THE RELATIONSHIP BETWEEN THE SYMPTOMATOLOGY OF AGORAPHOBIA AND FROM WHOM TREATMENT IS RECEIVED

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The Relationship Between the Symptomatology of Agoraphobia and From Whom Treatment Is Received.

BY

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ABSTRACT

Studies suggest that Agoraphobia is a more complex disorder than is presented by the current DSM-111-R classification. The present study was designed to determine if degree of incapacitation by agoraphobic symptoms determines who proffers treatment to the agoraphobic as well as how the G.P. (as primary caregiver) deals with agoraphobia. Results suggest that more incapacitated agoraphobics, as compared to less incapacitated agoraphobics, are treated by a psychiatrist. Secondly, results suggest that G.P.'s treat mild cases of agoraphobia themselves. Although results did not support the hypothesis that psychiatrists would treat more incapacitated agoraphobics more often than other caregivers, results did show that, when G.P.'s did make referrals, they tend to make significantly more referrals to psychiatrists. The theoretical implications and needs of future research, based on these results, are discussed.

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According to DSM-III-R classification, agoraphobia is described as Panic Disorder with Agoraphobia or Agoraphobia without a history of Panic Disorder. Panic Disorder with Agoraphobia is described as,

> the 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, there are either travelling restrictions or need for a companion when away from home, or there is endurance of agoraphobic situations despite intense anxiety (American Psychiatric Association, 1987, pp. 235-241).

On the other hand, Agoraphobia without a history of Panic Disorder is described as,

> 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 suddenly developing a symptom(s) that could be incapacitating or extremely embarrassing. 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" (American Psychiatric Association, 1987, pp. 235-241).

Thus, agoraphobia is only differentiated in terms of whether panic attacks are associated with the disorder or not.

The above classification has played a significant role in the assessment and treatment of agoraphobia. However, agoraphobia appears as a more complex disorder than is presented by the current classification. As background to the present study, investigations regarding comorbidity, etiology, and treatment of agoraphobia will be reviewed. As an introduction, studies of demographic variables found to be related to agoraphobia will be presented.

Demographic Variables of Agoraphobia

A number of demographic factors have been related to agoraphobia, namely gender, age of onset, marital status, education, social class, area of residence and occupation. Before discussing these factors the prevalence of agoraphobia will be examined.

Prevalence

Agoraphobia is said to be one of the most severe, chronic and prevalent anxiety disorders. It accounts for over 60% of all phobics seen for treatment (Agras, Sylvestor, & Oliveau, 1969; Michelson, 1987). Epidemiological estimates reported by the National Institute of Mental Health (NIMH) indicate prevalence rates of between 2.7% and 5.8% of the general population (Myers et al., 1984; Weissman, 1985; Weissman, 1988). Similarly, Norton, Walker, and Ross (1991) reported

that approximately 5% of the population will have agoraphobia at some point in their life. The consistency of these findings suggests that agoraphobia is a prevalent problem that warrants study.

Gender

In a study by Marks and Herst (1970), consisting of a survey of 1,200 agoraphobics in Britain, 95% of the sample were women. On the other hand, Agras et al. (1969) found that approximately only 75%, as opposed to 95%, of agoraphobics were women. Generally, studies have supported the findings of Agras et al. (1969) in that two-thirds of agoraphobics are women (Hafner & Marks, 1976; Brehony & Geller, 1981; Agras et. al., 1969; Hand, Lamontagne, & Marks, 1974; Marks, 1969). This suggests that Marks and Herst (1970) may not have included a representative sample.

A number of different hypotheses have been suggested to account for this sex distribution. One hypothesis suggests that this sex distribution occurs because agoraphobia is innate (i.e., a syndrome of endogenous anxiety) (Rapp & Thomas, 1982). More specifically, women may have a higher prevalence of agoraphobia due to endocrine factors related to female reproductive stages. Women undergo mental, physical, and behavioural changes synchronous with different phases of the menstrual cycle, especially during the 4 to 5 days prior to the onset of menstruation. This syndrome, 'premenstrual

tension,' includes irritability, anxiety, depression, bloated feelings, headaches, etc (Rutter, 1986). If women undergo such changes on a regular monthly basis, increased feelings of anxiety during this period may account for some of the excess female agoraphobics.

However, this sex difference may also occur through socialization. Gjerde and Block (1991) stated that, during childhood, boys are permitted greater freedom to explore. Also, they are positively encouraged when they exhibit curiosity, independence, competition, and achievement-related behaviours. Thus, the range of available experiences is expanded for boys. On the other hand, the range of activities available to females is limited by ensuring close and cautionary adult supervision and stressing etiquette in all activities. As a result, the possibility of females developing a sense of competence is diminished. Instead they are taught to be passive, self-conscious, and reserved.

Foder (1974) explained the higher incidence of agoraphobia among women in terms of this conventional feminine role. More specifically, women are conditioned to be dependent and this dependency is reinforced by family and husband.

For some women Foder (1974) believed that there was a conflict between dependency and autonomy. On the one hand the female is dissatisfied with her condition and would like to

become independent, but at the same time, she is afraid of asserting herself because of the lack of skills and/or the possibility that it would detract from her femininity. Through her symptoms of agoraphobia she is able to continue to avoid the conflict and, at the same time, is given a rationale for continuing to be dependent (Goldberg, 1988).

Another notion is that male agoraphobics tend to have different coping mechanisms. there may have been less male agoraphobics in past as men have had to make their way to and from work, thus exposing themselves systematically. Another explanation is that men tend to employ alcohol and drugs in order to reduce anxiety, thus evading the diagnosis of agoraphobia (Rapp & Thomas, 1982). However, neither of these explanations has been validated.

Although no firm conclusions can be drawn as to what causes the difference in frequencies of agoraphobia among males and females, the results consistently show that agoraphobia is primarily exhibited by females.

Age of Onset

Wittchen (1988) found that, of 26 agoraphobics studied (with or without panic attacks), 24% first developed agoraphobic symptoms between the ages of 21 to 30. Results also showed that 21% of population developed agoraphobic symptoms between the ages of 11 to 20 and 22% developed symptoms between the ages of 41 to 50 (Wittchen, 1988).

The common finding is that agoraphobia usually begins in young adults 18 to 35 years of age with a mean onset of age 29 (Marks & Herst, 1970; Burns & Thorpe, 1977; Wittchen, 1986). Marks and Herst (1970) found that patients become handicapped, on average, 15 months after the phobia began. Eighty percent of these patients were never again completely free of agoraphobic symptoms.

Marital Status

At the time they come for treatment most agoraphobics are married, as would be expected in young to middle-aged adults (Goldstein & Chambless, 1978; Marks, 1987; Vose, 1981; Öst, 1987). Vose (1981) found that at least 60% of agoraphobic patients were married women. Similarly, Öst (1987) found that, in comparing 370 phobics (i.e., agoraphobics, social phobics, claustrophobics, animal phobics, blood phobics, and dental phobics) on a number of variables, 81.5% of the agoraphobics were married, 6.2% were single and 12.3% were divorced.

Education

British agoraphobics have been shown to resemble the general population in intelligence (Marks & Herst, 1987). However, studies have shown that the prevalence of agoraphobia decreases with the level of education completed. Robins et al. (1984) completed a study to observe the lifetime rates of 15 DSM-111 psychiatric disorders across three areas (New

Haven, Baltimore, and St. Louis) covered by the Epidemiologic Catchment Area (ECA; a survey completed in the United States including New Haven, Baltimore, St. Louis, Durham, and Los Angeles which investigated the prevalence and incidence of specific psychiatric disorders). The Robins et al. (1984) study showed that college graduates had significantly lower rates of agoraphobia than those with lower levels of education. Similarly, Canino et al. (1987) completed an epidemiologic survey of the lifetime and 6-month prevalence rates of several psychiatric disorders in Puerto Rico. Subjects consisted of individuals from age 18 through 64 years of age. Results indicated that, as the level of education increased, the rate of agoraphobia decreased. More specifically, results showed that there was a lifetime prevalence rate of 8.7% in individuals with 0-6 years of education, a rate of 8.5% in individuals with 7-11 years of education, a rate of 5.8% in individuals with 12-14 years of education, and a rate of 5.2% in individuals with 16+ years of education.

Social Class

Marks and Herst (1970) found that British agoraphobics were similar to those of the general population in terms of social status. However, Boyd (1985) found that there was a higher prevalence of agoraphobia in the United States among people who were low in socioeconomic status. Similarly,

Canino et al. (1987) found that there was a higher prevalence of agoraphobia in Puerto Rico, an area associated with lower income.

Area of Residence

Studies have shown that the prevalence rate of agoraphobia is greater in urban as opposed to rural areas (Robins et al., 1984; Canino et al., 1987). In the study completed by Robins et al. (1984) the only area surveyed which had a rural catchment area was St. Louis. Results showed that central St. Louis had an agoraphobic prevalence rate of 4.6% while the rural area had a rate of 3.7%. In the Canino et al. (1987) study the prevalence rate of agoraphobia in urban areas was 8.2% as opposed to a rate of 4.6% in rural areas, showing a significant difference ($p<.01$).

Occupation

Studies have also shown that agoraphobia may prevent sufferers from working, or handicap their work (Marks & Herst, 1970; Öst, 1987). In the survey by Marks and Herst (1970), it was found that 60% of the women stated that they wanted to work, but could not. Öst (1987) found that, of the six groups of phobics studied, agoraphobics had the highest percentage of people not working in the labour force (i.e., 45% of agoraphobics were either on sick leave, illness pension, or were housewives).

Summary of Demographic Findings

In general, it appears that 5% of individuals will develop agoraphobia during their lives. Agoraphobia is more apt to develop in married, nonworking women, approximately 29 years of age who live in urban areas. Studies also suggest that individuals who have little education and low social class are also more likely to develop agoraphobia.

Etiology

Models of agoraphobia can be classified under two main headings, psychological and physiological. The model one advocates may affect one's understanding of agoraphobia as each model suggests different underlying mechanisms in the development and maintenance of agoraphobia as well as choice of treatment.

Psychological Models

As discussed in the introduction, in the present DSM-111-R classification, agoraphobia is classified as Panic Disorder with Agoraphobia and Agoraphobia without a history of Panic Disorder. This implies that the diagnosis of agoraphobia is a residual category for those subjects who have never experienced a panic attack. Spitzer (1988) found that, among clinical cases with anxiety disorders, Agoraphobia without a history of panic is reported to be very rare. This suggests that this disorder may not exist.

However, Weissman, Leaf, Holzer, and Merikangas (1985) found that, within their population of agoraphobics, 50% had never experienced either panic-like states or the full-blown panic disorder. This suggests that each of these disorders does exist independently. The psychological factors that lead to the development of each (i.e., Agoraphobia without a history of Panic disorder and Panic Disorder with Agoraphobia) will now be discussed.

1. Agoraphobia without a history of Panic disorder

Psychosocial, conditioning, and integrative models have been proposed to explain the development and maintenance of agoraphobia. Each of these models will now be discussed.

Psychosocial Model

According to this model, agoraphobics are typically nonassertive individuals who perceive themselves to be incapable of functioning independently (Goldstein & Chambless, 1978; Saran, 1984; Haimo & Blitman, 1985; Fisher & Wilson, 1985). Studies have shown that agoraphobic symptoms may begin to occur during adolescence, a time when the person is torn between individuation and, at the same time, longing to remain in a familiar, predictable environment (Marks & Herst, 1970; Burns & Thorpe, 1977; Wittchen, 1986). This conflict situation becomes more complex over time leading to dependency on spouse, parent, children or other significant individuals (Beck & Emery, 1985). This creates interpersonal

conflict. The situation becomes more complex as the individual feels a loss of control.

Goldstein and Chambless (1978) suggested how this sequence of events could lead to agoraphobic fear and avoidance. They differentiated between the 'simple' agoraphobic (clients whose symptoms are precipitated by panic attacks produced by drug experiences or physical disorders such as hyperglycaemia) and the 'complex' agoraphobic. They suggest that the 'complex' agoraphobic develops through the interaction of four factors: (1) panic attacks which lead to anticipatory fear (i.e., fear of fear), (2) dependency, passivity, and unassertiveness, (3) attributing distressful feelings to inappropriate sources and (4) some source of conflict, usually interpersonal.

Walker, Norton, and Ross (1991) present the case of a married woman to show how these four factors lead to the development of agoraphobia. They describe the female as someone who feels unable to function independently, but is unable to express her feelings openly. Dissatisfaction with the marital situation results in a desire to leave, but the fear of living independently causes her to remain in the marriage. Feelings of dissatisfaction may arise in situations in which she feels trapped (e.g., elevator, waiting in a line-up). Feelings aroused in these situations are similar to those of being in the unhappy marriage. By avoiding those

situations which arouse anxiety she thwarts the possibility of living independently (Walker et al., 1991). When this interpersonal conflict persists long enough the person may feel a loss of control.

Self-control. The agoraphobic has a large investment in a sense of self control and competence. Although this self-control is minimal, dominance by another person tends to erode the individual's capability to function adequately on an independent basis. Gradually, the individual begins to perceive a variety of possible dangers in the outside world (e.g., losing control of the car, getting lost in traffic, etc.). Over time these fears accumulate and expand so that almost every stage in the process of going outside becomes a serious confrontation (Beck & Emery, 1985).

The importance of self-control has been shown in a study by Rachman, Craske, Tallman, and Solyom (1986). In this study subjects were randomly assigned to one of two treatment conditions in which they received eight sessions of individually administered exposure treatments. Both groups received progressive exposure to selected fear-evoking situations. The groups differed in that those subjects in the Escape condition were given the option of escaping when their fear reached a preset level of 70 on a scale of 0-100. On the other hand, those in the No-escape condition received repeated, gradual exposure until anxiety subsided in the

anxiety-provoking situation. Results showed that both groups of patients showed significant improvements on all measures of agoraphobia. However, the presession estimates of control were greater for the subjects in the Escape group than those in the No-escape group. These subjects (i.e., those in the Escape group) also reported less fear during the treatment session overall. These results may be due to the knowledge that they were allowed to escape if the need arose (Rachman et al., 1986).

It also appears that agoraphobics may feel as if they have no control of their feelings of anxiety because they attribute them to external events, thus creating a feeling of helplessness (Fisher & Wilson, 1985). Emmelkamp and Cohen-Kettenis (1975) found that, when compared with non-agoraphobics, agoraphobics had an external locus of control.

Conditioning Models

Based on the successfulness of exposure in the treatment of agoraphobia, it has been suggested that agoraphobic avoidance results from some form of reinforcement. Some models have suggested that this reinforcement is avoidance of specific noxious stimuli (classical and operant conditioning) while others suggests that agoraphobic avoidance appears to be directed toward obtaining safety (safety-signal perspective).

Classical conditioning. Mowrer (1947; 1960) described the development of avoidance behaviour in terms of a two-

factor theory: (1) the establishment of a classically conditioned association between a central motivational state of fear and some previously neutral stimulus and (2) an instrumental response (i.e., avoidance) which reduces the fear by removing the stimulus which elicits fear (negative reinforcement). Thus, this model suggests that agoraphobic avoidance arises in an attempt to avoid a specific noxious stimuli.

Emmelkamp (1979) cites two sources of evidence against Mowrer's two-factor theory. First of all, oftentimes agoraphobics cannot recall a specific experience that led to their fears. Secondly, there has been a consistent failure in conditioning fear relations in humans in the laboratory (Emmelkamp, 1979; Rachman, 1977).

Operant conditioning. In the operant behavioural approach, agoraphobic avoidance is seen as a freely emitted response which is increased or decreased by the consequences that follow. According to this model there is no need for conditioned fear for the avoidance to occur (Brehony & Geller, 1981). Goldstein and Chambless (1978) suggest that a reinforcer for agoraphobic avoidance may be social reinforcement (e.g., attention from others). However, empirical support for this model is lacking.

Safety-signal perspective. Alternative conditioning formulations suggest that agoraphobic behaviour may occur for

reasons other than avoiding specific noxious stimuli. One such formulation is the safety signal-perspective.

According to the safety-signal perspective, agoraphobic fear and avoidance are the result of an attempt to achieve and maintain a sense of safety (Rachman, 1984). Thorpe and Burns (1983) completed a national survey which suggested that safety was important for the agoraphobic individual. They described the following, in order of importance, as the most common sources of comfort for the agoraphobic individual: when away from home having a way open for a quick return, being accompanied by husband/wife, sitting near a door in a restaurant/hall/etc, talking the problem over with a friend, distraction, discussing the problem with one's daughter, being accompanied by a friend and giving oneself reassurance (Thorpe & Burns, 1983).

Rachman (1984) noted that the three most important sources of comfort were related to safety. According to Rachman (1984), the agoraphobic individual balances the danger threatening him/her against prevailing safety and accessibility to assistance. Any important event that threatens one's sense of safety can tilt the balance between danger and safety.

Rachman (1984) showed that the safety-perspective could offer explanations for some of the problems encountered with conditioning theories. Firstly, the safety-signal perspective

suggests why agoraphobic avoidance can occur in situations where fear did not occur. This model suggests that any event which involves loss of safety-signals (e.g., loss of a loved one) may result in avoidance. Secondly, Rachman (1984) suggests that this model is able to explain why different methods of treatment (e.g., self-instructional training, tranquillizing drugs, exposure) all make a contribution to increasing mobility. Rachman (1984) attributes the effectiveness of these self-help and safety procedures to their ability to maintain a balance between safety and danger.

The use of a safety-signal perspective would have important therapeutic implications. Treatment would focus on attempts to discover what makes the individual feel safe (Rachman, 1984).

However, there are some problems with the safety-signal perspective. A primary concern is that most people do not describe their problems in terms of a sense of safety. Also, no direct empirical evidence has been found which supports predictions of the safety-signal perspective (Rachman, 1984).

An Integrative Model

Brehony and Geller (1981) presented a model which describes a complex interplay of behavioural, physiological, cognitive, and interpersonal behaviours in the development and maintenance of agoraphobia. They suggest that social learning experiences give rise to problems with assertiveness,

dependency and self-esteem which make the individual more vulnerable to stress.

Brehony and Geller (1981) explain that agoraphobics typically find particular situations stressful. These include situations in which they feel trapped (e.g., being cut from an escape route) and those which are novel. It is suggested that, since the individual has a predisposition to have difficulty in stressful situations, sympathetic arousal is created. The catastrophic interpretation of arousal results in a desire to escape the fear-eliciting situation, resulting in a reduction of fear (i.e., negative reinforcement). This reinforcement leads to avoidance of situations in which fear is elicited (i.e., situations in which one feels trapped and novel situations) (Brehony & Geller, 1981).

