td>SELF</td>
<td>69.48</td>
<td>19.58</td>
<td></td>
<td>79.24</td>
<td>17.04</td>
<td></td>
<td>2.03*</td>
</tr>
<tr>
<td>OTHER</td>
<td>55.20</td>
<td>14.51</td>
<td></td>
<td>57.24</td>
<td>14.01</td>
<td></td>
<td>0.56</td>
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<tr>
<td>SOC</td>
<td>60.49</td>
<td>18.01</td>
<td></td>
<td>59.86</td>
<td>16.98</td>
<td></td>
<td>-0.14</td>
</tr>
<tr>
<td>SE-S</td>
<td>71.78</td>
<td>17.29</td>
<td></td>
<td>75.57</td>
<td>16.68</td>
<td></td>
<td>0.87</td>
</tr>
</tbody>
</table>

*Note: SELF, OTHER, and SOC are the self-oriented, other-oriented and socially-prescribed perfectionism subscales of the MPS.

*p < .05
compared to 26 years for the university. The average level of education attained was community college for the community sample and undergraduate school for the university sample. While it has been suggested that lower educational status has been linked to agoraphobia (Rock & Goldberger, 1978) the community sample had attained a relatively high educational level, that of community college. No significant differences in education level were found among the clinical groups within the community sample.

Given the significant age differences between the university and community samples, partial correlations were run (Table 4). Correlations between the groupings and all of the dependent measures, while partialing out the age variable, revealed significant findings on all but "self-oriented" perfectionism and "other-oriented" perfectionism (Table 4).

The types of situations commonly associated with panic attacks revealed some interesting findings. As described in Table 5, the most avoided situation among the agoraphobic sample was planes (\(M = 2.5\)) followed by public transportation or buses (\(M = 2.3\)), crowds (\(M = 2.2\)) and "being far from home" (\(M = 2.1\)). Similar findings were revealed when viewing these situations from the perspective of most feared (Table 5). The most feared situation was planes (\(M = 2.7\)), followed by crowds (\(M = 2.3\)), public transportation or buses (\(M = 2.2\)), and "being far from home" (\(M = 2.2\)). Open spaces, work and "being at home," quite common agoraphobic situations, were, in general, less likely to be avoided or feared.

Upon examination of panic coping strategies (Table 6), it is apparent from all panickers, including the community and university sample (23% of this sample had
Table 4

Partial Correlations: Partialing out Age

<table>
<thead>
<tr>
<th></th>
<th>Community and University Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAI</td>
<td>0.37****</td>
</tr>
<tr>
<td>VANDO</td>
<td>0.31****</td>
</tr>
<tr>
<td>MPS</td>
<td>-0.21**</td>
</tr>
<tr>
<td>SELF</td>
<td>-0.14</td>
</tr>
<tr>
<td>OTHER</td>
<td>-0.01</td>
</tr>
<tr>
<td>SOC</td>
<td>-0.30****</td>
</tr>
<tr>
<td>SE-S</td>
<td>0.41****</td>
</tr>
</tbody>
</table>

***p < .05, ****p < .0001
Table 5

The Means of Situations Avoided and the Means of Situations Feared

<table>
<thead>
<tr>
<th>Situations Avoided</th>
<th>Mean</th>
<th>Situations Feared</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plane</td>
<td>2.5</td>
<td>Plane</td>
<td>2.7</td>
</tr>
<tr>
<td>Bus</td>
<td>2.3</td>
<td>Crowds</td>
<td>2.3</td>
</tr>
<tr>
<td>Crowds</td>
<td>2.2</td>
<td>Bus</td>
<td>2.2</td>
</tr>
<tr>
<td>Far from Home</td>
<td>2.1</td>
<td>Far from Home</td>
<td>2.2</td>
</tr>
<tr>
<td>Enclosed Places</td>
<td>1.9</td>
<td>Enclosed Places</td>
<td>2.0</td>
</tr>
<tr>
<td>Malls</td>
<td>1.8</td>
<td>Public Places</td>
<td>1.7</td>
</tr>
<tr>
<td>Waiting in Line</td>
<td>1.7</td>
<td>Malls</td>
<td>1.6</td>
</tr>
<tr>
<td>Public Places</td>
<td>1.5</td>
<td>Drive</td>
<td>1.6</td>
</tr>
<tr>
<td>Grocery Stores</td>
<td>1.4</td>
<td>Waiting in Line</td>
<td>1.6</td>
</tr>
<tr>
<td>Restaurants</td>
<td>1.4</td>
<td>Bridge</td>
<td>1.6</td>
</tr>
<tr>
<td>Driving</td>
<td>1.4</td>
<td>Elevator</td>
<td>1.5</td>
</tr>
<tr>
<td>Bridges</td>
<td>1.3</td>
<td>Grocery</td>
<td>1.5</td>
</tr>
<tr>
<td>Elevator</td>
<td>1.3</td>
<td>Restaurants</td>
<td>1.4</td>
</tr>
<tr>
<td>Ride</td>
<td>1.0</td>
<td>Work</td>
<td>1.3</td>
</tr>
<tr>
<td>Work</td>
<td>1.0</td>
<td>Ride</td>
<td>1.3</td>
</tr>
<tr>
<td>Open Spaces</td>
<td>0.9</td>
<td>Opens Spaces</td>
<td>1.0</td>
</tr>
<tr>
<td>Walking</td>
<td>0.9</td>
<td>Religious</td>
<td>0.9</td>
</tr>
<tr>
<td>Religious Places</td>
<td>0.9</td>
<td>Walk</td>
<td>0.9</td>
</tr>
<tr>
<td>At Home</td>
<td>0.4</td>
<td>At Home</td>
<td>0.7</td>
</tr>
</tbody>
</table>

Note: 0 No avoidance or escape/No fear or anxiety; 1 Occasional avoidance or escape/Mild fear; 2 Moderate: may enter alone/Moderate fear; 3 Severe: rarely alone; must be accompanied if enter/Severe fear; 4 Very severe: never enters even with safe person/Very severe fear
Table 6
The Means of Coping Strategies