Although the model proposed by Brehony and Geller (1981) provides a comprehensive explanation of the development and maintenance of agoraphobia, it is not problem-free. The difficulty with this model is verifying that problems in assertiveness, dependency, and self-esteem appear before agoraphobic symptoms. Studies have shown that assertiveness training has been successful in the treatment of agoraphobia (Thorpe, Freedman, & Lazar, 1985; Emmelkamp, van der Hout, & DeVries, 1983), but, as of yet, no studies have been shown to offer unequivocal support for this model.

2. Panic Disorder with Agoraphobia

Panic attacks are a common phenomenon in the general population. In fact, the occurrence of clinical panic has been shown to be approximately 1% in the general population (Norton, Harrison, Hauch, & Rhodes, 1985). Thus, it is understandable that much has been learned about clinical panic through the general population. Through comparison with this group (i.e., general population) one is more able to understand why Panic Disorder with Agoraphobia develops in some individuals, but not others.

Norton, Dorward, and Cox (1986) compared nonclinical panickers with clinical panickers on a number of variables to determine the factors associated with panic attacks. In order to compare nonclinical subjects with patients diagnosed with Panic Disorder and Agoraphobia, Norton et al. (1986) added two additional characteristics to the DSM-III criteria: a) the unexpected occurrence of some of the attacks and b) the occurrence of some of the symptoms of panic within 10 minutes after the onset of the attack. Results indicated that the panickers experienced an average of eight (range = 1-12) of the symptoms described for Panic Disorder with only 8.5% of the subjects having fewer than four symptoms (i.e. the number required for a diagnosis of panic attack according to DSM-III).

During panic attacks the most frequently reported symptoms were palpitations, trembling, sweating, dizziness, and hot/cold flashes, which appear to be typical for all those people who report having a panic attack. Although these symptoms were similar to those of clinical panickers in onset and duration, they appeared to be less severe (Norton et al. 1986).

It was also shown that these groups differed on the severity with which they experienced fear. Barlow, Vermilyea, Blanchard, Vermilyea, Dinardo, and Cerny (1985) found that agoraphobics reported fear as the second most severe symptom of panic attacks (next to palpitations). On the other hand, nonclinical panickers ranked fear as much less severe (sixth most severe symptom) since the sole fear experienced is doing something uncontrollable during an attack (Norton et al., 1986).

Hence, according to Norton et al. (1986), the panic attacks of clinical subjects are more severe (i.e., accompanied by more fear and psychopathology). Consequently, a more appropriate manner to conceptualize panic attacks may be as a spectrum of severity (i.e. the severe end of the spectrum indicated by greater psychopathology and fear). Such a conceptualization has been presented by Norton, Cairns, Wozney, and Malan (1988).

Norton et al. (1988) completed a study in which panic was classified into five different levels based on the frequency and recency (i.e., 3 weeks prior to testing) of panic attacks. Categorization resulted in the subsequent groups: nonpanickers (NP; no panic attacks within the last year), limited symptom panickers (LS; having had panic episodes, but not meeting the four-symptom criteria required by DSM-III), infrequent panickers (IP; one or more panic attacks in the last year), recent panickers (RP; one or two panic attacks in the 3 weeks prior to testing), and frequent panickers (FP; three or more panic attacks 3 weeks prior to testing). Each subject completed a revised version of the Panic Attack Questionnaire (PAQ), the Hopkins Symptom Checklist (HSCL), the State-Trait Anxiety Inventory (STAI), and the Beck Depression Inventory (BDI). Results showed that, with the exception of LP subjects, there was a linear trend across groups. More specifically, there were increased scores from NP to IP to RP to FP across all eight measures of the HSCL-90, the BDI and both STAI scales. This linear trend also occurred in the family history data, with the more frequent panickers having more relatives having had panic attacks. However, results showed that there were few significant differences in ratings of symptom severity among IP, RP, and FP groups. These findings suggest that the perceived severity of an attack is

not a function of the frequency of panic attacks (Norton et al., 1988).

In the Norton et al. (1988) study the only measure that clearly differentiated FP subjects from either IP or RP was the degree of seriousness with which subjects perceived panic attacks. Thus, the importance the subject assigns to the panic attack may be the fundamental factor affecting severity of psychopathology while the frequency of panic attacks may play a secondary role. Klein, Ross, and Cohen (1987), too, suggest that panic attacks develop in some agoraphobics because the individual becomes convinced that feelings of panic in specific situations are dangerous. Thus, psychosocial and cognitive variables may interact to produce panic. Models that may explain how this occurs will now be discussed.

Integrative Model

In the model proposed by Stampler (1982) it is suggested that psychophysiological, biochemical, and clinical aspects of panic disorder interact. Stampler (1982) suggests that initial panic attacks arise during a time of stress (i.e., changes in life circumstances, marital conflict). Life stress is more difficult for agoraphobic-proned individuals who are passive, dependent and have few coping skills. Both psychological (i.e., prolonged worrying about social stress) and physiological changes (i.e., receptor sites for

epinephrine become hyperactive within endocrine system) may prompt the initial attack. Prolonged rumination of another panic attack results in fear of fear (Stampler, 1982). The cognitive explanation of panic is best described by Clark (1986).

Clark's Cognitive Model

According to Clark (1986) the physical sensations associated with panic (e.g., pounding heart, inability to breathe) are often interpreted by the client as a sign of impending death by a heart attack. The panic attack reinforces the person's belief that someone must take care of him or her. This sets off a self-defeating feedback loop in which panic attacks increase dependency and feelings of helplessness, which in turn, decrease the likelihood of remaining in the conflict situation.

The individual becomes hyperalert to his or her sensations and interpret feelings of mild to moderate anxiety as precursors of oncoming panic attacks. The anxiety of developing another attack in similar conditions results in avoidance. Consequently, the avoidance generalizes widely and the individual often has high levels of free-floating anxiety. Thus, according to this model, panic attacks result from the catastrophic misinterpretations of bodily sensations (i.e. perceiving sensations to be more dangerous than they really are). These thoughts cause a further increase in apprehension

(i.e. fear) which culminates in a vicious cycle resulting in a panic attack.

This interpretation is capable of explaining both the avoidance and fear components of panic attacks, which Norton et al. (1986) report to be the factors differentiating clinical and nonclinical panickers. According to this interpretation, the anticipation of fear, based on cognitions, results in further apprehension resulting in a panic attack, while avoidance may occur as an attempt to avoid the intensity of fear experienced in particular situations (Clark, 1986). However, this explanation does not explain why agoraphobia develops in some individuals who do not have panic disorder.

States-of-Mind Model (SOM)

Schwartz (1986) developed the states-of-mind (SOM) model. The SOM model maintains that an optimal balance of positive and negative cognitions characterize normal psychological functioning. Specific deviations from this balance are associated with psychopathology. The SOM model proposes five distinct states of mind defined in terms of set-point ratios (balances) of positive cognitions/affects to total positive plus negative cognitions/affects. The positive dialogue (set-point of .618 ± .06) is an internal dialogue which is positively balanced but, at the same time, has sufficient negative cognitions to remain realistically cautious. The internal dialogue of conflict (set-point of .500 ± .05) is

associated with mild levels of psychopathology. The negative dialogue (set-point of .38 ± .06) characterizes moderate psychopathology and the negative monologue (set-point of .31 to .00) characterizes severe psychopathology. The positive monologue (range of .69 to 1.00) is associated with maladaptive states of mania and hypomania if sustained for prolonged periods (Michelson, Schwartz, & Marchione, 1991).

Michelson and Mavissakalian (1982), through the use of self-statement training and paradoxical training, were able to bring SOM's from the negative dialogue/ monologue range (pretreatment) to SOM's which fell in the positive dialogue range (posttreatment). This suggests that the distinguishing feature of agoraphobia with and without panic disorder may be the initial SOM level. The initial SOM may change, according to Sheehan and Sheehan (1982), as a function of the intensity and frequency of spontaneous panic attacks. This explanation could explain why some agoraphobics who do not have panic initially, develop panic disorder at a later time.

Problems with Psychological Model

The difficulty with this classification is determining which causes the other. Does panic precede avoidance or vice versa? Many patients who have had panic attacks state that their primary fear, prior to entering the phobic situation, is of having a heart attack or of losing control, rather than simply having another panic attack. In addition, some

individuals who have overcome avoidance still tend to have panic attacks without showing avoidance (Marks, 1987). Thus, no simple conclusion can be made about which precedes the other.

Summary of Psychological Models

As has been shown, the psychological models used to describe the etiology of Agoraphobia without a history of Panic Disorder and Panic Disorder with Agoraphobia both use psychosocial, conditioning, and cognitive explanations. In general, a dependent individual with a lack of self control is more vulnerable to develop agoraphobia. The differentiating factor appears to be the cognitive interpretation of anxiety (i.e., if feelings of anxiety are not interpreted catastrophically, they may not result in full-blown panic, thus avoiding the diagnosis of Panic Disorder with Agoraphobia). The hypothesis that the psychopathology of panic results from the catastrophic misinterpretations of certain bodily sensations (i.e. anxiety sensitivity) suggests the appropriateness of both a cognitive-behavioural and a behavioural approach for treatment of panic attack.

Physiological Model

According to the physiological model, the nucleus of agoraphobia is the panic attack (Vittone & Uhde, 1985). Physiological models of the etiology of panic disorder suggest that panic attacks are spontaneous physical events that occur

unpredictably in predisposed individuals. The phobic avoidance that often follows initial panic attacks is interpreted by the medical school as the response of a terrified person seeking to stay in a relatively safe place (Norton et. al, 1991). In a desperate attempt to discover the etiology and to prevent further occurrences of panic, the individual may conclude that the situation(s) in which panic have occurred may be responsible and, as a result, should be avoided (Vittone & Uhde, 1985). In this section models developed to try to explain how panic develops will be discussed by examining heredity and underlying physiological mechanisms.

Heredity

Family and twin studies have been utilized in determining the contribution of heredity in the development of Panic Disorder with Agoraphobia.

Family studies. Crowe, Noyes, Pauls, and Slymen (1983) completed a study which showed that there was a 25% rate of panic disorder in first degree relatives of panic disordered probands as compared to a 2.3% rate in relatives of normal controls. On the other hand, Buglass, Clarke, Henderson, Kreitman, and Presley (1977) concluded that there was no evidence of increased prevalence of psychiatric illness among the parents of agoraphobics. They found that there were no significant differences between patient groups and controls.

These studies show the inconsistency in the prevalence of panic disorder among family members.

The problem with these studies is determining the significance of heredity because similarity in reactions among family members may be due to a common environment as well as to common genes.

Twin studies. By using twin studies one provides a greater opportunity for determining contribution of heredity. Monozygotic (MZ) twins have identical genetic endowment while dizygotic (DZ) twins are no more similar genetically than other siblings. Thus, a higher concordance rate of panic in MZ twins would offer support for the role of heredity in the development of panic disorder.

Torgersen (1983) investigated the role of heredity in the determination of anxiety disorders in a study consisting of 32 MZ and 53 DZ same-sexed twins. Results showed that there was a 31% concordance rate of panic disorder with agoraphobia amongst MZ twins as compared to a 0% concordance rate in DZ twins. Similarly, Slater and Shields (1969) found that there was a concordance rate of 41% in MZ twins as compared to a 4% concordance rate in DZ twins.

Although these studies provide evidence for the role of heredity in the development of Panic Disorder with Agoraphobia, there still exist a number of problems. First of all, in the Torgersen (1983) study the same interviewer

interviewed both twins in all twin pairs. Also, the same interviewer classified the twins. Therefore, this study was not blind. Secondly, it is possible that MZ twins may show a higher concordance rate because of a more similar environment as opposed to identical genetic make-up (i.e., parents tend to emphasize the differences between DZ twins and minimize the distinctions between MZ twins) (Lader, 1991). Thirdly, although these results provide some basis for the importance of heredity, they provide no explanation of what is inherited. The next section will review underlying physiological mechanisms which have been postulated to play a role in the development of Panic Disorder with Agoraphobia.

Underlying Physiological Mechanisms

Many underlying mechanisms have been postulated to produce panic. In the present study abnormal functioning of the locus ceruleus (LC) system and possible disorder in the metabolism of the inhibitory transmitter gamma amino butyric acid (GABA) will be discussed. In reviewing the importance of these mechanisms in the development of panic, the use of pharmacologic agents to induce panic will be addressed.

Locus ceruleus (LC). Redmond (1979) suggested that the biological basis of panic was the LC. This small brain-stem nucleus contains approximately 50% of brain noradrenergic neurons, thus supplying noradrenaline-mediated inneveration to many areas of the primate brain. These areas include the

cerebral cortex, hippocampus, cingulate gyrus, and amygdala (Lader, 1991). Pathways to the nucleus are believed to convey warnings of possible noxious consequences while pathways from the nucleus are associated with motivation, learning, and memory (Lader, 1991). Consequently, it has been suggested that this system mediates the fear/arousal response in primates (i.e., increased firing in this area may result in panic attacks) (Lydiard & Ballenger, 1987). For example, Redmond (1979) showed that an animal can move from a stage of fearlessness to one of terror when LC activation is increased.

Induction studies have also shown the importance of the LC in producing panic. If noradrenergic activity is important in the etiology of panic, then it is expected that panic vulnerability would be influenced by pharmacological agents which act on the LC. Two such agents are sodium lactate and yohimbine.

Pitts and McClure (1967) found that an infusion of 10mg/kg of sodium lactate produced panic symptoms in 13 of 14 anxiety neurotics as compared to only 2 of 16 normal controls. Similarly, Liebowitz et al. (1984) found that approximately 75% of panic-disordered or agoraphobia with panic-disordered patients developed panic during lactate infusions. On the other hand, none of the normal controls had panic when given sodium lactate infusions. This suggested that some individuals are more biologically vulnerable to panic. More

specifically, there is more stimulation of central noradrenergic centers (primarily LC) in these individuals.

Another agent used in discussing the importance of LC activation in the production of panic is yohimbine. Yohimbine is a alpha$_2$-adrenergic antagonist that interferes with inhibition of noradrenergic transmission at pre-synaptic sites (Shear, 1986). Thus, low doses of yohimbine may enhance the neural release of noradrenaline from the LC projections (Lader,1991).

Charney, Heninger, and Sternberg (1982) found that a 20mg dose of yohimbine produced significant anxiogenic effects in eight normal volunteers. Yohimbine has also been shown to produce panic attacks in patients diagnosed with a panic disorder (Uhde, Boulenger, Vittone, Siever, & Post, 1983; Charney, Heninger, & Breier, 1984). These results suggest that yohimbine may be a 'panicogenic' compound (Lader,1991).

GABA. GABA is an inhibitory neurotransmitter that is believed to be involved in 40% of all synapses (Lader, 1991). Torgersen (1983) suggested that less than average activity of GABA or of receptor sensitivity to GABA would result in the inability to adequately dampen or inhibit excitatory responses. Thus, internal or external stimulation would allow the release of neuronal activity which is uninhibited, maybe to the point of panic (Lader,1991).

This suggests that any drugs potentiating GABA should have widespread inhibitory actions. Such a class of drugs are the benzodiazepines (Lader, 1991). Benzodiazepines act at their own receptors rather than directly at GABA receptors. The antipanic effect of benzodiazepines, as will be seen later, offers support for an association between GABA and benzodiazepines.

Also, benzodiazepine antagonists have also suggested a relationship between benzodiazepine receptors and anxiety. Ninan, Insel, Cohen, Cook, Skolnick, and Paul (1982) showed that beta-CCE (beta-carboline-3-carboxylic acid ethyl ester), a benzodiazepine receptor antagonist, was potently anxiogenic in primates. Similarly, Dorow, Horowski, Paschelke, Amin, and Braestrup (1983) found that beta-CCE produced severe anxiety in normal human volunteers.

Problems with Underlying Mechanisms

First of all, although the above studies suggest a relationship between pharmacological agents and particular sites of action in inducing panic, they are unable to determine the actual pharmacological mechanisms. These agents set into motion a complex series of metabolic changes, thus making it difficult to determine which change ultimately provoked the panic attack. Secondly, some lactate studies have failed to use control groups and double-blind methodology. Also, criteria for panic onset are often not

defined clearly (Shear, 1986). Furthermore, studies suggesting an association between GABA and benzodiazepines in producing anxiety have difficulty because GABA and benzodiazepines are involved in a range of brain activities other than anxiety (Lader, 1991).

Finally, if a specific physiologic disturbance were identified, its ability to cause panic is still questionable. Studies have suggested that psychological mechanisms may still be functioning (Ackerman & Sachar, 1974; Kelly, Mitchell-Beggs, & Sherman, 1971; van der Molen, van den Hout, Vroemen, Lousberg, & Griez 1986). Ackerman and Sachar (1974) suggested that a conditional emotional response or a learned perceptual association may determine whether or not physiological changes generate anxiety. Studies have also suggested a safety component may be involved. For example, Kelly et al. (1971) found that there was less fear during lactate infusions when a doctor was present.

The individual's cognitive interpretation of the physiological change may also determine the effect of the change. Van der Molen et al. (1986) completed a double-blind, placebo-controlled cross-over study in which lactate infusions were given to normal subjects. One group was told that the infusions may produce bodily sensations 'similar to anxiety' while the other group was told that the infusion would produce 'pleasant tension'. Results showed that placebo infusions did

not affect either group. However, lactate infusions produced feelings of anxiety in the former group while those in the latter did not report a change in mood. These results suggest that, although sodium lactate had a physiological effect (i.e., placebo as compared to lactate injections), the effect is mediated by one's cognitive interpretation (i.e., whether the feeling would be anxiety as opposed to pleasurable expectation) (van der Molen et. al, 1986).

Summary

It can be seen that the physiological and psychological models differ significantly in the etiology of agoraphobia. According to the physiological model, it is the propensity to develop spontaneous panic that has to be treated. The model suggests that heredity and underlying mechanisms result in panic. However, as shown, the physiological approach is not able to explain all facets of agoraphobia. A psychological mechanism may also be present. The psychological model views the entire condition of Agoraphobia as a 'sensitizing' process (Rapp & Thomas, 1982).

Thus, there is no clear model which describes clearly the etiology of agoraphobia as many mechanisms appear to be interacting. One's conceptualization of agoraphobia becomes even more complex when one becomes aware of the comorbidity of agoraphobia.

Comorbidity

Many problems can occur in the life of the agoraphobic which aggravate the situation. Agoraphobia is often associated with other mental health problems such as major depression. Agoraphobia may also interfere with an individual's ability to function in the family or marital relationship. Patient's with agoraphobia have also frequently been shown to possess long-standing maladaptive personality attributes. In order to highlight the implications that these factors can play in the assessment and treatment of agoraphobia, it is necessary to consider them separately.