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distracting yourself</td>
<td>3.6</td>
</tr>
<tr>
<td>Relaxation exercises</td>
<td>3.6</td>
</tr>
<tr>
<td>Talking</td>
<td>3.6</td>
</tr>
<tr>
<td>Getting out of situation</td>
<td>3.6</td>
</tr>
<tr>
<td>Taking medication</td>
<td>3.5</td>
</tr>
<tr>
<td>Telling yourself it's O.K.</td>
<td>3.4</td>
</tr>
<tr>
<td>Tell self you can handle it</td>
<td>3.3</td>
</tr>
<tr>
<td>Breathing exercises</td>
<td>3.3</td>
</tr>
<tr>
<td>Tackle attack</td>
<td>3.1</td>
</tr>
<tr>
<td>Reassure yourself it will be over</td>
<td>3.1</td>
</tr>
<tr>
<td>Seeking medical aid</td>
<td>3.1</td>
</tr>
<tr>
<td>Reassure yourself nothing bad will happen</td>
<td>2.9</td>
</tr>
<tr>
<td>Telling yourself anxiety not harmful</td>
<td>2.9</td>
</tr>
<tr>
<td>Focus on staying in situation</td>
<td>2.9</td>
</tr>
<tr>
<td>Looking about</td>
<td>2.9</td>
</tr>
<tr>
<td>Lying down</td>
<td>2.8</td>
</tr>
<tr>
<td>Think of pleasant images</td>
<td>2.8</td>
</tr>
<tr>
<td>Tell yourself people won't judge you</td>
<td>2.6</td>
</tr>
<tr>
<td>Smoking</td>
<td>2.5</td>
</tr>
<tr>
<td>Giving in to the panic</td>
<td>2.5</td>
</tr>
</tbody>
</table>

Note. Likert scale from 1-5, with 1 being Totally Ineffective to 5 being Totally Effective
experienced at least one panic attack), that there were a number of effective strategies, among them were: “distracting yourself” (M = 3.6), “relaxation exercises” (M = 3.6), “talking or being with a close friend” (M = 3.6), and “taking medication” (M = 3.5). “Getting out of the situation” (M = 3.6) also seems to be a prevalent method for coping with panic attacks.

As indicated in Table 7 only weak to moderate correlations (r = -0.01 to r = 0.47) were found among the dependent measures (except between pairs of subscales of the MPS, where moderate r = 0.36 to strong, r = 0.81, correlations were found). However, the results were as expected, with significant positive correlations between the PAI, the SE-S, and the Vando R-A Scale, and significant negative correlations between these scales and the total MPS.

As the dependent variables were not highly correlated, t-tests rather than a MANOVA, were used to compare the community group, as a whole, with the university sample (Table 8). Significant differences were found on most of the dependent variables. The university sample scored significantly higher on panic coping ability, self-efficacy and stimulus intensity reducing than did the community sample. The results were opposite on the perfectionism measure, with the community sample scoring significantly higher on this measure.

As the perfectionism sub-scales were highly correlated, a MANOVA was used for the analysis. A MANOVA, revealed significant differences between the community and university samples on the “self-oriented” and on the “socially-prescribed” perfectionism
Table 7

Correlation Coefficients among Dependent Variables

<table>
<thead>
<tr>
<th>Scale</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(n=160)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. PAI</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Vando</td>
<td>0.33***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. MPS</td>
<td>-0.21*</td>
<td>-0.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Self Perf.</td>
<td>-0.28**</td>
<td>-0.01</td>
<td>0.81****</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Other Perf</td>
<td>0.03</td>
<td>0.21**</td>
<td>0.69****</td>
<td>0.36****</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Social Perf</td>
<td>-0.20</td>
<td>-0.16*</td>
<td>0.80****</td>
<td>0.49****</td>
<td>0.36****</td>
<td></td>
</tr>
<tr>
<td>7. SES</td>
<td>0.47****</td>
<td>0.40****</td>
<td>-0.021**</td>
<td>-0.07</td>
<td>-0.01</td>
<td>-0.34****</td>
</tr>
</tbody>
</table>

*p < .05, **p < .01, ***p < .001, ****p < .0001 (all two-tailed p values)
Table 8

T-tests Comparing the Community and University Samples on the 4 scales

T-tests with (158) D. F.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Community Mean</th>
<th>University Mean</th>
<th>t-value</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAI</td>
<td>53.19</td>
<td>75.56</td>
<td>-4.50</td>
<td>p&lt;.01</td>
</tr>
<tr>
<td>MPS</td>
<td>188.09</td>
<td>169.99</td>
<td>3.19</td>
<td>p&lt;.0001</td>
</tr>
<tr>
<td>SES</td>
<td>72.78</td>
<td>87.11</td>
<td>-5.85</td>
<td>p&lt;.0001</td>
</tr>
<tr>
<td>VANDO</td>
<td>21.15</td>
<td>31.71</td>
<td>-7.00</td>
<td>p&lt;.0001</td>
</tr>
</tbody>
</table>

Note: Unlike the other measures wherein 160 individuals responded, only 18 university students responded to the PAI.
subscales, but not on the "other-oriented" perfectionism subscale, \( F(1, 158) = 7.96, p < .0001 \) (Table 9). The community sample scored significantly higher on the "self-oriented" and "socially-prescribed" perfectionism scales than did the university sample.

ANOVA and MANOVA were also employed to determine if any significant differences existed among the four clinical groups on all dependent variables. No significant results were found. Based on severity of agoraphobia, the groups were then collapsed. The panic disorder and mild agoraphobic avoiders comprised one group, and the moderate and severe agoraphobic avoiders comprised the other. The PAI was the only measure that proved to be significantly different between these two clinical groupings (Table 10). The grouping consisting of panic disorder and mild agoraphobic individuals scored higher on panic coping ability than the moderate to severe agoraphobic grouping.

When a MANOVA examining the three MPS subscales was run on these collapsed groupings, the "other-oriented" perfectionism scale also showed significant results, \( F(1, 78) = 4.18, p < .01 \) (Table 11). The panic disorder and mild agoraphobic grouping scored higher on the "other-oriented" perfectionism scale than the moderate to severe agoraphobic grouping.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Community Means</th>
<th>University Means</th>
<th>Univariate F-values</th>
<th>Sign. Of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self</td>
<td>72.04</td>
<td>64.93</td>
<td>7.32</td>
<td>p&lt;.01</td>
</tr>
<tr>
<td>Other</td>
<td>55.74</td>
<td>56.01</td>
<td>0.02</td>
<td>ns</td>
</tr>
<tr>
<td>Social</td>
<td>60.33</td>
<td>49.70</td>
<td>18.59</td>
<td>p&lt;.0001</td>
</tr>
</tbody>
</table>

Table 9
MANOVA Comparing the Community and University Samples on MPS subscales

(1, 156) D. F.
Table 10

T-tests Comparing 2 clinical groups on 4 measures

T-tests with (78) D.F.

<table>
<thead>
<tr>
<th>Variable</th>
<th>None-Mild Means</th>
<th>Mod-Severe Means</th>
<th>t-value</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAI</td>
<td>60.00</td>
<td>46.38</td>
<td>3.42</td>
<td>p&lt;.01</td>
</tr>
<tr>
<td>MPS</td>
<td>185.80</td>
<td>190.38</td>
<td>-0.50</td>
<td>ns</td>
</tr>
<tr>
<td>SES</td>
<td>75.45</td>
<td>70.10</td>
<td>1.41</td>
<td>ns</td>
</tr>
<tr>
<td>VANDO</td>
<td>22.95</td>
<td>19.35</td>
<td>1.72</td>
<td>ns</td>
</tr>
</tbody>
</table>
Table 11

MANOVA with 2 Clinical Groups on MPS subscales

(1, 76) D.F.

<table>
<thead>
<tr>
<th>Variable</th>
<th>None-Mild Means</th>
<th>Mod-Severe Means</th>
<th>Univariate F-value</th>
<th>Sign. Of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self</td>
<td>68.85</td>
<td>75.23</td>
<td>2.21</td>
<td>ns</td>
</tr>
<tr>
<td>Other</td>
<td>59.13</td>
<td>52.35</td>
<td>4.69</td>
<td>p&lt;.05</td>
</tr>
<tr>
<td>Social</td>
<td>57.83</td>
<td>62.83</td>
<td>1.62</td>
<td>ns</td>
</tr>
</tbody>
</table>
CHAPTER IV

DISCUSSION

The current study attempted to determine if particular personality factors (perfectionism, stimulus intensity modulation, self-efficacy and panic coping ability) were associated with panic disorder and agoraphobia, and therefore could differentiate this population from a sample of the normal population. These same personality factors were examined to determine if differences could be found between the clinical groupings of agoraphobic and panic disorder individuals.

Weak to moderate correlations were found among the measures, suggesting distinct constructs. Even though they represented distinct constructs, the community and university samples differed on all the variables (perfectionism, stimulus intensity modulation or perceptual reactance, self-efficacy and panic coping capability). All of the hypotheses comparing the university and community samples generally held true: individuals in the university sample exhibited a stimulus reducing tendency, were less perfectionistic (on the global measure and two of the subscales), were more self-efficacious, and coped with panic better. The only hypothesis not supported was that there was no difference found between these two groups on the “other-oriented” perfectionism subscale.

Prior to collapsing the community sample, the four DSM III-R clinical groupings were examined but no significant differences were found on any of the measures. The lack
of significant findings certainly leads one to question the necessity for the DSM III-R-defined severity levels of agoraphobia. As the distinctive four groupings didn’t reveal any additional insights, perhaps these classifications are limited in their utility for some purposes.

Alternatively, the lack of findings could be accounted by a misdiagnosis resulting from self diagnosis. It could be argued that given that the participants were recruited from self-help groups, rather than from a clinical setting, the accuracy of diagnosis could be questioned. Without the use of clinicians and professional diagnosis, the probability of misinterpretations is heightened, thereby reducing the possibility of clear delineated clinical groups. In an attempt to discover differences between clinical groupings the categories were collapsed into two groups of 40 participants each, with the understanding that these two groups are still theoretically distinct enough to be meaningful.

When collapsed into two clinical groupings (panic disorder and mild agoraphobia compared with moderate to severe agoraphobia) only one of the hypotheses (hypothesis 4), held true. Individuals exhibiting marked avoidance were less able to manage panic. No significant differences between the two clinical groupings were found on the self-efficacy measure or on the stimulus intensity modulation measure. In this study, marked avoidance did not translate into less self-efficacy or in more stimulus augmenting or perfectionistic behavior. In fact, the only other significant difference found between these two clinical groupings was in the “other-oriented” perfectionism subscale. The finding was opposite than expected, as the milder grouping of agoraphobic individuals displayed more, rather than less, “other-oriented” perfectionism, than the more marked agoraphobic individuals.
The results from the current study support hypothesis 1 by confirming that the community sample are stimulus augmenters, in comparison to the university sample. According to Petrie (1967), stimulus augmenters are overstimulated in that their senses process a lot of stimuli. They are more alert to and more sensitive to environmental stimuli, such as temperature and pain.

This finding is understandable in light of research which indicates that people with anxiety disorders, and in particular agoraphobic individuals, are relatively more cognizant of internal and external stimuli (Rapee & Murrell; 1988; Street, Craske, & Barlow. 1989). Research also contends that panic disorder and agoraphobic individuals are overattentive to internal body sensations, and scan their internal environments for any sign of arousal (Barlow, 1988; Belfer & Glass, 1992; Clark, 1986; Mathews et al., 1981).

The literature on stimulus intensity modulation has linked similar personality factors to the stimulus augmenter as those found with the panic disorder and agoraphobic individuals. Closely related to the social anxiety exhibited by panic-prone individuals, stimulus augmenters have been found to be introverts, and to be more concerned about social approval. Also, similar to the depression experienced by panic-prone individuals, stimulus augmenters have been found to be relatively pessimistic compared to stimulus reducers (Barnes, 1985).

The stimulus intensity modulation measure did not produce significant differences between the two clinical groupings. More marked agoraphobic individuals did not prove to be stimulus augmenters in comparison to less severe agoraphobic individuals. More severe agoraphobic individuals do not seem to process more sensory input or to be more alert to environmental stimuli than less severe agoraphobic individuals. Accordingly, it
may not merely be the ability to recognize internal and external cues that differentiate severity of agoraphobia.

The perfectionism measure produced very interesting results. When the effects of age were statistically partialed out, in comparison to the university sample, the community sample was more perfectionistic overall, as well as more "socially-prescribed" perfectionistic, thereby supporting hypothesis 2. However, no significant differences between these two groups were found on the "self-oriented" or "other-oriented" perfectionism subscales.

In examining the results from the MPS subscales the community groups have a relatively higher tendency to believe that others impose unrealistic standards on themselves ("socially-prescribed" perfectionism), compared to the university sample. They not only feel the need to be perfectionistic, but they also believe others expect them to be perfect. Panic or escape behavior may be a response to being unable to meet these perceived expectations of others.

These results are not surprising given that perfectionism has been linked to lower levels of adjustment (Flett et al., 1989; Hewitt et al., 1991), as well as anxiety (Flett et al., 1989; Hewitt et al., 1991). The literature also suggests that, similar to obsessive-compulsives, and given the lack of control many panic disorder and agoraphobic individuals experienced in childhood, there may be a strong need for order in the environment in order to reduce harm (Frost et al., 1990; Mallinger, 1984). In fact, as suggested by the literature and confirmed by this study, the agoraphobic individual confines his/her activities to those which are predictable and thus allow for order and
organization, such as not going far away from the home or riding on public transit systems (DSM III-R, APA, 1987; Marks & Mathews, 1979).