Comorbidity with another psychiatric disorder

Depression. Uhde, Boulenger, Roy-Byrne, Geraci, Vittone, and Post (1985) state that a present or past history of depression has been reported in 33 to 91% of patients with agoraphobia. The first episodes usually begin before or within a few weeks or months of the first panic attacks. During depression the patient feels blue, hopeless, or irritable, is more anxious and panicky, lacks interest in work, sleeps poorly, and depression questionnaire scores are elevated.

Breier, Charney, and Heninger (1984) carried out a study in which 60 subjects participated, all of whom were admitted to a 16-week outpatient clinical research treatment program for Agoraphobia and Panic Disorder. Assessment was

implemented through an intensive, face-to-face interview which consisted of structured and semi-structured components. This study showed that major depression occurs in two-thirds of patients with agoraphobic-panic disorder. Also, those patients who presented with both agoraphobia-panic disorder and major depression simultaneously have a more severe anxiety disorder at the time of admission, greater levels of past impairment, and a longer duration of panic disorder as compared with patients with agoraphobia-panic disorder with no history of depression (Breier et al., 1984).

Similarly, Bowen and Kohout (1979), in reviewing 55 cases of agoraphobics, found that 84% showed a positive family history of depression. More important was the finding of depressive symptoms in 100% of the agoraphobics and response to antidepressants by 86% (Bowen & Kohout, 1979).

Comorbidity with Personal and Interpersonal Functioning

Marital adjustment. Buglass et al. (1977) found that the marriages of agoraphobic women were very similar to those of general population on most measures of attitude, behaviour, domestic organization, marital interaction, husband's and children's psychiatric symptoms, and social interaction. However, it is possible that agoraphobia may be influenced for better or worse by people close to the patient. For example, if the husband of an agoraphobic woman is quite content that his wife should be housebound, he may be uninterested in or

even obstruct attempts at treatment that threaten his domestic calm (Hafner, 1984). A factor often related to marital conflict and agoraphobia is sexual adjustment.

Sexual adjustment. In the study by Buglass et al. (1977) women's sexual adjustment was compared before and after developing agoraphobia. Premorbid sexual adjustment was virtually the same in the two groups. Comparisons showed that they reported similar parental attitudes toward sex and similar discussion of sexual matters. With the onset of illness, however, the picture changed markedly. Sixteen of 24 patients who married before their current agoraphobia reported a loss of libido, as compared to only one of the controls (Buglass et al., 1977). Alternatively, these results may be due to a concurrent depression. These results again demonstrate the complexity of agoraphobia.

Anger. Another factor affected by the marital relationship, which may also increase the severity of agoraphobia, is anger. As shown by Walker et al. (1991) the female may be discontented in a marriage and want to leave. However, she is too afraid and unassertive to do so. This creates anger, producing anxiety and panic reactions. However, the individual does not make the connection between her emotions and the events that produced them, but rather, she attributes them to external events, thus increasing the amount of avoidance (Fisher & Wilson, 1985). This attribution

of feelings to external events may also result in a loss of self-control (Rosenbaum, 1980).

Stress. Stressful life events have also been shown to precipitate the onset of agoraphobia (Kaplan, 1987). Last, Barlow, and O'Brien, (1984) found that between 60% and 90% of agoraphobics show precipitating stress. The most common precipitators include illness or death of a loved one, client illness, domestic stress, job stress and overwork, and new responsibilities (Kaplan, 1987). These stressful life events may heighten the feeling of 'loss of control'. Stampler (1982), as shown earlier, suggested that it was the emotionally stressful changes in the individual's life that could lead to the initial panic attack.

Summary

From the above review it is apparent that agoraphobia is more complex than presented by the current classification. Depression, marital difficulties, sexual adjustment, anger, and stress have all been postulated to be associated with the agoraphobia, thus increasing it's complexity. Also, it has been shown that the models used (i.e., physiological and psychological) to explain the etiology of agoraphobia differ significantly. It is logical that the model advocated in explaining etiology determines the approach to treatment.

Treatment

Treatment of agoraphobia has focused primarily on the panic and avoidance parameters. The model one advocates (i.e., psychological or physiological) plays an intricate role in the treatment of agoraphobia (Rapp & Thomas, 1982).

The psychological model views the onset of the panic attacks as a more predictable event and as the culmination of an increase in anxiety (i.e., sensitizing process). Thus, the psychological treatments focus on reducing phobic avoidance and developing coping strategies to deal with panic attacks. They believe that the onset of panic attacks may be secondary to the development of phobic fears, patients report the onset of panic attacks as originating in fear-provoking situations.

On the other hand, the physiological model of the etiology of agoraphobia has focused on the occurrence of unpredictable panic attacks. Thus, the medical based treatments are designed to reduce the frequency of panic attacks (Norton et. al, 1991).

In order to understand the relevance of each of these views of treatment, it is necessary to study them in more depth.

Psychological Treatment

The major psychological treatments of agoraphobia include exposure (in vivo or imagination) and respiratory control techniques. More recently a cognitive-behavioural approach

has been developed. Recent research has also concentrated on a multimodal approach to agoraphobia, which assesses all systems as proposed by Lang (1968). The cost/benefit factor will be discussed in regard to the multimodal approach.

Exposure

In exposure the fundamental concept is to induce anxiety through exposure to the fear-provoking stimuli (in imagination or in real situations), but prevent avoidance so that neither the anxiety nor the avoidance will be reinforced by the relief.

The most common method of exposure used for agoraphobics is in vivo exposure (actual confrontation with feared stimuli with a goal of reducing avoidance behaviour). Numerous studies have shown that there is improvement in avoidance with the use of in vivo exposure. Curtis, Nesse, Buxton, Wright, and Lippman (1976) found that in vivo exposure was successful in treating 10 out of 12 specific phobias. Jansson and Öst (1982) showed that the success rate of in vivo exposure was approximately 70%.

Imaginal versus in vivo exposure. On the one hand there is systematic desensitization (gradual, non-anxiety provoking exposure) and at the other extreme there is flooding (prolonged exposure to anxiety-producing stimuli). These methods of treatment can be implemented in imagination or in vivo (realistic situations). Chiari and Mosticoni (1979)

showed that there was a greater depth of relaxation acquired with systematic desensitization than in muscular relaxation training sessions. Boulougouris, Marks, and Marset (1971) compared desensitization and flooding. These treatments were given first in fantasy and then in vivo. Results showed that in vivo exposure was more effective. These results support the superiority of in vivo exposure over imaginal exposure.

Prolonged exposure in vivo. Prolonged exposure in vivo has been shown to be superior to shorter exposure sessions. In the study by Boulougouris et al. (1971) flooding was significantly superior to systematic desensitization on both clinical and physiological measures. Also, when Stern and Marks (1973) compared short (4 half-hour sessions) with long (2-hour) sessions, longer sessions were shown to produce significantly superior results.

It has also been shown that frequent practice is more effective than spaced practice. Foa, Jameson, Turner, and Payne (1980) compared ten sessions of frequent practice with ten sessions of spaced practice (in a crossover design). In the frequent practice condition treatment was conducted on consecutive days, whereas in the spaced conditions, sessions were held once a week only. Results indicated that frequent practice was more effective than spaced treatment. Foa et al. (1980) suggest that the superiority of the frequent condition may be due to the fact that frequent practice provides less

opportunity for accidental exposure between treatment sessions and for the reinforcement of avoidance or escape behaviour.

Involvement of the therapist. As can be seen, sometimes in vivo exposure requires much therapist time. The therapist often accompanies the client during initial exposure trials to provide support and comfort. Treatment outcome of in vivo exposure is obtained primarily through the Behavioural Avoidance Test (BAT). In the BAT a hierarchy of feared situations or events is designed, which the patient is exposed to in order of increasing difficulty. Between sessions the client relays information based on self-monitoring diary measures (i.e., the therapist requires patients to record moods and panic attacks) (Mavissakalian & Barlow, 1981). However, more recent studies to overcome time constraints, have changed the traditional in vivo exposure protocol, and have used self-help procedures and significant others.

Self-help manuals. As well as being able to alleviate time restraints, self-help manuals are capable of overcoming problems of severe avoidance and dependency on the therapist (Holden, O'Brien, Barlow, Stetson, & Infantino, 1983). However, cases in which there is little or no therapist contact have indicated contradictory results. Holden et al. (1983) gave six severe female agoraphobics a self-help manual for 4, 6, 8, or 10 weeks. These women then received 4, 6, or 8 weeks of therapist-directed home-based treatment. Cognitive

restructuring and graduated in vivo exposure comprised the treatment strategies in both conditions. The results indicated that self-conducted treatment was not effective. However, most of the subjects showed improvement to therapist-assisted exposure in phase two.

On the other hand, Ghosh and Marks (1987) randomly assigned agoraphobics to one of three groups: self-exposure instructions from a psychiatrist, a self help manual, or a computer program with these instructions. These therapies required 3.1, 0, and 1.2 hours of therapy respectively. Results showed that all three treatment groups improved significantly by the end of treatment and continued to improve up to 3-months follow-up, and maintained their gains to 6-months follow-up.

The difference between these two studies may be due to the severity of agoraphobia and the willingness of subjects to follow directions. More specifically, patients in the former study were severe agoraphobics and were less prone to complete homework assignments. Overall, there appears to be some support for the use of self-help manuals for less severe agoraphobics. With a minimal amount of therapist time (i.e. instructions on how to target problems and carry out avoidance) this method of therapy could be very cost-effective. A similar type of cost-effective exposure therapy involves the use of significant others in therapy.

Significant others in therapy. The significant other in therapy could be a spouse or self-help group. The presence of the spouse as an ally may make the treatment itself more powerful and continued cooperation may help to maintain or enhance gains during the follow-up period. Some studies have shown that improvement in agoraphobic symptoms may lead to deterioration in the marital relationship. Thus, by having the spouse actively involved this effect may not occur. However, some studies have shown that spouses involved in treatment report more anxiety when treatment ended. Hafner (1984) studied husbands of 33 agoraphobic women before and one year after their wives received in vivo exposure. At follow-up many husbands were found to have negative symptoms such as anxiety and depressive symptoms.

Barlow, Mavissakalian, and Hay (1981) did a study which involved six 30-62 year old agoraphobic females and their husbands. Therapy consisted of exposure and cognitive restructuring. They found two different patterns. For four subjects it was found that, as the phobia improved, marital satisfaction increased, whereas for two couples an inverse relationship was found, where improvements in phobia were correlated with decreases in marital satisfaction.

Barlow, O'Brien, and Last (1984) did a study involving 28 women. Half of these women received therapy with the husband included. It was found that both groups showed

improvement, but the spouse-participation group performed significantly better. However, Cobb, Mathews, Childs-Clarke, and Blowers (1984) did a study in which nine patients were treated as a couple while ten were treated alone. Treatment consisted of in vivo exposure, use of a manual, and homework assignments. Results showed that involving the spouse in treatment produced broadly similar results to seeing the patient alone. It was also found that changes were maintained in follow-up equally well. However, it should be noted that this procedure was carried out at home and spouses in the non-couple treatment also showed interest.

Other studies observing the use of significant others involve self-help groups. Results have shown that group exposure is about equally effective as individual exposure programs. Sinnott, Jones, Scott-Fordham, and Woodward (1981) found that a neighbourhood based in vivo exposure program (i.e., zoning; patients advised to help each other to complete homework assignments) was more effective than a clinic based exposure program (i.e. unzoned).

Thus, overall there appears to be some support for the use of significant others. These programs seem to have a beneficial effect on exposure and, at the same time, provide a method which is economical in terms of therapist time.

In conclusion, it can be seen that in vivo exposure is a very effective therapy that mainly controls avoidance

behaviour. It has been shown to be superior to exposure in imagination and, also, to be more effective with flooding. Also, recent studies dealing with significant others may form the foundation for the use of an in vivo exposure method which is more economical in terms of therapist time. In contrast to the in vivo exposure method which places emphasis on avoidance, studies are beginning to focus on exposure to interoceptive stimuli.

Interoception Exposure

More recently exposure has been used in the reduction of panic attacks through exposure to interoceptive stimuli. It has often been suggested that the avoidance often displayed by agoraphobics may not be due to external stimuli, but rather to the internal sensations produced in these circumstances (Griez & van den Hout, 1983; Barlow, Craske, Cerny, & Klosko, 1989; Craske & Barlow, 1993). What happens in these cases is that a positive feedback loop is developed. Components of the anxious response have themselves become conditioned stimuli leading to further anxiety.

Barlow et al. (1989) presented the results of a long-term study which tested four variations of behavioural treatments for panic disorder: exposure to somatic cues combined with cognitive therapy, relaxation therapy, a combination of the above, and a wait-list control. Results showed that subjects in all three treatments were superior on measures as compared

to wait-list control. More specifically, results showed that 85% of subjects who were exposed to somatic cues (through visualization of anxiety scenes, overbreathing, or spinning) were panic free at posttreatment, thus supporting the significance of interoceptive exposure (Barlow et al., 1989).

Another treatment which uses this method is paradoxical intention. In paradoxical intention, the therapist tells the patient to increase the anxiety they experience in anxiety-producing situations in an effort to teach them to habituate to and control these sensations. Ascher (1981) found that a group who received paradoxical intention were better able to approach target locations than a group who just received gradual exposure. However, the problem with paradoxical intention is that it relies on naturally occurring panic attacks.

In recent studies researchers have been trying to provide more systematic exposure to somatic sensations by producing symptoms artificially. Griez and van den Hout (1983) carried out a case study in which a patient received a 35% CO_2 65% O_2 mixture. They found that inhalation of CO_2 produces symptoms like panic attacks and, with increased administration the client became habituated to the anxious sensations and the panic attacks stopped. Although these results support the importance of interoceptive exposure, an alternative strategy which attempts to modify client's interpretation of their

symptoms, is voluntary hyperventilation. According to this viewpoint panic attacks are largely the result of hyperventilation and treatment should centre on the control of breathing.

Respiratory Control Techniques

There is a large degree of similarity between the panic attacks in agoraphobia and the attacks of the hyperventilation syndrome (HVS). Hyperventilation is a higher degree of ventilation than necessary to meet the demands of the body. This creates a decreased amount of arterial CO_2 and an increase in arterial PH and if sustained, produces symptoms of anxiety. Also, since these attacks occur unexpectedly they lead to a feeling of lack of control, anxious anticipation of attack, and finally avoidance.

To show the dependence between HVS and agoraphobia, Garseen, Van Veenendaal, and Bloemink (1983) did a study in which the occurrence of both HVS and agoraphobia were simultaneously observed. It was found that 60% of agoraphobic patients suffered from hyperventilation complaints and 60% of HVS patients suffered from agoraphobia. Thus, these results support the possibility that respiratory control techniques would prove to be a successful treatment in agoraphobia.

Clark, Salkovskis, and Chalkley (1985) used a group of 19 subjects from psychiatric outpatient departments suffering

from panic attacks. Their goals were, (a) to demonstrate that their panic often resulted from over-breathing rather than indicative of catastrophic things which they usually fear and (b) to teach them a way of controlling stress. The patient first learns voluntary hyperventilation, then is given an explanation of how hyperventilation induces panic, and finally, is trained in slow breathing. Treatment lasted 2-weeks and outcome measures were assessed using a panic attack diary, behaviour test, fear questionnaire, and Beck Depression Inventory. Results showed that respiratory control is an effective treatment for panic attacks because it resulted in significant reductions in panic attack frequency, anxiety /depression, and global ratings of distress.

In conclusion, it can be seen that respiratory control techniques can be an effective treatment for panic attacks in agoraphobia, as shown by the decrease in panic attacks. Also, it should be noted that this technique uses the cognitive component by trying to change interpretation of somatic symptoms (i.e., CO^2 induced sensations may have forced the patient to reassess the meaning of certain internal states). This idea leads to the importance of cognitive therapy in treating agoraphobia.

Cognitive-Behavioural Treatment

The most innovative approach to the treatment of agoraphobia has been the cognitive-behavioural approach.

According to this approach the various pharmacological and physiological agents which have been shown to produce panic in people may do so, not because of their ability to induce panic attacks, but by the interpretations made of the bodily sensations. This is the notion behind cognitive therapy.

Beck, Rush, Shaw and Emery (1979) suggested that one's perception of events are organized around basic schema. These schema (i.e., assumptions underlying our perceptions of reality and rules by which we live) are learned from our environment (i.e., home, school, etc) and generate our automatic thoughts. The goal of Beck's cognitive therapy is for the therapist and client to acquire a sense of the individuals irrational beliefs and to challenge these (Beck et al., 1979).

Beck's cognitive therapy is similar to Rational Emotive Therapy in that they both work with the A-B-C paradigm, both stress the role of irrational thinking, and both stress here-and-now action. They differ in that Beck's cognitive therapy challenges irrational cognitions through empirical testing (i.e., client and therapist attempt to devise actual tests of accuracy of client's beliefs) while RET challenges irrational beliefs through reason and persuasion (Beck et al, 1979). A third form of cognitive therapy is self-instructional training (SIT). In SIT, patients are required to substitute positive

coping self-statements for the anxiety-engendering self-statements.

Two forms of cognitive therapy which operate at opposite extremes are self-statement training (SST) and paradoxical intention (PI). SST is a process of cognitive restructuring whereby self-defeating cognitions are replaced whereas in PI the subject is instructed to increase anxiety as much as possible in order to develop a sense of control.

Mavissakalian, Michelson, Greenwald, Kornblith, and Greenwald (1983) carried out a study in which these two procedures were compared. In this study 26 agoraphobics were randomly assigned to PI or SST treatments and received 12 weekly 90-minute group sessions followed by follow-up at 1 and 6 months. Results showed significant improvement over time with both treatments. Although PI treatment showed greater gains at the end of the 12-week treatment period, the SST had shown equivalent results at the 6-month follow-up. This supports the long-term effectiveness of these two treatments.

Salkovskis, Clark, and Hackman (1991) did a study in which patients received only cognitive therapy (i.e., no exposure or breathing retraining). In the focal treatment the therapist helped patients to develop alternative, cognitive formulations of their panic attacks. In the non-focal condition, sessions concentrated on issues of particular concern to the patient, but excluded misinterpretations of

bodily sensations. Results showed that cognitive procedures which focused on changing misinterpretations of bodily sensations reduced panic attacks. However, cognitive procedures which did not target misinterpretations did not reduce panic.

Thus, it appears that earlier beliefs that a patient had to stay in a particular situation until anxiety decreased, may not be entirely accurate. Instead, Foa and Kozak (1986) believe that the essential component is for individuals to acquire information inconsistent with his or her earlier predictions. They believe that in order for treatment to work, fear reduction information must be made available that includes elements that are incompatible with those that exist in the fear structure. In this manner a new memory can be formed. Thus, presenting positive alternatives to catastrophic interpretations should result in fear decrement.