The “other-oriented” and “self-oriented” perfectionism scales did not produce significant results between the community and university sample (when age is partialled out). There was no difference between the two groups in the tendency to impose high standards on others or on self.

When the community group is collapsed, the only perfectionistic measure that produced significant results was “other-oriented perfectionism.” While relative to the university sample all community groups believe others to impose high standards on them, there was not a greater tendency for the marked agoraphobic individual to direct perfectionistic behavior inward against self. In other words, the fact that the marked agoraphobic severely confines her/his activities does not seem to be related to rigid thinking, or a compulsive need for order and organization in their lives, relative to the less severe agoraphobics.

In contrast to what was hypothesized, the more marked the avoidance, the less, rather than more, likely it is that one would direct perfectionistic behavior outward against others. It was presumed that given the extent of debilitation exhibited by the more marked agoraphobic individuals, they may believe that other effectively functioning individuals must therefore be perfect in their interactions and behaviors. Perhaps these individuals are consumed by their illness and have restricted their lives to the degree that other individuals play a small role in their thoughts. It seems to be the relatively better functioning individuals, panic disorder and milder agoraphobics, who impose these high standards on others. Perhaps, because they interact more with effectively functioning people, the milder
agoraphobics impart the belief that other, functioning individuals, must be held to unrealistic standards.

The university sample was more self-efficacious when compared with the community sample, thereby supporting hypothesis 3. This result was expected given that both clinical groups exhibit a dysfunctional coping style by either panicking or avoiding panic situations. Even though perceived self-efficacy has been found to be negatively correlated with anxiety, this variable was included to examine whether the panic-prone individual's inability to cope generalized beyond the panic situation. This study revealed that the ineffective coping behavior exhibited by the community group extends beyond panic situations. Also, by using a self-efficacy scale, rather than a mobility measure, such as an ability to enter a fear-provoking situation, self-efficacious behavior was not confused with coping behaviors of panic or avoidance when examining the results. The results from this study suggest that avoidance is simply another coping style.

The self-efficacy measure did not produce significant differences between the two clinical groupings. No particular clinical group is any less self-efficacious than the other. Therefore, although panic disorder individuals and agoraphobic individuals are similarly self-efficacious and less efficacious than the comparison group, the agoraphobic individuals are less able to cope with panic. Mobility measures, assessing approach behavior, therefore may tap into panic coping behavior, rather than self-efficacious behavior. Therefore, in contrast to the literature utilizing mobility measures (Kinney & Williams, 1988), the current study found that avoidance behavior does not translate into self-inefficacy, in comparison to panic disorder individuals. In other words, avoidance behavior, similar to panicking, is simply a coping strategy, albeit not an effective one.
The university sample was also able to manage panic better than the community sample, thereby supporting hypothesis 4. As the community sample suffers from panic, its inability to manage panic relative to the university sample is not surprising. Similar to self-efficacy, panic behavior is influenced by successful coping. Given that the community groups’ experiential base consists of the inability to manage panic or to cope with phobic situations, it is reasonable that they would perceive their coping ability to be ineffective.

When the community sample was collapsed into two clinical groupings (panic disorder and mild agoraphobic individuals compared with moderate and severe agoraphobic individuals), the less severe agoraphobic groups scored significantly higher on panic coping ability as compared to the more severe agoraphobics, thereby supporting hypothesis 4. As suggested by Telch et al. (1989a), the more marked the individual’s avoidance, the less capable one is of managing panic. This is consistent with the idea that agoraphobic individuals experience more panic-related anxiety, in terms of panic expectancy and anticipation of panic. Obviously, it is not just a matter of recognizing more situational cues and marked avoidance behavior that delineates the less severe from the more severe agoraphobic individuals. The results from the current study suggest that the major differentiating factor along the severity of avoidance continuum is simply the inability to manage panic.

**Descriptive Findings**

This study supported the gender ratio of agoraphobic samples found in previous research (3:1, female: male). Although the literature suggests an equal number of women and men are diagnosed with panic disorder, this study resulted in a 4:1 ratio of women to men. This result may be accounted for by the fact that, although men are more likely to
attend community groups, women are more likely to volunteer for activities (Lieberman & Snowden, 1993).

The use of medication had no significant effects on the results. This result is somewhat surprising in light of the fact that half the community group was taking medication on a continuous basis. Even though medication has been found to be effective in treating panic disorder and agoraphobia (Clark, 1986; Cox, Endler, Lee, & Swinson, 1992; Mattick, Andrews, Hadzi-Pavlovic, & Christenson, 1990), medication was not found to have an effect on panic coping ability or severity of avoidance, perfectionistic tendencies, self-efficacy, or stimulus intensity modulation. This raises interesting insights into whether medication is effective in the treatment of panic disorder and agoraphobia. Psychological interventions rather than medication may be warranted in the management of these two disorders.

Given that the majority of those taking medication were using it on a continuous, rather than on an “as needed basis” indicates that these individuals may not be using the medication as a coping mechanism. Interestingly, even though the study revealed medication to have no effect, the PAQ measure revealed that participants believed the use of medication to be an effective coping strategy. This finding also suggests that medication may only have a placebo effect for these individuals.

To a large extent, when reviewing the situations that were avoided, the results confirm previous research. Public transportation systems, crowds and “being far from home” are commonly avoided areas. However, the finding that planes are the most avoided and feared situations is surprising, given that it is not even specifically mentioned in the DSM III-R or DSM IV, nor included in a commonly used mobility questionnaire,
the Fear Questionnaire (Marks & Mathews, 1979). At the same time, "open spaces," the original meaning of the term agoraphobia, and utilized in the Fear Questionnaire, did not appear to be a particularly avoided or feared area. It is also interesting to note that "being far from home" was not ranked extremely high relative to the other situations on the scale. This result is also particularly remarkable given that the DSM III-R differentiates extent of agoraphobia on the basis of how far one can travel from the home unaccompanied. These results may be explained by the fact that a community sample, rather than a clinical sample was employed in this study. The community sample may be relatively more mobile than a clinical population.

The most effective panic coping strategies could be construed as both positive ("distracting yourself" and "relaxation exercises") and negative ("getting out of the situation," and taking medication). Given that the community sample is relatively more perfectionistic, it is not surprising to find that they did not view telling themselves that "people won't judge me," to be a particularly effective coping strategy.

Limitations of the Study

Several limitations of the study should be acknowledged. First, the selection of a university sample rather than a random sample of the general population limited the generalizability of the results. The educational background, and in particular, the age of this comparison sample were obviously skewed, but the effects of age were statistically controlled for. Also, it has been speculated that agoraphobia and panic disorder might be associated with lower educational levels (Rock & Goldberger, 1978). By utilizing a university sample it was not possible to verify this hypothesis.
Second, the use of a community sample points to a few limitations. Only those interested in the study participated, thereby possibly biasing the results. The participants themselves, rather than experienced practitioners, conducted the clinical diagnosis. This may have led to incorrect or exaggerated diagnosis.

In contrast, the use of a community group rather than a clinical group resulted in a more variable group. The community group enabled less severe agoraphobics to be equally represented in this study. The very nature of a self-help or community group compared to a clinical sample suggests a better functioning group of individuals. Therefore, it could be argued that the results from this study are conservative. It is possible that significant results might have been found between the clinical groupings on some of the measures used if participants were selected from a clinical population.

The possibility of misdiagnosis may have accounted for the lack of findings when examining the four clinical groupings. In contrast, the same results may be explained by the limited utility of DSM III-R-defined categories for some applications. As a result, no conclusions could be drawn specifically regarding the panic disorder group. Therefore, although the agoraphobic groupings could be examined in terms of differences found on the various measures used, no explicit statements could be made comparing agoraphobia and panic disorder.

Finally, the correlational nature of the data means that no conclusions can be drawn about the direction of the relationship between the variables and degree of agoraphobia.

**Implications for Further Research and Therapeutic Interventions**

Overall the results of this study highlight the importance of all four variables in delineating the agoraphobic and panic disorder individuals from a university sample. The
results from the self-efficacy measure confirm that exposure therapy, which involves confronting and mastering an activity, may be an effective therapeutic intervention for these individuals. Successful coping in threatening environments may increase self-efficacy. The results from this study indicate that psychopharmacological interventions should be examined for effectiveness. Other panic coping strategies should be emphasized, such as cognitive therapies emphasizing distraction or relaxation. This is particularly relevant in the case of the marked agoraphobic individuals who seem relatively less capable of managing panic.

As the community sample presented themselves as stimulus augmenters, the significance of perceptual reactance and stimuli sensitivity deserves further investigation. Stimulus intensity modulation can be measured by techniques other than paper-and-pencil tests, including magnitude estimation tasks, or by assessing the strength of the nervous system through auditory thresholds or evoked potentials (Nebylitsyn, 1964; Strelau, 1983). The stimulus intensity modulation results suggest that this observed stimulus augmenting tendency noted in the community sample may be linked to cortical arousal or neurological differences. Further research into the cortical arousal of panic disorder and agoraphobic individuals may prove beneficial to the effective treatment of these disorders.

The fourth factor, perfectionism, with the inherent characteristics of striving towards unrealistic standards, was also found to be a significant factor differentiating the university and community samples. Given the paucity of literature on perfectionism and either panic disorder and agoraphobia, further research seems warranted. While panickers exhibit a profound fearfulness of losing control and agoraphobic individuals constrain their activities to avoid panic, it can only be speculated at this time whether perfectionism is
associated with attempts to maintain order and organization in the environments. It certainly would be quite interesting to discover what exact role perfectionism plays in these disorders.

The significance of perfectionism found in the clinical sample from this study points to the importance of cognitive-behavioral therapeutic interventions. The unrealistic standards these individuals hold for themselves must be confronted through cognitive restructuring.
REFERENCES


FOOTNOTES

1 None: panic disorder; Mild: some avoidance (or endurance with distress), but relatively normal lifestyle, e.g., travels unaccompanied when necessary, such as to work or to shop; otherwise avoids traveling alone; Moderate: avoidance results in constrictive lifestyle, e.g., the person is able to leave the house alone, but not go more than a couple of miles unaccompanied; Severe: avoidance results in being nearly or completely housebound or unable to leave the house unaccompanied.

2 A MANOVA was run to compare the university sample with the two clinical groupings on the ‘other-oriented’ perfectionism scale. This analysis revealed that the university sample did not differ significantly from either of the clinical groupings.
APPENDIX A

Advertisement

Graduate psychology student seeks panic or agoraphobic participants for research study. Willing to come to the home. Please call (416) 787-0565.
APPENDIX B

Diagnostic Questionnaire

Please provide the following information by placing a check mark in the appropriate spaces.

Sex: Male_________ Female_________

Age: ______

Education:
- High School (please specify grade level) ______
- Community college/trade school ______
- Undergraduate school ______
- Graduate school ______

1. In your own words, please describe what the term “panic” or panic attack” means to you.

2. In your own words, please describe what the term “agoraphobia” means to you.

3. Have you ever sought out any information on panic or agoraphobia?
   YES_____ NO_____

4. Have you ever been diagnosed with panic or agoraphobia or anything related to anxiety?
   Panic_____ Agoraphobia_____ Other (explain)__________________________

5. How many years (months) ago were you diagnosed? ______________

6. Are you currently taking any medication for stress, anxiety or depression?
   YES____ NO_____

PLEASE TURN OVER
7. If you are taking medication, what type of medication are you taking (antidepressant, tranquilizers, etc.)?

8. What is the exact name of the medication you are taking?

9. If you are taking medication, are you using medication on a continuous basis or on an “as needed” basis?

   Continuous_____ As Needed_____ 

Regardless of whether or not you are taking medication, please answer the following questions.

If you are on medication, please respond to the following questions from the perspective of how you would behave or feel if not on medication.

The following questions related specifically to panic attacks and agoraphobia.

A panic attack is the sudden onset of intense apprehension, fear, or terror, often associated with feelings of impending doom. Some of the most common symptoms experienced during an attack are: dizziness, shortness of breath, accelerated heart rate, chest pain or discomfort, sweating, nausea or abdominal distress and trembling or shaking.

10. Have you ever had one or more panic attacks?

    YES_____ NO_____ MAYBE_____ 

Agoraphobia is a fear of being in places or situations from which escape might be difficult (or embarrassing), or in which help might not be available in the event of a panic attack. As a result of this fear, the person either restricts travel or needs a companion when away from home, or else endures agoraphobic situations despite intense anxiety. Some agoraphobic situations 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 car.

11. According to this definition, do you consider yourself to be agoraphobic or to have been agoraphobic in the past?

    YES_____ NO_____ 

If you have not answered “yes” to one of the two above questions (Q. 10 or Q.11) OR have only experienced a panic attack in a life threatening situation, please go on to the next questionnaire.

12. Have you ever had an unexpected or unpredictable panic attack in which the panic attack did not occur immediately before or on exposure to a situation that almost always caused anxiety?