Thus, the cognitive approach to agoraphobia aims to change catastrophic misinterpretations by helping clients identify and test alternative more accurate explanations, of their symptoms.

From the findings of the most common cognitive-behavioural treatments of agoraphobia it appears that exposure procedures seem to be most appropriate for avoidance behaviours while interoceptive exposure, cognitive

restructuring, and respiratory control techniques are more effective in reducing panic attacks.

Multimodal Treatment

Recent research trends appear to support the use of multimodal treatments. Lang's (1968) triple response model of fear (TRM) appears to be the model on which present treatments are based. Lang believes that three systems have to be assessed (i.e., behavioural, cognitive, and physiological) in order to understand agoraphobia adequately (Himadi, Boice, & Barlow, 1985). These findings are consistent with those of McCann, Woolfolk, and Lehrer (1987). McCann et al. (1987) developed the Multiprocess Theory. According to the Multiprocess Theory, cognitive techniques will have greater impact upon cognitive responses while somatic techniques will have more powerful effects on behavioral dysfunction (McCann et al., 1987). The importance of using three modes of treatment has been supported.

Marchione, Michelson, Greenwald, and Dancu (1987) did a study in which 19 agoraphobic subjects were randomly assigned to one of three cognitive behavioural treatments: cognitive therapy plus graduated exposure, progressive deep muscular relaxation training plus graduated exposure, and graded exposure alone. These treatments were assessed using behavioural, psychophysiological, cognitive, and self-report response systems as proposed by Lang's TRM. Results showed

that treatment combinations (cognitive therapy plus graded exposure and muscular relaxation training plus graded exposure) were more effective in decreasing symptoms than graded exposure alone. Thus, this study and others have shown that a more beneficial and reliable treatment for agoraphobia is one that integrates the different treatments proposed.

However, there are problems with the multimodal approach to agoraphobia. First of all, it's cost-benefit may be a problem. Many patients receive elements of therapy they do not require or patients leave treatment early due to boredom. Secondly, as seen from the complications of agoraphobia, one may need to go beyond the usual fundamentals to the assessment of nonspecific components in treatment (Himadi et al., 1985).

Summary

In this study it has been shown that psychological treatments have been effective in the treatment of agoraphobia (with and without associated panic). More specifically, the studies reviewed show that exposure to stimuli is effective treatment for the avoidance behaviour associated with agoraphobia. Studies have also shown that self-help and significant others can be effective methods of exposure, thus lessening the dependence on therapist time. Interoceptive exposure has been shown to be effective for the treatment of physiological symptoms of agoraphobia in the studies reviewed. Also, studies have shown that cognitive-behavioural treatments

have become increasingly more integral to the treatment of agoraphobia. Finally, multimodal treatments have been shown to be effective, but their cost-benefit is questionable. Although these psychological treatments have become increasingly more common in the research literature, it is wondered if they are being implemented by professionals as a source of treatment for agoraphobics.

Physiological Treatment

In physiological treatment, drugs are the preferred treatment (Rapp & Thomas, 1982). More specifically, tricyclic antidepressants (TCAs), mono-oxidase inhibitors (MAOIs) and benzodiazepines have most often been used in the treatment of Agoraphobia with Panic Disorder. These drugs are specifically used for their clinical antipanic effect (Lydiard & Ballenger, 1987). Each medication has its particular advantages and disadvantages.

Tricyclic Antidepressants

The three tricyclic antidepressants (TCAs) shown to be most effective in treating Panic Disorder and Panic Disorder with Agoraphobia have been imipramine (brand name Tofranil), desipramine (brand name Norpramine) and nortriptyline (brand name Pamelor) (Munjack, 1988). The majority of studies report a statistically significant difference favouring imipramine over placebo. For example, Mavissakalian and Michelson (1986)

found that imipramine had a greater effect on phobia and depression ratings than did a placebo.

Ballenger, Sheehan, and Jacobson (1977) carried out a study in which a group of phobic patients (panic attacks and agoraphobia) received either imipramine, phenelzine, or placebo plus biweekly supportive therapy and self-exposure homework. At the end of 12-weeks, both active medication groups were significantly more improved than the placebo-treated group. Also, the phenelzine-treated patients showed significantly greater improvement in global ratings than the imipramine-treated group. Furthermore, TCAs have been shown to be effective in treating phobic patients who have experienced panic attacks (e.g., agoraphobics), but not those with a lack of panic (e.g., simple phobia). This suggests the efficacy of the TCAs in the treatment of agoraphobia (Lydiard & Ballenger, 1987).

However, potential side effects of imipramine include dry mouth, low blood pressure, constipation, blurred vision and difficulty urinating. Other potential side effects include reduction in sex drive (particularly for males) and weight gain.

The effects of treatment appear to be greater when a combined treatment is utilized. Mavissakalian, Michelson, and Dealy (1983) gave one group of agoraphobics imipramine alone while the other group received imipramine and self-exposure

for the 12-week duration. Results showed that there was not a significant difference in panic measure at the end of the study. However, those subjects who had received the combined treatment showed more improvement on overall symptom severity, phobic anxiety, and depression. These results again suggest the antipanic effects of the TCAs, while behavioural treatment is more effective in reducing avoidance.

Monamine Oxidase Inhibitors

Of the three MAOIs used in clinical psychiatry [phenelzine (brand name Nardil), isocarboxizid (brand name Marplan) and tranylcypromine (brand name Parnate)], phenelzine is the only one that has received systematic study. A study by Buiges and Vallejo (1987), which included 16 PD patients and 19 agoraphobics, showed that all 16 PD and 18 agoraphobic subjects respectively were panic-free after 6 months of open treatment with an average of 55 mg/day of phenelzine. Thus, this study suggests that phenelzine is effective in blocking panic attacks. Also, as shown earlier, phenelzine is more effective than imipramine in blocking panic attacks (Ballenger et al., 1977).

MAOIs have also been shown to have side effects. Potential side effects include sedation, difficulty falling asleep, and low blood pressure. Also, weight gain and difficulty achieving orgasms also occur sometimes. However,

the consensus is that phenelzine has fewer side effects than imipramine.

Combining MAOIs and behavioural treatment has been shown to be more effective than medical treatment alone. Sheehan, Ballenger, and Jacobson (1980) did a study which showed that phenelzine (45 mg/day) plus behaviour therapy was more effective than medication alone during the course of a 12-week treatment program. Similar results were found by Solyom, Solyom, LaPierre, Pecknold, and Morton (1981). Results showed that phenelzine plus behavioural treatment was more effective than phenelzine without behavioural treatment.

Benzodiazepines

The benzodiazepines that have most prominently been reported effective for panic attacks in several studies are alprazolam (Xanax) and clonazapam (Klonopin). There is also evidence that lorazepam (Ativan) and diazepam (Valium) are also effective. Advantages of benzodiazepines include rapid effectiveness (within first few days) and easy toleration (few side effects as compared to TCAs and MAOIs). However, the potential side effects include sedation, memory problems and reduced sex drive. Other causes for concern in using benzodiazepines is the potential for all of them to cause physiological withdrawal symptoms during discontinuation and the high rate of relapse once this medication is discontinued (Munjack et al., 1988).

Problems with Physiological Treatment

The primary problem in the physiological treatment of agoraphobia is that a significant proportion of patients who respond to medication experience a recurrence of symptoms after discontinuation of MAOIs or TCAs. Furthermore, the rate of relapse is usually higher than that of those who receive psychological treatment (Lydiard & Ballenger, 1987).

Kelly, Guirguis, Frommer, Mitchell-Heggs, and Sargant (1970) found that only 30% of patients who were well for one year were able to discontinue MAOIs, while 36% relapsed after discontinuation of the drug. Also, the remaining subjects were advised to remain on the medication. Even more predominant was a study by Solyom, Heseltine, McClure, Solyom, Ledwidge, and Steinberg (1973). This study showed that 100% of phenelzine-treated patients had relapsed at a 2-year follow-up, while only 10% of placebo-treated patients had relapsed.

Other problems, with many of these studies, are that they often include mixed patient samples and fail to respond to the results of each of these groups separately. Also, most drug studies employ concomitant behavioural therapy, thus making it difficult to delineate the drug effects alone (Lydiard & Ballenger, 1987).

Summary

The studies reviewed support the antipanic effect of the TCAs and MAOIs, thus suggesting their effectiveness in treating agoraphobia with concurrent panic. However, the high rate of relapse suggests the need for a concomitant behavioural treatment. In fact, some studies, as has been shown, have found behavioural treatments alone to be effective in reducing panic as well as avoidance in the treatment of agoraphobia.

Conclusion

From the review of the above studies, both physiological and psychological treatment were shown to be effective, to some degree, in treating agoraphobia. This reality has obscured rather than enhanced our understanding of agoraphobia. If drugs were necessary to reduce panic, as proposed by the physiological model, then a biological origin of agoraphobia would be viable. However, the physiological model can not explain why some agoraphobics improve without drugs.

Although the present review has shown that psychological treatments (i.e., in vivo and interoceptive exposure, respiratory control techniques, cognitive-behavioural treatments, and multimodal treatment) have been shown to treat agoraphobic symptoms effectively, it has been suggested that

the majority of agoraphobics are still being treated with medications (Evans, Oei, & Hoey, 1988)

Immediate Background of Present Study

From the above review it appears that the symptoms and comorbidity may determine from whom agoraphobics receive treatment. First of all, it can be seen that the G.P. and psychiatrist are more apt to treat agoraphobia with panic disorder because it is believed that the inclusion of panic requires the use of antipanic medication (Lydiard & Ballenger, 1987) while behavioural methods are seen as appropriate for avoidance alone.

Even within the medical field there appears to be a distinction in treatment. Evans et al. (1988) carried out a study which compared the prescribing practices of G.P.s as compared to psychiatrists in the treatment of 111 agoraphobics. Results showed that psychiatrists tended to prescribe significantly more medications. More specifically, 39% of agoraphobics treated by G.P.s were given no medication whereas only 7% of agoraphobics treated by psychiatrists were given no medication. Even more significant was the finding of the magnitude of drugs prescribed by psychiatrists. Results showed that, of agoraphobics treated by psychiatrists, 26% were given combinations of three or more drugs, and the remaining 67% were receiving one or two medications. This

study also showed that G.P.s usually gave lower doses of drugs than did psychiatrists (Evans et. al, 1988).

The factor which may differentiate the prescribing practices of psychiatrists and G.P.s may be the severity of symptoms exhibited by the agoraphobic. More specifically, those agoraphobics who are more incapacitated may be referred to a psychiatrist when one or two prescriptions are found to be ineffective by a G.P. (Evans et al, 1988). This hypothesis was supported in a study by Chamber, White, and Lindquist (1983). They found that, in cases of persistent anxiety, 43% of G.P.s would refer the patient to a psychiatrist for more effective treatment. Similarly, Evans et al. (1988) found that G.P.s were uncertain about treating anxiety disorders and such uncertainty may lead to less frequent prescription of drugs for these patients. Thus, psychiatrists seem to be the preferred source of treatment for more incapacitated agoraphobics (Evans et al., 1988).

The Present Study

The current classification of agoraphobia, according to DSM 111-R criteria, focuses on the symptoms of avoidance and panic. However, as shown, this distinction can play a very significant role in who treats the patient. More specifically, the agoraphobic who suffers from panic appears to be most often treated by a G.P. and/or referred to a psychiatrist. These individuals will be considered more

dysfunctional according to Axis V of DSM-111-R (American Psychiatry Association, 1987).

From the above review, it can be seen that there may be other important variables (e.g., concurrent depression, personality characteristics) which may influence incapacitation of agoraphobics as well as who proffers treatment to them. Thus, the primary objective of the present study is to determine whether or not the symptomatology of the agoraphobic patient determines who will provide treatment to the individual.

A second objective of the present study is to study the perspective of the individual who is first presented with the agoraphobic's symptoms (i.e., the G.P.). In a study by Pollard, Henderson, Frank, and Margolis (1989) it was shown that 54% of anxiety-disordered individuals cited a physician as being the most likely source for locating treatment.

Therefore, the present study was designed to determine if incapacitation influences who proffers treatment to the agoraphobic as well as how the G.P. (as primary caregiver) deals with agoraphobia. More specifically, the following hypotheses will be tested: (1) agoraphobics who are more incapacitated are more likely to be treated by psychiatrists, (2) G.P.s will refer more incapacitated agoraphobics to a psychiatrist who would provide treatment, (3) and G.P.s will tend to treat mild cases of agoraphobia themselves.

METHOD

To test the hypotheses formulated above two subject populations, agoraphobics and G.P.s, were sought.

Agoraphobics

Agoraphobic subjects were obtained through newspaper advertisements (see Appendix A) in the Evening Telegram which is distributed to the twin cities of St. John's and Mount Pearl. Urban areas within Newfoundland were selected because it has been shown that agoraphobics in such areas are more apt to use the professional services that are available (Pollard et al., 1989). Subjects were also invited through communications with Agoraphobics Caring Together (ACT), a self-help group for agoraphobics within the St. John's area. Fifty agoraphobics were contacted in the first instance in the present study.

G.P.s

G.P.'s addresses were acquired through the Newfoundland Medical telephone Directory. These individuals were then contacted by mail. Three-hundred and thirty-seven G.P.s were surveyed in the present study. One-hundred and eighty-seven were from urban areas of Newfoundland and 150 were from rural areas.

Measures

Agoraphobics

Assessment of the agoraphobic population consisted of a battery of measures designed to evaluate the symptoms and associated problems which may increase the severity of agoraphobia. According to Lang's TRM (Himadi et al., 1985) and the study completed by McCann et al. (1987), assessment should be completed in cognitive, behavioural, and physiological domains. Also, as proposed by Brehony and Geller (1981) personality and interpersonal factors may play a role. Thus, in order to acquire a comprehensive picture of agoraphobia, one has to encompass a broad range of domains. Self-report measures were selected in the present study as the individual's perception of his/her symptoms should be the primary determinant of the caregiver from whom they seek treatment. Therefore, in the current research, measures assessed agoraphobia on the following dimensions: behavioural, physiological, cognitive, personality and interpersonal. This battery of tests (see Appendices B-N) was designed earlier by Andrée Liddell and Assen Alladin.

Behavioural

Mobility Inventory for Agoraphobia (MIA). This inventory contains three measures: avoidance alone (MIA Alone), avoidance accompanied (MIA Accompanied), and panic frequency. First, the respondent completes 26 items which are rated on a

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from items 5, 6, 8, 12, 15, blood-injury from items 2, 4, 10, 13, 16, and social phobia from items 3, 7, 9, 11, 14). Each of these questions concerning avoidance is rated from 0 'would not avoid at all' to 8 'always avoid it'. Items 18-22 are five common nonphobic symptoms found in phobic patients which are indicative of more general affective disturbance (i.e., anxiety-depression) Again, these items are rated from 0 'hardly at all' to 8 'very severely troublesome'. Global phobia consists of one item, item 24 (score range 0-8), on which the respondent is asked to rate the present state of their phobic symptoms (see Appendix C)(Marks & Mathews, 1979).

The scale has been shown to be reliable and valid. In the study by Marks & Mathews (1979) test-retest reliabilities for each of the subscales ranged from 0.79 to 0.96. Also, there were surprisingly low correlations between the four measures, suggesting discriminant validity. Marks and Mathews (1979) also showed that these measures were representative of the clinical status of patients, and treatment resulted in improvement on the corresponding subscales.

Physiological

Panic Attack Questionnaire (PAQ). The PAQ used in the present study is a revised version of an earlier DSM-111 version prepared by Norton et al., 1986). The PAQ contains 23 items which provide a description of the symptoms experienced during a panic attack. Also, this measure provides

information on the frequency of panic attacks, their duration, whether panic attacks are expected or unexpected, symptoms of anxiety experienced, lifestyle change or avoidance, and prevalence of attacks among family members (see Appendix D).

In the present study the frequency of panic attacks was measured by the second item of the PAQ: 'In the past 4 weeks, how many panic attacks have you had?' (Panic Frequency). Measures of the severity of the most recent (Recent Panic Severity) and most extreme panic attacks (Extreme Panic Severity) were also calculated. Cognitive symptoms during an attack were also calculated (PAQ Cognitive). Finally, the frequency of family members who also have panic attacks (PAQ Family) was recorded.

Norton et al. (1988) found the PAQ to have adequate test-retest reliability (Kappa = .65-1.00). This scale has also been shown to differentiate panickers from nonpanickers (Norton et al., 1986).

Body Sensations Questionnaire (BSQ). This is a 17-item scale which is comprised of items concerning sensations associated with autonomic arousal. The respondent is to rate each item on a five-point scale, ranging from 'not frightened or worried by this sensation' (1) to 'extremely frightened by this sensation' (5). Responses to these items indicate how anxiety-provoking the client found each sensation. The total

score is obtained by averaging the individual items (see Appendix E).

The scale has been shown to be reliable and valid by Chambless et al. (1984). This scale was found to be highly internally consistent (0.87) and to have moderate test-retest reliability (0.67) over a 4-week interval. Chambless et al. (1984) also found the BSQ to have construct validity and to be sensitive to change with treatment.

Epstein-Fenz Manifest Anxiety Scale (EFMAS). The EFMAS is a 45-item scale which assesses the individual on three dimensions: striated muscle tension (Tension), autonomic arousal (Arousal), and feelings of insecurity and fear (Insecurity) (Fenz & Epstein, 1965). The respondent responds to each item on a scale from 1 'never applies to me' to 5 'nearly always'. A score was obtained for each subscale (see Appendix F) (Fenz, 1967).

This scale has been shown to have test-retest reliability of 0.70 over a 6-week interval (Fenz, 1967). Fenz (1967) also showed that this scale was valid. Results of a factor analysis showed that neurotics manifested more specificity in factor loadings associated with the three scales than normals.

Beck Depression Inventory (BDI). The BDI consists of 21 items which assess depressive symptoms and attitudes. This scale was derived from clinical observations about the attitudes and symptoms displayed frequently by depressed

psychiatric patients and infrequently by nondepressed psychiatric patients (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961). The first 14 items measure cognitive/affective symptoms and the final 7 items measure somatic symptoms. Each item is rated from 0 to 3 in terms of intensity and is scored by summing the ratings given to each of the 21 items. In the present study the somatic symptoms of depression, items 15 to 21 (see Appendix G), were utilized as a physiological measure of depression (BDI-Physiological) .