    YES_____ NO_____ 

PLEASE TURN OVER
13. What percentage of your panic attacks were unexpected and what percentage were expected or predictable?

UNEXPECTED____   EXPECTED____

14. Are all of your panic attacks triggered by situations in which you were the focus of other’s attention?

YES____   NO____

15. Have you ever had four or more panic attacks in a four week period?

YES____   NO____

16. Have one or more panic attacks been followed by a period of at least a month of persistent fear of having another attack?

YES____   NO____

17. Do you feel that you are more fearful of death than the average person?

YES____   NO____

IF YOU ANSWERED “YES” TO QUESTION 11, THEN PLEASE ANSWER THE FOLLOWING, OTHERWISE GO ON TO THE NEXT QUESTIONNAIRE.

18. Avoiding particular situations is a common response of agoraphobic. Please rate your level of avoidance, according to the following definitions of mild, moderate or severe, by circling the appropriate number:

Mild: Some avoidance (or endurance with distress), but relatively normal life-style, e.g. travels unaccompanied when necessary, such as to work or to shop; otherwise avoids traveling alone.

Moderate: Avoidance results in a constricted life-style, e.g. you are able to leave the house alone, but not to go more than a few miles unaccompanied.

Severe: Avoidance results in being nearly or completely housebound or unable to leave the house unaccompanied.

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>Mild</td>
<td>Moderate</td>
<td>Severe</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

“0” on this scale means that you experience panic but no agoraphobia.

PLEASE TURN OVER
19. Listed below are a number of situations that are commonly associated with panic attacks. Please indicate the degree to which you avoid the following places or situations and the degree of fear you experience in the situation by placing a number in the space provided. Please use the following scale to rate avoidance and fear.

0  No avoidance or escape / no fear or anxiety
1  Occasional avoidance or escape / mild fear
2  Moderate: may enter alone / moderate fear
3  Severe: rarely alone; must be accompanied if enter / severe fear
4  Very Severe: never enters even with safe person / very severe fear and panic

<table>
<thead>
<tr>
<th></th>
<th>AVOIDANCE</th>
<th>FEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Driving</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Riding in a car</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Grocery Stores</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Malls</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Crowds</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Public trans.: bus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Plane</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Waiting in a line</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Walking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Elevators</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Bridges</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Being at home</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Being far from home</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Public places: auditoriums etc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Restaurants</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Enclosed places: tunnels; small rooms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Open spaces: parks, etc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. Religious places</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. Work</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. Other (explain)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX C

Vando R-A Scale

Instructions:
Following you will find a series of paired statements which you are asked to regard as choices. In some cases you will dislike both choices. In other cases you will find the choices neutral. No matter how the item strikes you, however, you are asked to choose between them. In each case you are to decide which of the alternatives you prefer in comparison to the other alternative and then to indicate your selection by drawing a circle around the (a) or (b) to the left of the statement. It is important to answer all items. Do not skip any. It is best to work as rapidly as possible.

1. (a) see a war drama
   (b) see a situation comedy

2. (a) play sports requiring endurance
   (b) play games with rest stops

3. (a) raunchy blues
   (b) straight ballads

4. (a) jazz combo
   (b) 1001 strings

5. (a) stereo on too loud
   (b) stereo on too low

6. (a) own a goldfish
   (b) own a turtle

7. (a) conservatism (oppose change)
   (b) militantism (promote change)

8. (a) too much sleep
   (b) too little sleep

9. (a) danger
   (b) domesticity

10. (a) passenger car
    (b) sports car
11. (a) have several pets  
(b) have one pet

12. (a) be a shepherd  
(b) be a cowboy/girl

13. (a) motorcycle  
(b) motor scooter

14. (a) see the movie  
(b) read the book

15. (a) cocktail music  
(b) rock or disco music

16. (a) do research in the library  
(b) attend a classroom lecture

17. (a) a hot drink  
(b) a warm drink

18. (a) a drum solo  
(b) a string solo

19. (a) too much exercise  
(b) too little exercise

20. (a) loud music  
(b) quiet music

21. (a) prepare medications  
(b) dress wounds

22. (a) a driving beat  
(b) a nice melody

23. (a) hard rock music  
(b) regular popular music
24. (a) like athletics  
(b) dislike athletics

25. (a) unamplified music  
(b) electrically amplified music

26. (a) smooth-textured foods  
(b) crunchy foods

27. (a) wake-up pill ("upper")  
(b) sleeping pill ("downer")

28. (a) speed  
(b) safety

29. (a) rock music  
(b) ballads

30. (a) soccer  
(b) golf

31. (a) excitement  
(b) calm

32. (a) a family of six  
(b) a family of three

33. (a) thrills  
(b) tranquillity

34. (a) play contact sports  
(b) play noncontact sports

35. (a) live in a crowded home  
(b) live alone

36. (a) share intimacy  
(b) share affection
37. (a) games emphasizing speed  
(b) games paced slowly

38. (a) thinking  
(b) doing

39. (a) competitive sports  
(b) non-competitive sports

40. (a) emotionally expressive, somewhat unstable people  
(b) calm, even tempered people

41. (a) be a nurse on an acute care ward  
(b) be a nursing operator

42. (a) be a NASA scientist  
(b) be an astronaut

43. (a) be a stunt person  
(b) be a prop person

44. (a) a job which requires a lot of traveling  
(b) a job which keeps you in one place

45. (a) climb a mountain  
(b) read about a dangerous adventure

46. (a) body odors are disgusting  
(b) body odors are appealing

47. (a) keep on the move  
(b) spend time relaxing

48. (a) have a cold drink  
(b) have a cool drink

49. (a) being confined in a room  
(b) being free in the desert
50. (a) security
    (b) excitement

51. (a) continuous anesthesia
    (b) continuous hallucinations

52. (a) water skiing
    (b) boat rowing

53. (a) hostility
    (b) conformity

54. (a) traditional art (e.g. Renoir)
    (b) abstract art (e.g. Picasso)