This scale has been shown to be reliable and valid (Beck, Steer, & Garbin, 1988). Beck et. al (1988) implemented a meta-analysis of research studies, between the years 1961 and 1986, to determine the psychometric properties of the BDI. Internal consistency yielded a correlation coefficient of 0.86 for psychiatric patients and 0.81 for nonpsychiatric subjects. Test-retest reliability was found to range from 0.48 to 0.86 for psychiatric patients and 0.60 to 0.83 for nonpsychiatric patients. Concurrent validity was also shown to be high; the clinical ratings and the BDI showed an average correlation of 0.72 for psychiatric patients and 0.60 for nonpsychiatric patients. The BDI was also highly correlated with the Hamilton Psychiatric Rating Scale for Depression (HRSD; 0.73 for psychiatric patients). The BDI was also shown to have discriminant validity; it accurately discriminates subtypes of depression and differentiates depression from anxiety (Beck et

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scale consists of 26-items describing specific thoughts. The individual is asked to rate the frequency of occurrence on a five-point scale (0 'never' to 4 'always'). Fourteen of these items are relevant to depression (CCL-Depression) and 12 are relevant to anxiety (CCl-Anxiety) (see Appendix I).

Beck et. al (1987) showed this scale to be both reliable and valid. In terms of reliability, Chronbach coefficient alphas of 0.90 and 0.92 were found for CCl-Anxiety and CCL-Depression respectively. The test-retest reliability, over a 6-week interval, was found to be 0.79 for CCL-Anxiety and 0.76 for CCL-Depression. This scale was also shown to have adequate discriminant and convergent validity and was shown to be correlated with other measures of anxiety and depression. In addition, it differentiated those subjects who were anxious or depressed, and accurately classified individuals (Beck et. al, 1987).

Personality

Self-Control Schedule (SCS). The SCS is a self-report instrument designed to assess an individual's tendency to use self-control methods during behavioural problems (Rosenbaum, 1980). The respondent is asked to rate each of 36 items on a 6-point scale on how descriptive the items are of themselves (+3 'very characteristic of me, extremely descriptive' to -3 'very uncharacteristic of me, extremely nondescriptive'). Within the test, 12 items refer to the use of cognitions in

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this happened' to 5 'I felt very comfortable or good when this happened' (AQ Comfort). The frequency ratings and comfort ratings are then added respectively (see Appendix K).

State-Trait Anger Expression Inventory (STAXI). The STAXI is a 44-item self-report measure designed to assess the experience of anger (Spielberger, 1988). The experience of anger is assessed on 2 dimensions: state anger (i.e., a temporary state invoked by characteristics of presenting stimuli) and trait anger (i.e., a more stable response to a wide variety of stimuli). The trait anger can then by divided into angry temperament (i.e., expressing anger without provocation) and angry reaction (i.e., expression of anger when criticized or provoked). The STAXI assesses anger along three dimensions: anger-out (i.e., externally outward to people or objects), anger-in (i.e., suppress anger within oneself), and anger-control (i.e., able to exert some control over the expression of anger) (Fuqua, Leonard, Masters, Smith, Campbell, & Fischer, 1991). On each of the items, the respondent is asked to rate each of the items on a four-point scale from 1 'almost never' or 'not at all' to 4 ' almost always' or 'very much so'. The total for each of the seven subscales is scored by adding the ratings of the items in each. A eighth subscale, anger expression, is calculated as a combination of the anger-in, anger-out, and anger-control subscales (see Appendix L) (Spielberger, 1988).

The manual of the STAXI (Spielberger, 1988) reports high reliability: coefficient alphas of 0.84 and 0.93 for the state anger and state trait scales respectively, coefficients ranging from 0.84 to 0.89 for the trait-temperament scale, and coefficients ranging from 0.73 to 0.85 for the anger expression scales (i.e., anger-in, anger-out, and anger-control). The STAXI has also been shown to be valid (Spielberger,1988).

Marital Adjustment Test (MAT). Marital adjustment is accommodation of a husband and a wife to each other at any given time. The MAT consists of 15-items which an individual rates on a scale from 0 'very unhappy' to 35 'perfectly happy'. The total score is obtained by summing all items. On this scale higher scores indicate greater marital adjustment (Locke & Wallace, 1959).

This scale was shown to be reliable and valid (Locke & Wallace, 1959). In this study the reliability coefficient, computed by the split-half technique and corrected by the Spearman-Brown formula, was shown to be 0.90. Also, it was shown that the test was valid in that it clearly differentiated between those persons who were well-adjusted and those who were maladjusted in marriage (see Appendix M) (Locke & Wallace, 1959).

Psychopathology

Symptom Checklist-90 (SCL-90-R). The SCL-90-R is a 90-item self-report symptom inventory designed primarily to reflect the psychological symptom patterns of psychiatric and medical patients (Derogatis, 1977). Each of these 90-items is rated on a five-point scale of distress ranging from 0 'not at all' to 4 'extremely'. The SCL-90-R is scored and interpreted in terms of nine primary symptom dimensions: somatization, obsessive-compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, and psychoticism. Scores are obtained by calculating the total ratings for the relevant items on each scale (see Appendix N) (Derogatis, 1977).

Furthermore, three global indices of distress are obtained as well: the global severity index (GSI), the positive symptom total, and the positive symptom distress checklist. The function of each of these global measures is to communicate, in a single score, the depth of the individual's psychopathology (Derogatis, 1977).

Derogatis, Rickels, and Rock (1976) found the internal consistency of the nine symptom dimensions to range from a low of 0.77 for psychoticism to a high of 0.90 for depression. Similarity, test-retest reliability, over a 1-week period for a sample of 94 heterogenous outpatients, was shown to range from 0.80 to 0.90 (Derogatis, 1977).

The validity of the SCL-90-R has also been shown to be adequate. Derogatis et. al (1976) found that the dimensions of the SCL-90-R corresponded with those of the MMPI; each dimension had its highest correlation with a like construct. The SCL-90-R has also been shown to be sensitive to change in a variety of medical and clinical contexts (Derogatis, 1977). In terms of construct validity, Derogatis and Cleary (1977a) implemented a study which found that an empirical analysis matched the theoretical structure well on just about all dimensions.

In the present study, the purpose of the SCL-90-R is to provide individual scores on each of its 9 scales and to provide an overall level of severity index (Total Psychopathology) which is based on the GSI.

Procedure

Agoraphobics

The subjects who showed interest in the study (either through reply to the advertisement or through involvement in the self-help group) were sent a battery of questionnaires (Appendices B-N) which were completed and returned. Subjects were also required to complete a questionnaire which provided the appropriate demographic information (e.g., age, sex, marital status, SES, education, etc.) and provided details on the onset of the disorder and treatment(s) that had been received (see Appendix O).

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RESULTS

Demographics

Agoraphobics

Thirty-five of the 50 (70%) agoraphobics surveyed completed and returned the above battery of questionnaires related to agoraphobia and associated symptoms. The mean age of respondents was 34.4 (SD=11.867). Ten of the respondents were male (28.6%) and 25 were female (71.4%). Sixty percent of the population were married, 5.8% were divorced or widowed, and 34.3% were single. Observation of work status showed that 34.3% of the population were employed, 45.7% were unemployed, 17.1% were students, and 2.9% were retired. Twenty-three percent of the population had obtained some high school education, 20% had completed high school, 34.3% had completed trade school, 20% had attended some university courses, and 2.9% of the population had obtained a B.A. (see Appendix Q1).

G.P.s

Fifty-four percent of G.P.s surveyed across Newfoundland replied to the survey (183 respondents of 337 surveyed). Fifty-six percent of the returned surveys were from urban areas and 43.7% were from rural areas. Fifty percent of the population were male and 28.4% were female. Twenty-one percent did not identify their sex. The average years of experience was 13.58 with a range of 1 to 41 years.

Agoraphobic Data

Means and standard deviations for each of the variables analyzed are presented in Table 1. Variables are classified as behavioural, physiological, cognitive, or personality (see Table 1). The individual scores for these variables are presented in Appendices Q2 through Q8.

Correlations

Correlations between dependent variables were computed to ensure that variables within a category (i.e., behavioural, physiological, cognitive, and personality) were related. Correlations are shown in Tables 2, 3, 4, 5, and 6. As shown in Table 2, the behavioural items consist of Agoraphobia, Blood-Injury, Social Phobia, and Fear Total subtests of the FQ, and the MIA Alone and the MIA Accompanied subtests of the MIA. All of the behavioural measures are significantly correlated (see Table 2).

In the present study physiological symptoms include anxiety, panic, and depression. Correlations are presented for each of these sub-categories of physiological symptoms in Tables 3 and 4. In Table 3 it can be seen that the physiological symptoms of anxiety include BSQ, Anxiety subscale of the SCL-90-R, and the subscales of the EFMAS (i.e., Arousal, Tension, and Insecurity). These variables are significantly correlated (see Table 3).

Table 4 shows the correlations between panic parameter variables (i.e., frequency and severity). It can be seen that the frequency of panic (Panic Frequency) is not correlated with the severity of the symptoms (Recent Panic Severity and Extreme Panic Severity). In the present study the BDI-Physiological variable was utilized as a measure of the physiological symptoms of depression.

In the present study the cognitive variables measure two different factors: anxiety and depression. Those variables measuring anxiety [i.e., ACQ, PAQ Cognitive, CCL Anxiety, and SCL-90-R Obsessive-Compulsive (OCD)] are all strongly correlated (see Table 5). The CCL Depression will be analyzed separately as a measure of cognitive symptoms of depression.

Personality variables will be grouped into anger, assertion (AQ: comfort and frequency), and self-control (SCS). As shown in Table 6, measures of anger will include state anger, trait anger, anger in, anger out, and the hostility subscale of the SCL-90-R. Table 6 shows that these variables are correlated.

Measures of assertion (AQ: comfort and frequency) will be analyzed separately as they were not found to correlate strongly with other variables. The SCS and MAT were found to have a strong negative correlation (r=-0.5749, p<.01).

Table 1
Number of Observations, Means, and Standard Deviations of Behavioural, Physiological, Cognitive, and Personality Variables.

Variable	N	Mean	SD
Behavioural			
MIA			
MIA Alone	35	2.672	0.818
MIA Accompanied	35	3.272	0.855
FQ			
Agoraphobia	35	22.257	11.044
Blood-Injury	35	18.086	9.426
Social Phobia	35	15.029	8.998
Fear Total	35	55.371	23.003
Anxiety/depression	35	23.514	7.830
Physiological			
PAQ			
Panic Frequency	33	3.636	3.516
Panic Severity (Recent)	32	2.000	0.708
Panic Severity (Extreme)	33	2.832	0.672
PAQ Cognitive	32	2.375	0.862
PAQ Family	34	0.794	1.274
BSQ	35	50.600	12.530
EFMAS			
Tension	35	38.600	10.917
Arousal	35	41.543	9.134
Insecurity	35	52.343	9.881
BDI	35	17.286	10.560
BDI-Physiological	35	5.057	2.869
COGNITIVE			
ACQ	35	36.971	9.262
CCL			
CCL Depression	35	20.143	12.448
CCL Anxiety	35	20.200	8.432

Table 1 (continued)
Means and Standard Deviations of Behavioural, Physiological, Cognitive, and Personality Variables.

PERSONALITY			
SCS	35	-44.486	16.751
AQ			
AQ Frequency	35	62.943	13.538
AQ Comfort	35	117.457	29.971
STAXI			
State Anger	35	14.571	7.686
Trait Anger	35	21.143	6.098
Anger Temperament	35	7.457	3.128
Angry Reaction	35	9.914	2.801
Anger-In	35	18.657	4.856
Anger-Out	35	15.857	3.934
Anger-Control	35	21.400	4.513
Anger-Expression	35	55.914	7.294
MAT	20	97.600	28.684
PSYCHOPATHOLOGY			
SCL-90-R			
Somatization	35	1.360	0.895
Obsessive-Compulsive	35	1.491	0.923
Interpersonal Sensitivity	35	1.432	0.864
Depression	35	1.730	0.846
Anxiety	35	1.831	0.867
Hostility	35	0.938	0.737
Phobic Anxiety	35	1.804	1.225
Paranoia	35	0.990	0.789
Psychoticism	35	1.249	0.876
Total Psychopathology	35	1.453	0.752

Table 2
Correlations Between Behavioural Measures of Agoraphobia.

	Agora-phobia	Blood-Injury	Social Phobia	Fear Total	MIA Accomp-anied	MIA Alone
Agora-phobia	1.00					
Blood-Injury	0.34*	1.00				
Social Phobia	0.53**	0.36*	1.00			
Fear Total	0.83**	0.71**	0.79**	1.00		
MIA Accomp-anied	0.60**	0.24	0.35*	0.52**	1.00	
MIA Alone	0.76**	0.40*	0.58**	0.76**	0.69**	1.00

*p<.05, **p<.01

Table 3
Correlations Between Physiological Symptoms of Anxiety.

	BSQ	SCL-90-R Anxiety	Arousal	Tension	Insecur-ity
BSQ	1.00				
SCL-90-R Anxiety	0.56**	1.00			
Arousal	0.63**	0.46*	1.00		
Tension	0.60**	0.43*	0.74**	1.00	
Insecur-ity	0.56**	0.41*	0.72**	0.66**	1.00

*p<.05, **p<.01

Table 4

Correlations Between Panic Parameter Variables.

	Panic Frequency	Recent Panic Severity	Extreme Panic Severity
Panic Frequency	1.0000		
Recent Panic Severity	.2019	1.0000	
Extreme Panic Severity	.2620	.6059**	1.0000

*p<.05, **p<.01

Table 5

Correlations Between Cognitive Variables of Anxiety.

	ACQ	PAQ Cognitive	CCL Anxiety	SCL-90-R OCD
ACQ	1.0000			
PAQ Cognitive	.4889**	1.0000		
CCL Anxiety	.5585**	.4290*	1.0000	
SCL-90-R OCD	.6094**	.3598*	.5098**	1.0000

*p<.05, **p<.01

Table 6
Correlations Between Measures of Anger.

	State Anger	Trait Anger	ANGER IN	ANGER OUT	SCL-90-R Hostil-ity
State Anger	1.0000				
Trait Anger	.4067*	1.0000			
Anger In	.5743**	.3533*	1.0000		
Anger Out	.3533**	.7781**	.2298	1.0000	
SCL-90-R Hostil-ity	.6480**	.5608**	.4653**	.4299**	1.0000

*p<.05, **p<.01

However, these variables will have to be analyzed separately because of the lower number of subjects who completed the MAT (only 15 subjects who responded to survey were married).

The Total Psychopathology variable will be analyzed separately as a measure of overall psychopathology.

Incapacity

To determine if the degree of incapacitation actually reflected differences on behavioural, physiological, cognitive, and overall psychopathology, a valid measure of incapacitation was necessary. Mavissakalian (1986) used the three subscales of the FQ (i.e., Agoraphobia, Blood-Injury, and Social Phobia) to measure rate of improvement of

agoraphobic symptoms over time. Mavissakalian (1986) showed that the Agoraphobia subscale was the best indicator of improvement. Mavissakalian (1986) also suggested using a cutoff score of 30 as a diagnostic aid in identifying more chronic agoraphobics. Thus, in the present study, those subjects whose Agoraphobia score is greater than or equal to 30 will be identified as more incapacitated (Severity 1, N=10) and those whose Agoraphobia score falls below 30 will be identified as less incapacitated (Severity 2, N=25). The subsequent analyses were completed to determine if more incapacitated agoraphobics reported greater difficulties on behavioural, physiological, cognitive, and personality dimensions, and had, overall, more psychopathology.

Behavioural. A MANOVA with Severity (more incapacitated vs. less incapacitated) as the between-group factor and the four behavioural variables as dependent variables showed that, overall, more incapacitated agoraphobics were significantly more avoidant than less incapacitated agoraphobics (see Table 7). Univariate analyses showed that agoraphobics, who were more incapacitated, had significantly elevated means on the Mobility Inventory Alone and the Social Phobia measures. Those who were more incapacitated obtained means of 4.032 (SD=.663) and 22.500 (SD=7.962) respectively on the Mobility Inventory Alone and Social Phobia variables while those who were less incapacitated had means of 2.968 (SD=.731) and

12.040 (SD=7.640) on these variables respectively (see Table 7).

Physiological (Anxiety). A MANOVA with Severity (more incapacitated vs. less incapacitated) as the between-group factor and the four physiological variables of anxiety as dependent variables showed that more incapacitated agoraphobics had significantly more physiological symptoms of anxiety as compared to less incapacitated agoraphobics (see Table 7). Univariate analyses showed that all physiological measures of anxiety were shown to significantly differentiate these groups. Those who were more incapacitated obtained means of 49.300 (SD=8.028), 47.200 (SD=10.412), and 59.300 (SD=8.260) on the Arousal, Tension, and Insecurity variables respectively as compared to means of 38.440 (SD=7.676), 35.160 (SD=9.223), and 49.560 (SD=9.193) for less incapacitated agoraphobics. Also, more incapacitated agoraphobics had higher means on the Body Sensations Questionnaire and SCL-90-R measure of Anxiety [mean=58.400 (SD=14.698) and mean=2.290 (SD=0.942) respectively] as compared to less incapacitated agoraphobics [mean=47.480 (SD=10.292) and mean=1.648 (SD=0.781) respectively].

Physiological (Panic and depression). A MANOVA with Severity (more incapacitated vs. less incapacitated) as the between-group factor and the two Panic parameter variables as dependent variables was not shown to be significant (see Table

7). Nor was the Panic Frequency X Severity ANOVA shown to be significant. Also, the BDI-Physiological measure X Severity ANOVA was not shown to be significant (see Table 7).

Cognitive (Anxiety). The MANOVA with Severity (more incapacitated vs. less incapacitated) as the between-group factor and the four cognitive variables of anxiety as dependent variables showed that more incapacitated agoraphobics had significantly more cognitive symptoms of anxiety than did less incapacitated agoraphobics (see Table 7). The Cognitive Checklist measure of Anxiety and SCL-90-R measure of Obsessive Compulsive variables were shown to account for this significant finding with more incapacitated agoraphobics having means of 27.300 (SD=9.178) and 2.030 (SD=1.204) for these variables respectively as compared to means of 16.818 (SD=5.861) and 1.286 (SD=0.732) for less incapacitated agoraphobics.

Cognitive (Depression). The Cognitive Checklist measure of Depression X Severity ANOVA showed that more incapacitated agoraphobics had a significantly greater intensity of cognitions regarding depression as compared to the depressive cognitions of less incapacitated agoraphobics (see Table 7). More incapacitated agoraphobics obtained a mean of 28.20 (SD=14.635) on the Cognitive Checklist-Depression measure as compared to a mean of 16.92 (SD=10.066) on this measure for less incapacitated agoraphobics.

Personality. Of the personality variables X Severity analyses, neither the MANOVA for anger (Severity as between-group variable and five anger variables as dependent variables) nor the MANOVA for assertion (severity as between-group variable and two assertion variables as dependent variables) were shown to be significant. The Marital Adjustment Test X Severity ANOVA was also not found to be significant. However, it should be noted that the SCS X Severity ANOVA variable was significant (see Table 7) with the more incapacitated agoraphobics having less self-control (mean=-53.200, SD=15.718) than less incapacitated agoraphobics (mean=-41.00, SD=16.143).

Total Psychopathology. As shown in Table 7, the Total Psychopathology X Severity ANOVA showed that more incapacitated agoraphobics had significantly more total psychopathology than less incapacitated agoraphobics. More incapacitated agoraphobics had a Total Psychopathology mean of 1.916 (SD=0.961) as compared to a mean of 1.268 (SD=0.574) for less incapacitated agoraphobics.

Summary. The above analyses showed that more incapacitated agoraphobics have more avoidance, more physiological and cognitive symptoms of anxiety, more cognitive symptoms of depression, and less self-control. More incapacitated agoraphobics also had greater overall psychopathology than those who were less incapacitated (see Table 7).

Table 7

F Ratios of MANOVA and ANOVA Tests Using Measure of Severity of Agoraphobic Symptoms (Agoraphobia Subscale of FQ= Severity) as Dependent Variable.

Variable	F	df	p[a]
Behavioural			
Blood-Injury, Social Phobia MIA Accompanied, MIA Accompanied, X Severity	5.168[b]	(4,30)	.003**
Blood-Injury X Severity	3.971[c]	(1,33)	.055
Social Phobia X Severity	13.082[c]	(1,33)	.001**
MIA Accompanied X Severity	2.907[c]	(1,33)	.098
MIA Alone X Severity	15.916[c]	(1,33)	.000**
Physiological (Anxiety)			
BSQ, SCL-90-R (Anxiety), Arousal, Tension, Insecurity X Severity	2.823[b]	(5,29)	.034*
BSQ X Severity	6.265[c]	(1,33)	.017*
SCL-90-R (Anxiety) X Severity	4.300[c]	(1,33)	.046*
Arousal X Severity	13.940[c]	(1,33)	.001**
Tension X Severity	11.326[c]	(1,33)	.002**
Insecurity X Severity	8.463[c]	(1,33)	.006**
Physiological (Panic Parameters)			
Recent Panic Severity, Extreme Panic Severity, X Severity	1.939[b]	(2,29)	.162
Recent Panic Severity X Severity	2.465[c]	(1,30)	.127
Extreme Panic Severity X Severity	3.657[c]	(1,30)	.065
Panic Frequency X Severity	0.149[d]	(1,31)	.702
Physiological (Depression)			
BDI-Physiological X Severity	0.937[d]	(1,33)	.340

[a](*)p<.05; (**)p<.01.
[b]Multivariate tests.
[c]Univariate tests.
[d]Analysis of Variance

Table 7 (continued)
F Ratios of MANOVA and ANOVA Tests Using Measure of Severity of Agoraphobic Symptoms (Agoraphobia Subscale of FQ= Severity) as dependent Variable.

Variable	F	df	p[a]
Cognitive (Anxiety)			
ACQ, Cognitive Panic, CCL (Anxiety), SCL-90-R (Obsessive Compulsive) X Severity	3.532[b]	(4,27)	.019*
ACQ X Severity	3.397[c]	(1,30)	.075
Cognitive Panic X Severity	1.914[c]	(1,30)	.177
CCL (Anxiety) X Severity	5.318[c]	(1,30)	.000**
SCL-90-R (OCD) X Severity	4.692[c]	(1,30)	.038*
Cognitive (Depression)			
CCL (Depression) X Severity	6.880[d]	(1,33)	.013*
Personality			
State Anger, Trait Anger, Anger In, Anger out, SCL-90-R (Hostility), X Severity	.378[b]	(5,29)	.860
State Anger X Severity	1.183[c]	(1,33)	.285
Trait Anger X Severity	.001[c]	(1,33)	.971
Anger In X Severity	.770[c]	(1,33)	.387
Anger Out X Severity	.184[c]	(1,33)	.670
SCL-90-R (Hostility) X Severity	.155[c]	(1,33)	.696
AQ (Comfort) and AQ (Frequency) X Severity	.132[b]	(2,32)	.878
AQ (Comfort) X Severity	.251[c]	(1,33)	.620
AQ (Frequency) X Severity	.053[c]	(1,33)	.820
SCS X Severity	4.138[d]	(1,33)	.050*
MAT X Severity	.371[d]	(1,18)	.550
Total psychopathology			
Total Psychopathology X Severity	6.107[d]	(1,33)	.019*

[a](*)p<.05; (**)p<.01.
[b]Multivariate tests.
[c]Univariate tests.
[d]Analysis of Variance

Test of hypothesis 1

Figure 1 shows the percentage of agoraphobics who received treatment from each of the caregivers. Sixty percent of the population received treatment from a psychiatrist, 54.3% received treatment from a psychologist, 65.7% received treatment from a G.P., and 71.4% of the population received treatment from a self-help group. Since only 5.7% of the population received treatment from a social worker, they will be excluded from the present analyses.

Incapacity. A 2 x 2 chi-square analysis [Psychiatrist (1=received psychiatric treatment, 2=did not receive psychiatric treatment) X Severity (1=more incapacitated, 2=less incapacitated)] was completed to determine if, in fact, more incapacitated agoraphobics received treatment from a psychiatrist, as compared to less incapacitated agoraphobics. Frequencies of this analysis are presented in Table 8. Results showed that more incapacitated agoraphobics were significantly more likely to be treated by psychiatrists (X^2 (1, N=35) = 5.25, Fisher Exact=.024).

Effectiveness of treatment. Although the above analysis showed that more incapacitated agoraphobics received psychiatric treatment, additional data were available in the present study. Subjects were also asked to select the treatment they perceived as effective in treating their symptoms. These results are shown in Figure 1 also. A self-

Table 8

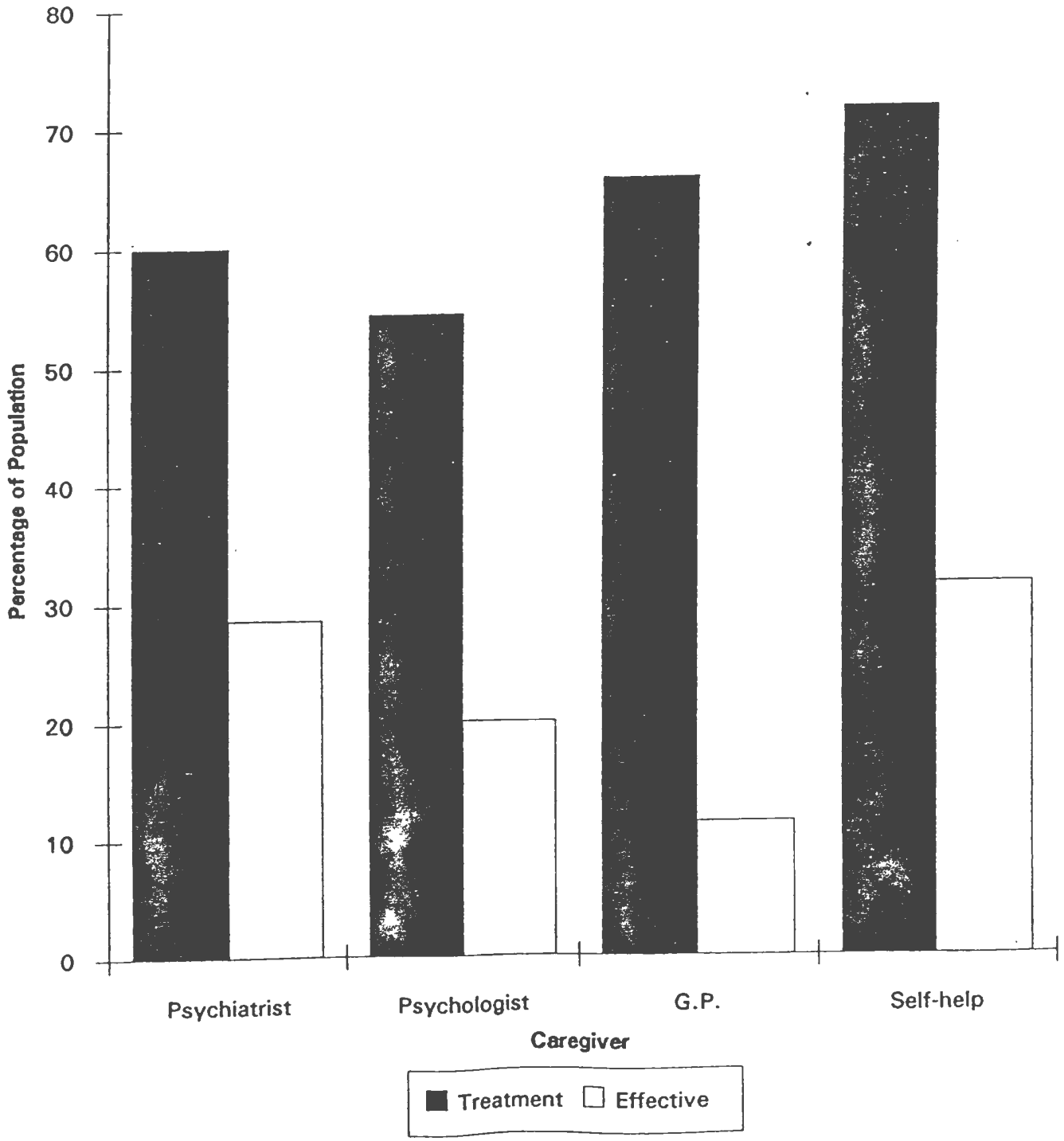
Frequencies Table for Severity X Psychiatric Treatment Chi-Square Analysis.

		Psychiatric Treatment	
		YES	NO
Severity	More Incapacitated	9	1
	Less Incapacitated	12	13

help group was perceived as effective by 31% of the sample, 29% perceived psychiatric treatment to be effective, 20% perceived psychological treatment to be effective, and 11.4% perceived G.P. treatment to be effective (see Figure 1).

If the percentage of the sample who were treated by each of the caregivers is compared to those who found the particular caregiver effective in treating their symptoms, ratios indicate that 43.4% of individuals who go to self-help groups perceive this treatment to be effective, 47.6% of those who receive psychiatric treatment perceive it to be effective, 36.8% of agoraphobics who receive psychological treatment perceive this treatment to be effective and 17.4% of agoraphobics who receive treatment from a G.P. perceive this treatment to be effective. As, can be seen, self-help and psychiatrist appear to be equally effective in treating population of agoraphobics. Psychological treatment is also effective, while few agoraphobics appear to perceive G.P. treatment as effective.

Figure 1. Percentage of population who received treatment from each caregiver and those who found this treatment effective.



The agoraphobic's perception of effective treatment was categorized as psychiatric treatment (Treatment 1) or treatment from one of the other caregivers (i.e., G.P., psychologist, or self-help)(Treatment 2). It is expected that those who are more incapacitated would perceive psychiatric treatment as effective. However, a 2 X 2 chi-square analysis (Treatment X Severity) was not shown to be significant [(X^2 (1, N=35)=.014, Fisher Exact=.606].

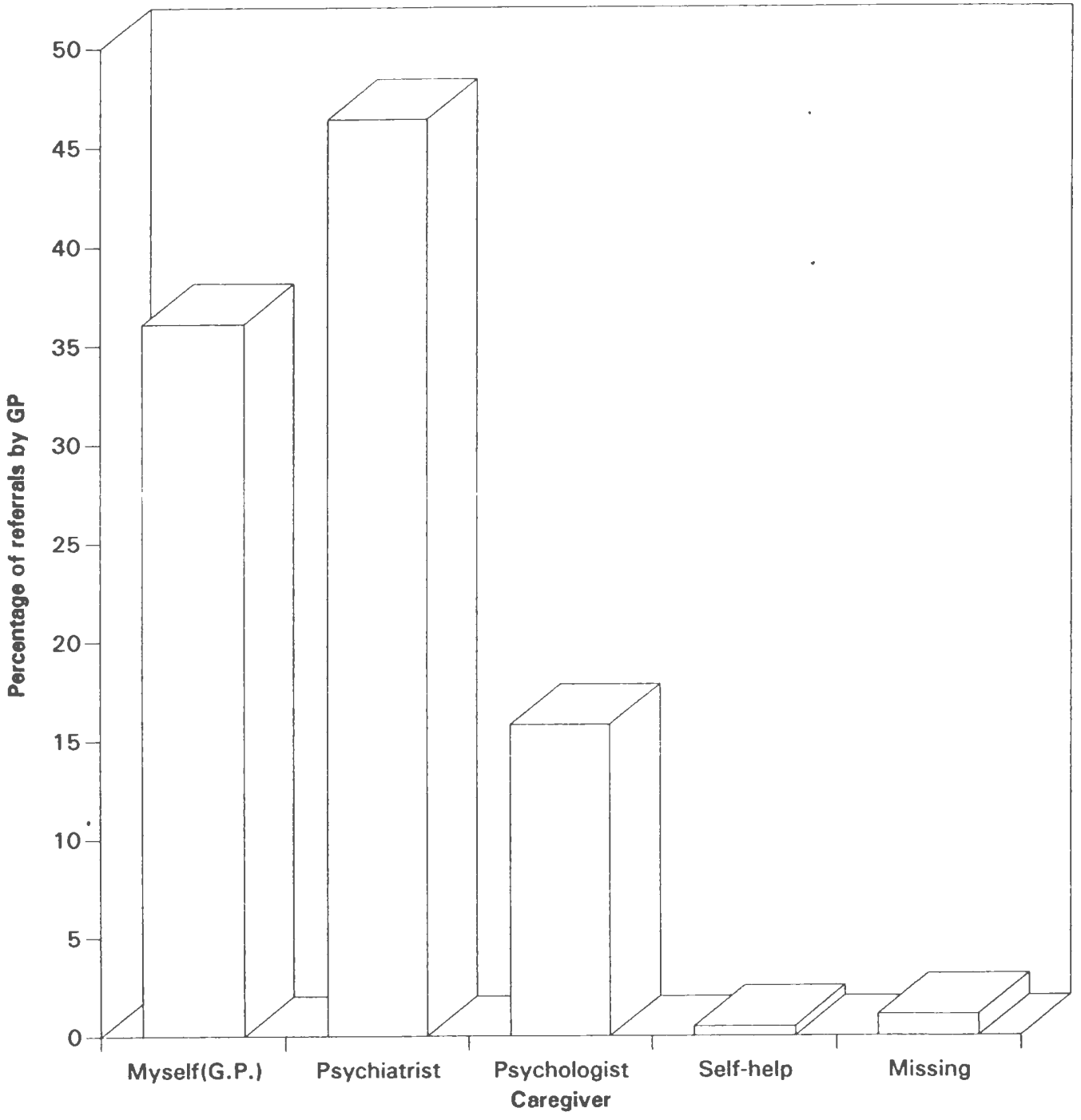
Medical distinction. Studies have suggested that there may be a distinction in treatment practices even within the medical field (Evans et al., 1988; Chamber et al., 1983) with G.P.s unable to adequately treat more incapacitated agoraphobics. A 2 X 2 chi-square analysis (G.P.s X Severity) showed that, unlike psychiatrists, G.P.s did not tend to treat more incapacitated agoraphobics (X^2 (1, N=35)=1.268, Fisher Exact=.236).

G.P. Data

Test of Hypothesis 2

Figure 2 shows referrals made by G.P.s when the case presentation of agoraphobia was severe (see Appendix P). G.P.s would refer 46.4 % of severe cases to a psychiatrist, handle 36.1% of cases themselves, refer 15.8% to a psychologist, and refer 0.5% to a self-help group (see Figure 2). Thus, results suggest that psychiatrists tend to treat severe cases of agoraphobia more often than other caregivers.

Figure 2. G.P.'s referral of choice for a severe case of agoraphobia.



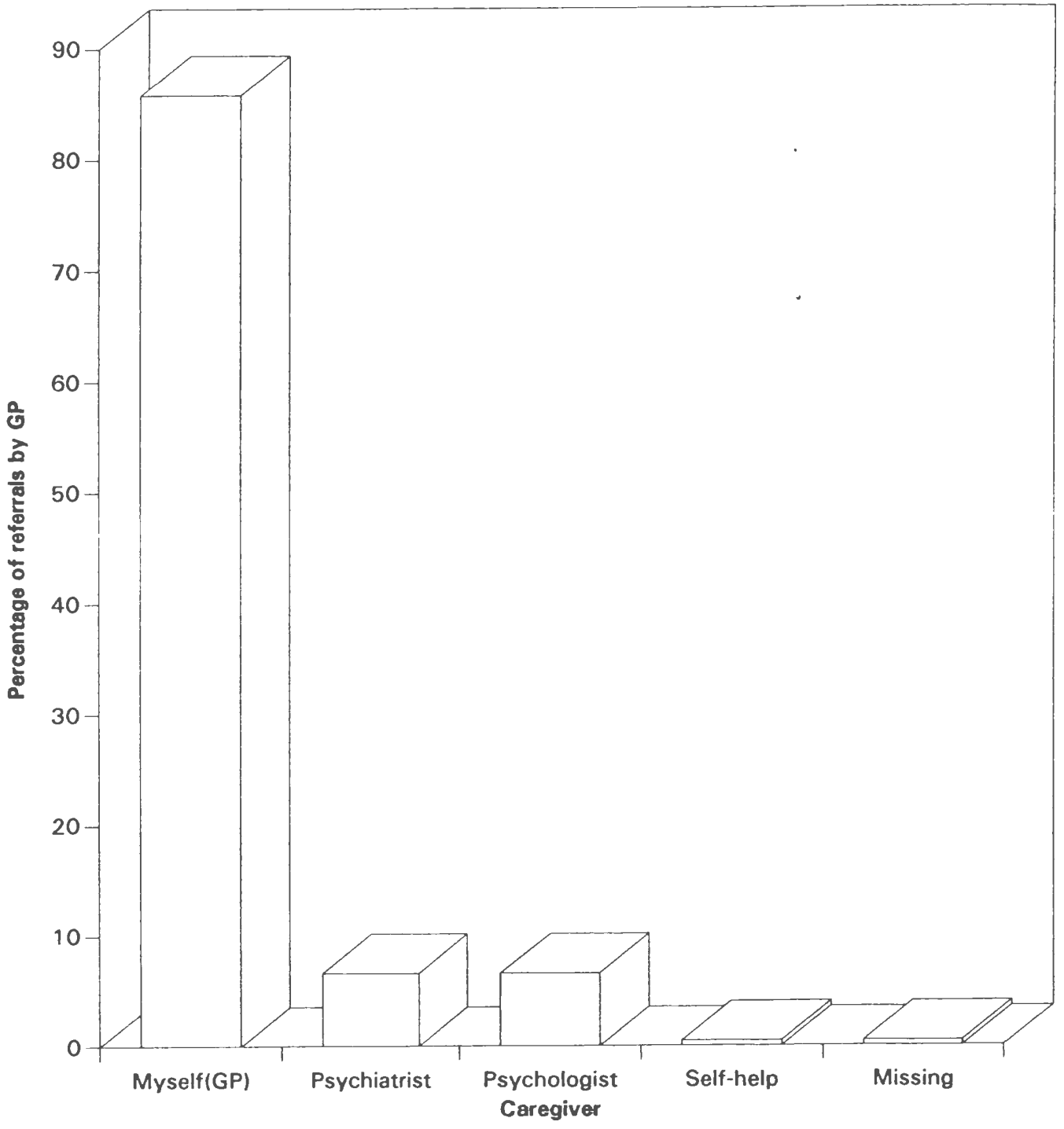
When a chi-square analysis was completed comparing referrals to a psychiatrist versus all other modes of referral (including G.P. treatment cases), the value was not found to be significant [X^2 (1,N=181)=0.669, p=0.414]. However, when psychiatric referrals were compared to alternative referrals (excluding cases handled by G.P.s themselves), the chi-square value was shown to be significant [X^2 (1, N=181)=26.304, p<.001]. These results suggest that psychiatrists do not treat significantly more agoraphobics who are more incapacitated because G.P.s tend to treat a large percentage of this population themselves. However, when G.P.s do make referrals to alternative caregivers, the referrals tend to be to a psychiatrist.