**APPENDIX D**

**MPS**

Listed below are a number of statements concerning personal characteristics and traits. Read each item and decide whether you agree or disagree and to what extent. If you strongly agree, circle 7; if you strongly disagree, circle 1; if you feel somewhere in between, circle any one of the numbers between 1 and 7. If you feel neutral or undecided the midpoint is 4.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Disagree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. When I am working on something, I cannot relax until it is perfect.</td>
<td>1 2 3</td>
<td>4 5 6 7</td>
</tr>
<tr>
<td>2. I am not likely to criticize someone for giving up too easily.</td>
<td>1 2 3</td>
<td>4 5 6 7</td>
</tr>
<tr>
<td>3. It is not important that the people I am close to are successful.</td>
<td>1 2 3</td>
<td>4 5 6 7</td>
</tr>
<tr>
<td>4. I seldom criticize my friends for accepting second best.</td>
<td>1 2 3</td>
<td>4 5 6 7</td>
</tr>
<tr>
<td>5. I find it difficult to meet others' expectations of me.</td>
<td>1 2 3</td>
<td>4 5 6 7</td>
</tr>
<tr>
<td>6. One of my goals is to be perfect in everything I do.</td>
<td>1 2 3</td>
<td>4 5 6 7</td>
</tr>
<tr>
<td>7. Everything that others do must be of top-notch quality.</td>
<td>1 2 3</td>
<td>4 5 6 7</td>
</tr>
<tr>
<td>8. I never aim for perfection in my work.</td>
<td>1 2 3</td>
<td>4 5 6 7</td>
</tr>
<tr>
<td>9. Those around me readily accept that I can make mistakes too.</td>
<td>1 2 3</td>
<td>4 5 6 7</td>
</tr>
<tr>
<td>10. It doesn't matter when someone close to me does not do their absolute best.</td>
<td>1 2 3</td>
<td>4 5 6 7</td>
</tr>
<tr>
<td>11. The better I do, the better I am expected to do.</td>
<td>1 2 3</td>
<td>4 5 6 7</td>
</tr>
<tr>
<td>12. I seldom feel the need to be perfect.</td>
<td>1 2 3</td>
<td>4 5 6 7</td>
</tr>
<tr>
<td>13. Anything I do that is less than excellent will be seen as poor work by those around me.</td>
<td>1 2 3</td>
<td>4 5 6 7</td>
</tr>
<tr>
<td>14. I strive to be as perfect as I can be.</td>
<td>1 2 3</td>
<td>4 5 6 7</td>
</tr>
<tr>
<td>15. It is very important that I am perfect in everything I attempt.</td>
<td>1 2 3</td>
<td>4 5 6 7</td>
</tr>
<tr>
<td>16. I have high expectations for the people who are important to me.</td>
<td>1 2 3</td>
<td>4 5 6 7</td>
</tr>
<tr>
<td>17. I strive to be the best at everything I do.</td>
<td>1 2 3</td>
<td>4 5 6 7</td>
</tr>
<tr>
<td>18. The people around me expect me to succeed at everything I do.</td>
<td>1 2 3</td>
<td>4 5 6 7</td>
</tr>
<tr>
<td>19. I do not have very high standards for those around me.</td>
<td>1 2 3</td>
<td>4 5 6 7</td>
</tr>
<tr>
<td>20. I demand nothing less than perfection of myself.</td>
<td>1 2 3</td>
<td>4 5 6 7</td>
</tr>
<tr>
<td></td>
<td>Disagree</td>
<td>Agree</td>
</tr>
<tr>
<td>---</td>
<td>----------</td>
<td>-------</td>
</tr>
<tr>
<td>21</td>
<td>Others will like me even if I don’t excel at everything.</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>22</td>
<td>I can’t be bothered with people who won’t strive to better themselves.</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>23</td>
<td>It makes me uneasy to see an error in my work.</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>24</td>
<td>I do not expect a lot from my friends.</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>25</td>
<td>Success means that I must work even harder to please others.</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>26</td>
<td>If I ask someone to do something, I expect it to be done flawlessly.</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>27</td>
<td>I cannot stand to see people close to me make mistakes.</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>28</td>
<td>I am perfectionistic in setting my goals.</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>29</td>
<td>The people that matter to me should never let me down.</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>30</td>
<td>Others think I am okay, even when I do not succeed.</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>31</td>
<td>I feel that people are too demanding of me.</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>32</td>
<td>I must work to my full potential at all times.</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>33</td>
<td>Although they may not show it, other people get very upset with me when I slip up.</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>34</td>
<td>I do not have to be the best at whatever I am doing.</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>35</td>
<td>My family expects me to be perfect.</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>36</td>
<td>I do not have very high goals for myself.</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>37</td>
<td>My parents rarely expected me to excel in all aspects of my life.</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>38</td>
<td>I respect people who are average.</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>39</td>
<td>People expect nothing less than perfection from me.</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>40</td>
<td>I set very high standards for myself.</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>41</td>
<td>People expect more from me than I am capable of giving.</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>42</td>
<td>I must always be successful at school or work.</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>43</td>
<td>It does not matter to me when a close friend does not try their hardest.</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>44. People around me think I am still competent even if I make a mistake</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------------------------------</td>
<td>--------------</td>
<td></td>
</tr>
<tr>
<td>45. I seldom expect others to excel at whatever they do.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX E

Self-Efficacy Scale

Instructions: This questionnaire is a series of statements about your personal attitudes and traits. Each statement represents a commonly held belief. Read each statement and decide to what extent it describes you. There are no right or wrong answers. You will probably agree with some of the statements and disagree with others. Please indicate your own personal feelings about each statement below by marking the letter that best describes your attitude or feelings. Please be very truthful and describe yourself as you really are, not as you would like to be.

Mark:
A If you DISAGREE STRONGLY with the statement
B If you DISAGREE MILDLY with the statement
C If you neither agree nor disagree with the statement
D If you AGREE MILDLY with the statement
E If you AGREE STRONGLY with the statement

1. I like to grow house plants. _____
2. When I make plans, I am certain I can make them work. _____
3. One of my problems is that I cannot get down to work when I should. _____
4. If I can't do a job the first time, I keep trying until I can. _____
5. Heredity plays the major role in determining one's personality. _____
6. It is difficult for me to make new friends. _____
7. When I set important goals for myself, I rarely achieve them. _____
8. I give up on things before completing them. _____
9. I like to cook. _____
10. If I see someone I would like to meet, I go to that person instead of waiting for him or her to come to me. _____
11. I avoid facing difficulties. _____
12. If something looks too complicated, I will not even bother to try it. _____
13. There is some good in everybody. _____
14. If I meet someone interesting who is very hard to make friends with, I'll soon stop trying to make friends with that person. _____
15. When I have something unpleasant to do, I stick to it until I finish it. _____

16. When I decide to do something, I go right to work on it. _____

17. I like science. _____

18. When trying to learn something new, I soon give up if I am not initially successful. _____

19. When I'm trying to become friends with someone who seems uninterested at first, I don't give up very easily. _____

20. When unexpected problems occur, I don't handle them well. _____

21. If I were an artist, I would like to draw children. _____

22. I avoid trying to learn new things when they look too difficult for me. _____

23. Failure just makes me try harder. __________

24. I do not handle myself well in social gatherings. _____

25. I very much like to ride horses. _____

26. I feel insecure about my ability to do things. _____

27. I am a self-reliant person. _____

28. I have acquired my friends through my personal abilities at making friends. _____

29. I give up easily. _____

30. I do not seem capable of dealing with most problems that come up in my life
APPENDIX F

Panic Attack Questionnaire

The questions below ask about how you cope with panic attacks (a sudden rush of intense fear or anxiety or feeling of impending doom) when they occur. People who experience panic attacks may use a variety of ways to cope with an actual attack. Please indicate if you ever used each method during an attack by circling YES or NO. When you circle "YES," please also indicate how effective you found the method to be in reducing the severity of panic attacks.