Chi-square analyses were completed for G.P. gender (male, female), area of residence (rural, urban), and years of experience respectively to determine if these variables affected G.P.'s choice of referral of a severe case of agoraphobia. In each case the chi-square value was not shown to be significant, suggesting that the sex, area, or years of experience of the G.P. do not significantly determine the G.P.'s tendency to refer severe cases of agoraphobia to a psychiatrist as opposed to other caregivers.

Test of Hypothesis 3

G.P.s were asked to indicate their referral for a mild case presentation of agoraphobia (Appendix P). Figure 3 shows

Figure 3. G.P.'s referral of choice for a mild case of agoraphobia.



that 85.8% of G.P.s would handle a mild case of agoraphobia themselves, 6.6% would refer to a psychiatrist, 6.6% would refer to a psychologist, and 0.5% would refer to a self-help group. Thus, as predicted, the majority of G.P.s indicated that they would handle a mild case of agoraphobia themselves. Chi-square analysis was completed to determine if the observed frequency of cases handled by G.P. themselves was greater than all other modes of referrals combined. Analysis showed that the chi-square value was significant [X^2 (1, N=182)=95.736, p<.001]. These results suggest that G.P.'s, in fact, tend to treat mild cases of agoraphobia themselves rather than refer to alternative caregivers.

Again, chi-square analyses were completed for G.P. gender (male, female), area of residence (rural, urban), and years of experience respectively to determine if these variables affected G.P.'s choice of treatment for a mild case of agoraphobia. In each case the chi-square value was not shown to be significant, suggesting that the sex, area, or years of experience of the G.P. do not significantly determine the G.P.'s tendency to treat mild cases of agoraphobia themselves.

DISCUSSION

The demographics of the population of agoraphobics obtained in the present study were consistent with those of previous studies. The population consisted primarily of married unemployed females with a mean onset of symptoms at 34.4 years of age. Also, the present population was predominately composed of agoraphobics who had obtained a high school education. Results of the present study showed that, in the population obtained, more incapacitated agoraphobics had significantly greater elevations on behavioural, physiological, cognitive, and overall psychopathology as compared to less incapacitated agoraphobics. However, self-control was the only personality variable which significantly differentiated more and less incapacitated agoraphobics, with those who are more incapacitated having less self-control. As hypothesized, results showed that, within the population of agoraphobics obtained in the present study, those who were more incapacitated were more apt to be treated by a psychiatrist.

Although the sample of G.P.s in the present study included more males, the sample appears to be representative of location (i.e., rural or urban) and years of experience. The results showed that G.P.s, in fact, do tend to treat mild cases of agoraphobia themselves. However, more severe cases of agoraphobia were not treated by a psychiatrist as

hypothesized as G.P.s treated a large percentage of the severe agoraphobics themselves. However, when G.P.s did make referrals for more severe cases of agoraphobia, they tended to refer to psychiatrists. These hypotheses will now be discussed in greater depth and their theoretical implications examined.

Agoraphobics Incapacity and Treatment

Hypothesis 1 suggested that more incapacitated agoraphobics would be treated by a psychiatrist. In reviewing hypothesis 1 for this agoraphobic population a number of factors will be considered: incapacity, importance of personality variables, treatment based on incapacity, and treatment effectiveness.

Incapacity

To test hypothesis 1, the present study first determined which variables distinguished more incapacitated and less incapacitated agoraphobics. As shown agoraphobic incapacity was determined by behavioural, physiological, and cognitive variables. Although the present study contained subjective self-report measures rather than objective measures of each of these modalities, results were consistent with Lang's TRM (Lang, 1968) in that they suggest that all three modalities must be assessed.

Personality

The only personality variable which was shown to be significant in the present study was self-control. This result appears to be consistent with those found by Rachman et al. (1986). As indicated by Rachman et al. (1986) when an individual is given a sense of self-control there is less fear and greater improvement. In the present study those who have little self-control are the more incapacitated.

The present results showed that anger, assertion, and marital discord did not significantly determine the severity of agoraphobia. However, based on these results alone, one cannot state that these factors do not enter into the equation. As proposed by Brehony and Geller (1981) these variables may predispose the individual to developing agoraphobia. Thus, although these factors may not increase the severity of the disorder they may play an active role in its etiology. Only future research can determine if there is a relationship.

Treatment

Results showed that more incapacitated agoraphobics received treatment from a psychiatrist significantly more often than did less incapacitated agoraphobics. This suggests that psychiatric treatment is required more often when an agoraphobic is more incapacitated. However, when G.P. treatment to these populations (more and less incapacitated

agoraphobics) is compared, more incapacitated agoraphobics do not tend to receive treatment from a G.P. more often. These results suggest that, in comparing more and less incapacitated agoraphobics, there is even a distinction within the medical field (i.e., psychiatric treatment is perceived to be necessary more often when incapacity is greater, but G.P. treatment is not). These findings are consistent with those of Evans et al. (1988); when an agoraphobic presents to a G.P. with more severe symptomatology (i.e., more incapacitated), the G.P. will tend to refer the individual to a psychiatrist. This mode of referral appears to be appropriate as 47.6% of agoraphobics perceived psychiatric treatment as effective as compared to only 17.4% of agoraphobics who received treatment from a G.P.

Treatment Effectiveness

Although more incapacitated agoraphobics were apt to receive psychiatric treatment, they did not significantly view psychiatric treatment as an effective method of treatment. These results suggest that incapacity alone may not determine psychiatric treatment. Maybe other caregivers (i.e., psychologists) can provide effective treatment for some of the more incapacitating symptoms. For example, cognitive treatment has been shown to be effective for panic (Salkovskis, 1991; Mavissakalian et al., 1983) and depression (Rush, Beck, Kovacs, & Hollon, 1983; Perris, 1989). Thus,

more incapacitated agoraphobics in the present study may benefit from cognitive therapy for depressive symptoms as this variable was shown to make them more incapacitated.

Also, studies have shown that mild cases of agoraphobia can be treated through self-help (Ghosh & Marks, 1987; Sinnott et al., 1981). Thus, a goal of future research may be to determine the effectiveness of treatment based on specific symptomatology.

G.P. Choice of Referral

In the present study it was shown that G.P.s, as hypothesized, did treat mild cases of agoraphobia themselves. Gender, area of residence, and years of experience did not affect this choice of treatment. However, results showed that severe cases of agoraphobia were not treated by a psychiatrist significantly more often when compared to all caregivers as G.P.s treated a large percentage of severe cases of agoraphobia themselves. However, when G.P. referrals alone were compared (i.e., G.P. treatment cases excluded) more incapacitated agoraphobics tended to be referred to a psychiatrist.

These results support the speculation made by Evans et al. (1988). Although psychological treatments have been shown to be effective, the treatment of choice continues to be medication. This appears to be the case with both mild and severe cases of agoraphobia. In each case the G.P. prefers to

treat the agoraphobic. Secondly, results support the results of Chamber et al. (1983) and Evans et al. (1988) in that more incapacitated cases are referred, by a G.P., to a psychiatrist.

Theoretical Implications

Classification system

As shown earlier, DSM-111-R includes agoraphobia in two classifications. These are Agoraphobia without a history of Panic Disorder and Panic Disorder with Agoraphobia. Results of the present study suggest that this classification may not be suitable in assessment and treatment. The study has suggested that incapacity of symptoms was determined by cognitive symptoms of depression as well as symptoms of anxiety and avoidance. Thus, anxiety and avoidance alone may not be adequate defining criteria as used in the present classification system.

This classification also does not acknowledge the importance personality variables may play. Although personality variables did not relate to level of severity significantly in the present study, these variables may predispose the individual to developing agoraphobia.

Classification is also important as it is used in diagnosis. As can be seen from G.P. referrals, G.P. perception of degree of incapacitation may determine who treats the agoraphobic. Thus, with alterations in the present

classification system, G.P.s may be more apt to make treatment formulations and referrals more cautiously.

Level of Severity

Physiological. There has been speculation that there is a spectrum of severity from nonclinical anxiety to Panic Disorder with Agoraphobia (Norton et al., 1986; Norton et al., 1988). The severe end of the spectrum is hypothesized to be associated with more fear and psychopathology. In the present study this was the case as agoraphobics with more severe symptomatology were shown to have higher means on variables measuring physiological anxiety (see Table 7).

If the level of severity conceptualization of panic attacks is indeed accurate, greater information on subclinical precursors could prove useful for understanding the progression from anxiety to Panic Disorder and Agoraphobia. Sheehan, Sheehan, and Minichiello (1981) found that the onset of anxiety frequently precedes development of phobic avoidance by 3 to 6 months. Hence, the phenomenon of nonclinical anxiety may be a possible early manifestation of Panic Disorder (Salge, Beck, & Logan, 1988). Consequently, by studying this population one could possibly gain insight into the mechanisms of panic attacks and their treatment.

Cognitive. Furthermore, variables measuring cognitive responses during anxiety were also significantly higher for those agoraphobics who were more incapacitated in the present

study. Thus, these results suggest that the cognitive interpretation of the anxiety may be associated with degree of incapacitation.

Results also showed that cognitive symptoms of depression are associated with degree of incapacitation. These results are consistent with those of Breier et al. (1984) who suggested that individuals suffering from depression and Panic Disorder with Agoraphobia simultaneously, have a greater level of impairment.

Treatment

If one compares the needs of the agoraphobic population to the treatment that is actually being provided, the results appear to be contradictory. Figure 1 shows that, 43.4% of agoraphobics who receive self-help and 46.7% who receive psychiatric treatment, consider these treatments to be effective, whereas only 17.4% of agoraphobics who receive G.P. treatment consider it to be effective. However, when one views the referrals made by G.P.s, it can be seen that the G.P. tends to treat 85.8% of mild cases of agoraphobia himself and 36.4% of severe cases. Again, as suggested by Evans et al. (1988) medications still appear to be the treatment of choice while alternative approaches appear to be effective.

Problems with Present Study

The primary problem in the present study is that the population obtained may be biased. Approximately 50% of the

participants in the present study were recruited while attending a self-help group (ACT) in St, John's. Thus, actively attending this group may have affected their response to items which questioned their perception of effectiveness of treatments they have obtained. Also, this population may not be representative of degree of incapacitation in agoraphobic population as agoraphobic symptoms may not have been as incapacitating during attendance to this group.

Secondly, due to the low sample size of agoraphobics obtained, a model for treatment could not be developed. Thirdly, if the present population were compared with normal controls more definitive statements could have been made about significance of personality variables in the etiology of agoraphobia.

Future Research

Through observation of the needs of the agoraphobic population and the caregivers from whom they first seek treatment (G.P.s) it is necessary to educate G.P.s about the effectiveness of alternative treatments. It is also necessary for these alternative treatments to be made available (i.e., in rural areas). Also, the agoraphobic population should be made aware of the effectiveness of alternative treatments.

If the level of severity hypothesis is indeed accurate future research should focus on the prevention of panic at a clinical level. To accomplish this goal, an assessment device

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should compare this clinical population with a nonclinical one to determine if, in fact, personality factors are important in the etiology of agoraphobia.

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Appendix A

AGORAPHOBIA

DO YOU FEAR:
Being away from home?
Going out into the open, into streets, shops, crowds?
Entering buses, elevators, movies?

DO YOU FEEL any of these:
Panic or terror?
Do these feelings prevent you from leaving home or otherwise seriously interfere with your life?

If YES to the above:

We are studying the relationship between the various symptoms of agoraphobia and the treatment received. Any information obtained in the present study will be confidential. If you wish to participate, please call John Mahar at 737-8792 or call 737-4387 weekdays from 9 a.m. to 5 p.m.

Appendix B

Agoraphobia Study

We are interested in learning more about how agoraphobics (people with fear of going out) feel and think about their fears, distress, and discomfort. Your feedback will assist us in developing the most helpful treatment program for people with agoraphobia.

Please read through the pages carefully and answer the questions. your responses will be confidential. Your time and efforts are greatly appreciated. Thank you for your time and cooperation.

The Mobility Inventory for Agoraphobia (MI)

1. Please indicate the degree to which you avoid the following places or situations because of discomfort or anxiety. Rate your amount of avoidance when you are with a trusted companion and when you are alone. Do this by using the following scale.

   1. Never avoid
   2. Rarely avoid
   3. Avoid about half the time
   4. Avoid most of the time
   5. Always avoid

(You may use numbers half-way between those listed when you think it is appropriate. For example, 3½ or 4½).

Write your score in the blanks for each situation or place under both conditions: when accompanied, and, when alone. Leave blank those situations that do not apply to you.

Places	When accompanied	When alone
Theatres	_____	_____
Supermarkets	_____	_____
Classrooms	_____	_____
Department stores	_____	_____
Restaurants	_____	_____
Museums	_____	_____
Elevators	_____	_____
Auditoriums or stadiums	_____	_____
Parking garages	_____	_____
High places		
Tell how high _____	_____	_____
Enclosed spaces (e.g. tunnels)	_____	_____
Open spaces		
(A) Outside (e.g. fields, wide streets, courtyards)	_____	_____
(B) Inside (e.g. large rooms, lobbies)	_____	_____

Riding In		
Buses	_____	_____
Trains	_____	_____
Subways	_____	_____
Airplanes	_____	_____
Boats	_____	_____
Driving or riding in car		
(A) At any time	_____	_____
(B) On expressways	_____	_____
Situations		
Standing in lines	_____	_____
Crossing bridges	_____	_____
Parties or social gatherings	_____	_____
Walking on the street	_____	_____
Staying at home alone	N/A	_____
Being far away from home	_____	_____
Other (specify)	_____	_____

We define a *panic attack* as:

(1) a high level of anxiety accompanied by
(2) strong body reactions (heart palpitations, sweating, muscle tremors, dizziness, nausea) with
(3) the temporary loss of the ability to plan, think, or reason and
(4) the intense desire to escape or flee the situation. (Note, this is different from high anxiety or fear alone.)

Please indicate the total number of panic attacks you have had in the last 7 days. _____.

Fear Questionnaire

Choose a number from the scale below to show how much you would avoid each of the situations if you could, because of fear or other unpleasant feelings. Then write the number you chose in the box opposite each situation.

0	1	2	3	4	5	6	7	8
Would not avoid it		slightly avoid it		Definitely avoid it		Markedly avoid it		Always avoid it

1. Main phobia you want treated (please describe in your own words) .....
2. Injections or minor surgery .....
3. Eating or drinking with other people .....
4. Hospitals .....
5. Travelling alone by bus or coach .....
6. Walking alone in busy streets .....
7. Being watched or stared at .....
8. Going into crowded shops .....
9. Talking to people in authority .....
10. Sight of blood .....
11. Being criticised .....
12. Going alone far from home .....
13. Thought of injury or illness .....
14. Speaking or acting to an audience .....
15. Large open spaces .....
16. Going to the dentist .....
17. Other situations (please describe) .....

Leave blank → [ ] [ ] [ ] [ ] ← Total

AG TD SOC

Now choose a number from the scale below to show how much you are troubled by each problem listed, and write the number in the box opposite.

0	1	2	3	4	5	6	7	8
Hardly at all		Slightly troublesome		Definitely troublesome		Markedly troublesome		Very severely troublesome

18. Feeling miserable or depressed .....
19. Feeling irritable or angry .....
20. Feeling tense or panicky .....
21. Upsetting thoughts coming into your mind .....
22. Feeling you or your surroundings are strange or unreal .....
23. Other feelings (please describe) .....

TOTAL [ ]

How would you rate the present state of your phobic symptoms on the scale below?

0	1	2	3	4	5	6	7	8
No phobias present		Slightly disturbing/ not really disabling		Definitely disturbing/ disabling		Markedly disturbing/ disabling		Very severely disturbing/ disabling

PLEASE CIRCLE ONE NUMBER BETWEEN 0 AND 8

Panic Attack Questionnaire (DSM-III-R Version)

A panic attack is the sudden onset of intense apprehension, fear, or terror, often associated with feelings of impending doom. Some of the symptoms experienced during a panic attack are dizziness, shortness of breath, chest pain or discomfort, and trembling or shaking.

If you have experienced one or more panic attacks in the *past year*, please answer *all* of the remaining questions. If you *have not* had a panic attack in the *past year*, please skip to question 23.

1. In the past year, approximately how many panic attacks have you had?

   1 2 3 4 5 6 7 8 9 10 11 or more

2. In the past 4 weeks, how many panic attacks have you had?

   1 2 3 4 5 6 7 8 9 10 or more

3. What is the greatest number of panic attacks you have had during any 4-week period in your life?

   1 2 3 4 5 6 7 8 9 10 or more

4. For how many months or years (approximately) have you been experiencing panic attacks?

   _____ years _____ months

5. How long ago was your worst attack?

   _____ years _____ months _____ weeks _____ days

6. Have you ever had a panic attack that was unexpected ("from out of the blue")?

   _____ no _____ yes

7. If you answered "yes" to question number 6, please indicate the proportion of your panic attacks that are unexpected.

   _____ all _____ most _____ some _____ few _____ none

8. If you recall your first panic attack, please describe briefly the circumstances surrounding the attack (e.g., where you were, what you were doing).