<table>
<thead>
<tr>
<th>Used this Strategy?</th>
<th>Totally Ineffective</th>
<th>Moderately Effective</th>
<th>Totally Effective</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES NO 1) Telling yourself that your anxiety sensations aren't harmful</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>YES NO 2) Reassuring yourself that it will be over soon</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>YES NO 3) Distracting yourself by focusing on something else</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>YES NO 4) Lying down on a bed or couch</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>YES NO 5) Reassuring yourself nothing bad will happen</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>YES NO 6) Breathing exercises</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>YES NO 7) Relaxation exercises</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>YES NO 8) Talking or being with a close friend or relative</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>YES NO 9) Telling yourself it will be OK because you’ve been through this before</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>YES NO 10) Smoking a cigarette</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>YES NO 11) Tackling the attack head-on knowing you are going to learn to control it eventually</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>YES NO 12) Thinking of pleasant images</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PLEASE TURN OVER
<table>
<thead>
<tr>
<th>Used this Strategy?</th>
<th>Totally Ineffective</th>
<th>Moderately Effective</th>
<th>Totally Effective</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES NO 13) Taking medication</td>
<td>1 2</td>
<td>3 4</td>
<td>5</td>
</tr>
<tr>
<td>YES NO 14) Getting out of the situation</td>
<td>1 2</td>
<td>3 4</td>
<td>5</td>
</tr>
<tr>
<td>YES NO 15) Giving in to the panic rather than fighting it</td>
<td>1 2</td>
<td>3 4</td>
<td>5</td>
</tr>
<tr>
<td>YES NO 16) Telling yourself 'I can handle it'</td>
<td>1 2</td>
<td>3 4</td>
<td>5</td>
</tr>
<tr>
<td>YES NO 17) Focus on staying in the situation</td>
<td>1 2</td>
<td>3 4</td>
<td>5</td>
</tr>
<tr>
<td>YES NO 18) Seeking medical attention</td>
<td>1 2</td>
<td>3 4</td>
<td>5</td>
</tr>
<tr>
<td>YES NO 19) Telling yourself people around won't judge you negatively</td>
<td>1 2</td>
<td>3 4</td>
<td>5</td>
</tr>
<tr>
<td>YES NO 20) Looking about at the people, things and places before you</td>
<td>1 2</td>
<td>3 4</td>
<td>5</td>
</tr>
</tbody>
</table>

Other EFFECTIVE strategies (please describe):

PLEASE CONTINUE TO NEXT PART OF THIS QUESTIONNAIRE
Instructions:
The statements below describe how one can cope with panic attacks when they occur. Read each item carefully and then choose a number from the scale below which BEST describes your confidence in coping with panic attacks.

<table>
<thead>
<tr>
<th>0</th>
<th>10</th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>50</th>
<th>60</th>
<th>70</th>
<th>80</th>
<th>90</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definitely Cannot Do</td>
<td>Probably Cannot Do</td>
<td>Maybe Can Do</td>
<td>Probably Can Do</td>
<td>Definitely Can Do</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Experience panic without avoiding
   % Confidence

2. Prevent a panic attack from coming
   % Confidence

3. Stop a panic attack in midstream
   % Confidence

4. Experience panic without frightening thoughts
   % Confidence

5. Use adaptive self-talk during a panic attack
   % Confidence

6. Distract one’s thoughts during a panic attack
   % Confidence

7. Control one’s breathing during a panic attack
   % Confidence

8. Confront a situation that will bring on an attack
   % Confidence

9. Relax one’s muscles during a panic attack
   % Confidence

10. Overall confidence in coping with panic attacks
    % Confidence
APPENDIX G

Research Information and Consent Form

Your participation is being sought for a research investigation by Stacey Burnard, a graduate student of the Psychology Department of the University of Windsor, under the supervision of Dr. Lafreniere (519-252-4232). This research will examine the personality characteristics of people who experience anxiety. It will involve having you fill out a number of questionnaires made up of short rating scales, which will take approximately one hour to complete.

Your participation in this study is strictly voluntary. Although for statistical purposes it is desirable that you fill out as many of the questionnaire items as possible, if there are particular items which you do not wish to answer, you may skip over those items. Your questionnaire will be handed in anonymously and collected separately from the consent form with your signature on it, to ensure that the responses by individual participants are not identifiable.

If you have any questions about this research, I will be happy to answer them at any time (416-787-0565). Results of this investigation will be available upon request by writing to Stacey Burnard at the Department of Psychology, University of Windsor, Windsor, Ontario.

This research investigation has been cleared by the Ethics Committee of the Psychology Department, University of Windsor. Any concerns regarding the procedures or ethics of this investigation may be directed to:

Dr. Ron Frisch, Chair
Psychology Dept. Ethics Committee
University of Windsor
(519) 253-4232 ext. 7012

I have read the information above and I voluntarily consent to be a participant in this investigation.

Signed___________________________ Date_________________
APPENDIX H

Instructions:

A series of five questionnaires that consist of statements about your personal attitudes, traits and commonly held beliefs are enclosed in this package. Read each statement and decide which statement most accurately describes you. Please be very truthful in your responses and describe yourself as you really are. Your answers are anonymous and confidential.

For statistical purposes, please attempt to answer all questions.

Please answer the questionnaires in the order that they are presented.

If you have never had a panic attack, then there is no need to complete the Panic Attack Questionnaire.

Thank you for your participation.
VITA AUCTORIS

Stacey Burnard was born in 1963 in Toronto, Ontario. She obtained a B.A. in Economics in 1985, at York University in Toronto. In 1988, she graduated with a M.B.A. from York University. Returning to school in 1990 to pursue a degree in psychology, she graduated on the Dean’s Honour List, with a B.A. (Honours) in Psychology, in 1992. She is currently a candidate for the Master’s degree in Psychology at the University of Windsor and hopes to graduate in the Spring of 1996.