   _____

   _____

9. How disturbing or distressing are your panic attacks?

not at all	mildly	moderately	very	extremely
0	1	2	3	4

10. To what degree have your panic attacks restricted or changed your lifestyle (e.g., activities you engage in, places you go)?

not at all	some	moderately	quite a bit	extremely
0	1	2	3	4

11. Do you avoid certain situations due to fear of having a panic attack?

_____ no _____ yes

12. If you answered "yes" to question number 11, please indicate situations you avoid.

---

13. Please indicate how severely you experienced each of the following symptoms *during your most recent panic attacks* and *during your most severe attack*.

not at all	mildly	moderately	severely	very severely
0	1	2	3	4

		most recent					most severe				
a.	Shortness of breath or smothering sensation	0	1	2	3	4	0	1	2	3	4
b.	Dizziness, unsteady feelings, or faintness	0	1	2	3	4	0	1	2	3	4
c.	Racing or pounding heart	0	1	2	3	4	0	1	2	3	4
d.	Trembling or shaking	0	1	2	3	4	0	1	2	3	4
e.	Sweating	0	1	2	3	4	0	1	2	3	4
f.	Choking	0	1	2	3	4	0	1	2	3	4
g.	Nausea or abdominal distress	0	1	2	3	4	0	1	2	3	4
h.	Feelings that things are not real	0	1	2	3	4	0	1	2	3	4
i.	Numbness or tingling sensations	0	1	2	3	4	0	1	2	3	4
j.	Hot flashes or chills	0	1	2	3	4	0	1	2	3	4
k.	Chest pains or discomfort	0	1	2	3	4	0	1	2	3	4
l.	Fear of dying	0	1	2	3	4	0	1	2	3	4
m.	Fear of going crazy or losing control	0	1	2	3	4	0	1	2	3	4
n.	Visual difficulties (blurring, tunnel vision)	0	1	2	3	4	0	1	2	3	4
o.	Hearing difficulties (e.g., difficulty hearing, ringing in ears)	0	1	2	3	4	0	1	2	3	4
p.	Difficulty concentrating	0	1	2	3	4	0	1	2	3	4
q.	Desire to escape from scene of attack	0	1	2	3	4	0	1	2	3	4
r.	Thoughts or images that you cannot get rid of	0	1	2	3	4	0	1	2	3	4
s.	Difficult speaking	0	1	2	3	4	0	1	2	3	4
t.	Feelings of embarrassment	0	1	2	3	4	0	1	2	3	4

14. When a panic attack occurs, *generally* what is the time period between the onset of the attack and when the panic is the most intense?
    a. just a few minutes (less than 10 minutes)
    b. 10 to 30 minutes
    c. 30 minutes to an hour
    d. several hours
    e. more than a day

15. Have *any* of your attacks developed suddenly and increased to peak intensity within 10 minutes of your noticing the first symptom?

    _____ no _____ yes

16. How long, *on the average*, does a panic attack last (from start to finish)?
    a. just a few minutes (less than 10 minutes)
    b. 10 to 30 minutes
    c. 30 minutes to an hour
    d. several hours
    e. more than a day

17. How anxious does the thought of future panic attacks make you?
    a. not at all
    b. mildly
    c. moderately
    d. very
    e. extremely

18. How serious (either psychologically or medically) do you think your panic attacks are?

not at all		moderately		extremely
0	1	2	3	4

19. To what extent have you considered seeking treatment for your panic attacks?
    a. I have never considered seeking treatment.
    b. I have thought about seeking treatment, but not seriously.
    c. I have seriously thought about seeking treatment, but doubt I will actually do so.
    d. I have seriously thought about seeking treatment and intend to do so in the future.
    e. I have asked for treatment in the past (or I am currently receiving treatment) specifically for panic attacks.

20. Have you ever been told there is a medical reason for your attacks?
    _____ no _____ yes If yes, what were you told? _____

    _____

21. During an attack, have you ever lost control or done something uncontrolled that you later regretted?
    _____ no _____ yes If yes, explain. _____

    _____

22. Please describe where you were and what you were doing when you experienced your last three panic attacks (if you've had three or more) and indicate if the panic was expected in each situation.

		expected	unexpected
a.	_____	_____	_____
b.	_____	_____	_____
c.	_____	_____	_____

23. To best of your knowledge, have any of the following members of your family experienced panic attacks?

	age	yes	no	don't know	not applicable
Mother	___	___	___	_____	_____
Father	___	___	___	_____	_____
Sister(s)	___	___	___	_____	_____
Brother(s)	___	___	___	_____	_____
Daughter(s)	___	___	___	_____	_____
Son(s)	___	___	___	_____	_____

Body Sensations Questionnaire

Below is a list of specific body sensations that may occur when you are nervous or in a feared situation. Please mark down how afraid you are of these feelings. Use the 5-point scale shown here. Please rate all items.

1 = I am not frightened or worried by this sensation
2 = I am somewhat frightened by this sensation.
3 = I am moderately frightened by this sensation.
4 = I am frightened by this sensation.
5 = I am extremely frightened by this sensation.

_____ 1. Heart palpitations

_____ 2. Pressure or heavy felling in chest

_____ 3. Numbness in arms or legs

_____ 4. Tingling in the fingertips

_____ 5. Numbness in another part of your body

_____ 6. Shortness of breath

_____ 7. Dizziness

_____ 8. Blurred or distorted vision

_____ 9. Nausea

_____ 10. "Butterflies" in the stomach

_____ 11. A knot in the stomach

_____ 12. A lump in the throat

_____ 13. Wobbly or rubber legs

_____ 14. Sweating

_____ 15. A dry throat

_____ 16. Disorientation and confusion

_____ 17. Disconnectedness from the body; or feeling only partly present

_____ 18. Other (please describe):

_____

_____

EPSTEIN-FENZ MANIFEST ANXIETY SCALE

INSTRUCTIONS :

The following are some statements on feelings, daydreams, attitudes, and behaviour. Read each statement and decide how often it applies to you.

Circle '1' if the statement never applies to you.
Circle '5' if you experience it almost all of the time.
Use '2', '3', and '4' for in-between ratings.

Never = 1
Rarely = 2
Sometimes = 3
Fairly often = 4
Nearly always = 5

A few may be difficult to answer by checking frequencies. For these, you may indicate how true or false the item is for you by using '1' for 'Definitely False', '3' for 'Questionable', '5' for 'Definitely True', and '2' and '4' for in-between ratings.

Be honest, but do not spend too much time over any one statement. As a rule, first impressions are as accurate as any.
Are there any questions?

1.	I am an easy going person	1 2 3 4 5
2.	I have sensations of burning, tingling, or crawling in certain parts of my body	1 2 3 4 5
3.	I feel chilly at temperatures that are comfortable to others	1 2 3 4 5
4.	My feelings are easily hurt	1 2 3 4 5
5.	I am either too hot or too cold and cannot get comfortable at a constant temperature setting	1 2 3 4 5
6.	I have trouble getting my breath for no special reason	1 2 3 4 5
7.	My mouth feels dry	1 2 3 4 5
8.	I have feelings of panic for no special reason	1 2 3 4 5
9.	I have pounding headaches in which I can feel a definite beat	1 2 3 4 5
10.	I am a relaxed person	1 2 3 4 5
11.	I clench my teeth when anxious	1 2 3 4 5
12.	I am troubled by discomfort in the pit of my stomach	1 2 3 4 5
13.	I worry about little things	1 2 3 4 5
14.	I have a hard time swallowing	1 2 3 4 5
15.	I become upset when I have to wait	1 2 3 4 5
16.	My skin becomes painfully sensitive	1 2 3 4 5
17.	I notice my heart pounding	1 2 3 4 5
18.	I take things hard	1 2 3 4 5
19.	I grind my teeth in my sleep	1 2 3 4 5
20.	I am bothered with blushing	1 2 3 4 5
21.	I am troubled by tension interfering with my speech	1 2 3 4 5
22.	My finger tips or other extremeties become cold	1 2 3 4 5
23.	I become irritable about little things	1 2 3 4 5
24.	I have pressure headaches in which my head feels as if it were in a vice, or as if there were a tight band around it	1 2 3 4 5

Never = 1
Rarely = 2
Sometimes = 3
Fairly often = 4
Nearly always = 5

25. When embarrassed, I break out in a sweat which annoys me greatly	1 2 3 4 5
26. I take things in my stride	1 2 3 4 5
27. I have trouble with my hand shaking while I write	1 2 3 4 5
28. I would rather win than lose in a game	1 2 3 4 5
29. I am troubled with diarrhoea	1 2 3 4 5
30. I have pains in the back of my neck	1 2 3 4 5
31. I suddenly feel hot all over, without apparent cause	1 2 3 4 5
32. I am troubled with backaches	1 2 3 4 5
33. I am a nervous person	1 2 3 4 5
34. In the absence of physical action my heart beats rapidly	1 2 3 4 5
35. My hand shakes when I try to do something	1 2 3 4 5
36. I have stomach trouble	1 2 3 4 5
37. I go to sleep without thoughts bothering me	1 2 3 4 5
38. My head feels tender to the point that it hurts when I comb my hair or put on a hat	1 2 3 4 5
39. My sleep is fitful and disturbed	1 2 3 4 5
40. The muscles of my neck ache as if they were tied in knots	1 2 3 4 5
41. I feel that I am about to go to pieces	1 2 3 4 5
42. I am easily frightened	1 2 3 4 5
43. I have frightening dreams	1 2 3 4 5
44. I have trouble with muscles twitching and jumping	1 2 3 4 5
45. I am bothered by dizziness	1 2 3 4 5

BECK INVENTORY

On this questionnaire are groups of statements. Please read each group of statements carefully. Then pick out the one statement in each group which best describes the way you have been feeling the PAST WEEK, INCLUDING TODAY! Circle the number beside the statement you picked. If several statements in the group seem to apply equally well, circle each one. Be sure to read all the statements in each group before making your choice.

1. 0 I do not feel sad
   1 I feel sad
   2 I am sad all the time and I can't snap out of it
   3 I am so sad or unhappy that I can't stand it

2. 0 I am not particularly discouraged about the future
   1 I feel discouraged about the future
   2 I feel I have nothing to look forward to
   3 I feel that the future is hopeless and that things cannot improve

3. 0 I do not feel like a failure
   1 I feel I have failed more than the average person
   2 As I look back on my life, all I can see is a lot of failures
   3 I feel I am a complete failure as a person

4. 0 I get as much satisfaction out of things as I used to
   1 I don't enjoy things the way I used to
   2 I don't get real satisfaction out of anything anymore
   3 I am dissatisfied or bored with everything

5. 0 I don't feel particularly guilty
   1 I feel guilty a good part of the time
   2 I feel quite guilty most of the time
   3 I feel guilty all of the time

6. 0 I don't feel I am being punished
   1 I feel I may be punished
   2 I expect to be punished
   3 I feel I am being punished

7. 0 I don't feel disappointed in myself
   1 I am disappointed in myself
   2 I am disgusted with myself
   3 I hate myself

8. 0 I don't feel I am any worse than anybody else
   1 I am critical of myself for my weaknesses or mistakes
   2 I blame myself all the time for my faults
   3 I blame myself for everything bad that happens

9. 0 I don't have any thoughts of killing myself
   1 I have thoughts of killing myself, but I would not carry them out
   2 I would like to kill myself
   3 I would kill myself if I had the chance

10. 0 I don't cry anymore than usual
    1 I cry more now than I used to
    2 I cry all the time now
    3 I used to be able to cry, but now I can't cry even though I want to

11. 0 I am no more irritated now than I ever am
    1 I get annoyed or irritated more easily than I used to
    2 I feel irritated all the time now
    3 I don't get irritated at all by the things that used to irritate me

12. 0 I have not lost interest in other people
    1 I am less interested in other people than I used to be
    2 I have lost most of my interest in other people
    3 I have lost all of my interest in other people

13. 0 I make decisions about as well as I ever could
    1 I put off making decisions more than I used to
    2 I have greater difficulty in making decisions than before
    3 I can't make decisions at all anymore

14. 0 I don't feel I look any worse than I used to
    1 I am worried that I am looking old or unattractive
    2 I feel that there are permanent changes in my appearance that make me look unattractive
    3 I believe that I look ugly

15. 0 I can work about as well as before
    1 It takes an extra effort to get started at doing something
    2 I have to push myself very hard to do anything
    3 I can't do any work at all

16. 0 I can sleep as well as usual
    1 I don't sleep as well as I used to
    2 I wake up 1-2 hours earlier than usual and find it hard to get back to sleep
    3 I wake up several hours earlier than I used to and cannot get back to sleep

17. 0 I don't get more tired than usual
    1 I get tired more easily than I used to
    2 I get tired from doing almost anything
    3 I am too tired to do anything

18. 0 My appetite is no worse than usual
    1 My appetite is not as good as it used to be
    2 My appetite is much worse now
    3 I have no appetite at all anymore

19. 0 I haven't lost much weight, if any lately.
    1 I have lost more than 5 pounds
    2 I have lost more than 10 pounds
    3 I have lost more than 15 pounds

    I am purposely trying to lose weight by eating less
    Yes ..... No .....

20. 0 I am no more worried about my health than usual
    1 I am worried about physical problems such as aches and pains; or upset stomach; or constipation
    2 I am very worried about physical problems and it's hard to think of much else
    3 I am so worried about my physical problems, that I cannot think about anything else

21. 0 I have not noticed any recent change in my interest in sex
    1 I am less interested in sex than I used to be
    2 I am much less interested in sex now
    3 I have lost interest in sex completely

Agoraphobic Cognitions Questionnaire

Below are some thoughts or ideas that may pass through your mind when you are nervous or frightened. Indicate how often each thought occurs when you are nervous. Rate each one from 1 to 5, using the scale below.

1 = Thought never occurs.
2 = Thought rarely occurs.
3 = Thought occurs half the time when I am nervous.
4 = Thought usually occurs.
5 = Thought always occurs when I am nervous.

_____ I am going to throw up.

_____ I am going to pass out.

_____ I must have a brain tumor.

_____ I will have a heart attack.

_____ I will choke to death.

_____ I am going to act foolishly.

_____ I am going blind.

_____ I will not be able to control myself.

_____ I will hurt someone.

_____ I am going to have a stroke.

_____ I am going to go crazy.

_____ I am going to scream.

_____ I am going to babble or talk funny.

_____ I will be paralyzed by fear.

Other ideas, not listed (please describe and rate).

_____ _____

_____ _____

_____ _____

COGNITION CHECKLIST

INSTRUCTIONS: Please rate how often you have each of the thoughts that a described below during each of the following situations.

	Never	Rarely	Some-times	Often	Alw
When I have to attend a social occasion I think:					
1) I'm a social failure.	0	1	2	3	4
2) I'll never be as good as other people are.	0	1	2	3	4
When I am with a friend I think:					
3) People don't respect me anymore.	0	1	2	3	4
4) No one cares whether I live or die.	0	1	2	3	4
5) I'm worse off than they are.	0	1	2	3	4
6) I don't deserve to be loved.	0	1	2	3	4
7) I've lost the only friends I've had.	0	1	2	3	4
8) I'm not worthy of people's attention or affection.	0	1	2	3	4
9) There's no one left to help me.	0	1	2	3	4
When I feel pain or physical discomfort I think:					
10) What if I get sick and become an invalid?	0	1	2	3	4
11) Something might be happening that will ruin my appearance.	0	1	2	3	4
12) I am going to be injured.	0	1	2	3	4
13) What if no one reaches me in time to help?	0	1	2	3	4
14) I'm going to have an accident.	0	1	2	3	4

Pain or physical discomfort (cont'd):	Never	Rarely	Some-times	Often	Alwa
15) I might be trapped.	0	1	2	3	4
16) I am not a healthy person.	0	1	2	3	4
17) There's something very wrong with me.	0	1	2	3	4
Please rate how often you have the following thoughts regardless of the situation.					
18) Life isn't worth living.	0	1	2	3	4
19) I'm worthless.	0	1	2	3	4
20) I have become physically unattractive.	0	1	2	3	4
21) I will never overcome my problems.	0	1	2	3	4
22) Something awful is going to happen.	0	1	2	3	4
23) I'm going to have a heart attack.	0	1	2	3	4
24) I'm losing my mind.	0	1	2	3	4
25) Something will happen to someone I care about.	0	1	2	3	4
26) Nothing ever works out for me anymore.	0	1	2	3	4

SELF-CONTROL SCHEDULE

Directions:

Indicate in the space after each statement how characteristic or descriptive each of the following statements is of you by using the code given below.

CODE

+3 very characteristic of me, extremely descriptive

+2 rather characteristic of me, quite descriptive

+1 somewhat characteristic of me, slightly descriptive

-1 somewhat uncharacteristic of me, slightly undescriptive

-2 rather uncharacteristic of me, quite undescriptive

-3 very uncharacteristic of me, extremely nondescriptive

---

1. When I do a boring job, I think about the less boring parts of the job and the reward that I will receive once I am finished. _____

2. When I have to do something that is anxiety arousing for me, I try to visualize how I will overcome my anxieties while doing it. _____

3. Often by changing my way of thinking I am able to change my feelings about almost everything. _____

4. I often find it difficult to overcome my feelings of nervousness and tension without any outside help. _____

5. When I am feeling depressed I try to think about pleasant events. _____

6. I cannot avoid thinking about mistakes I have made in the past. _____

7. When I am faced with a difficult problem, I try to approach its solution in a systematic way. _____

8. I usually do my duties quicker when somebody is pressuring me. _____

9. When I am faced with a difficult decision, I prefer to postpone making a decision even if all the facts are at my disposal. _____

10. When I find that I have difficulties in concentrating on my reading, I look for ways to increase my concentration. _____

11. When I plan to work, I remove all the things that are not relevant to my work. _____

12. When I try to get rid of a bad habit, I first try to find out all the factors that maintain this habit. _____

13. When an unpleasant thought is bothering me, I try to think about something pleasant. _____

14. If I would smoke two packages of cigarettes a day, I probably would need outside help to stop smoking. _____

15. When I am in a low mood, I try to act cheerful so my mood will change. _____

16. If I had the pills with me, I would take a tranquilizer whenever I felt tense and nervous. _____

17. When I am depressed, I try to keep myself busy with things that I like. _____

18. I tend to postpone unpleasant duties even if I could perform them immediately. _____

19. I need outside help to get rid of some of my bad habits. _____

20. When I find it difficult to settle down and do a certain job, I look for ways to help me settle down. _____

21. Although it makes me feel bad, I cannot avoid thinking about all kinds of possible catastrophes in the future. _____

22. First of all I prefer to finish a job that I have to do and then start doing the things I really like. _____

23. When I feel pain in a certain part of my body, I try not to think about it. _____

24. My self-esteem increases once I am able to overcome a bad habit. _____

25. In order to overcome bad feelings that accompany failure, I often tell myself that it is not so catastrophic and that I can do something about it. _____

26. When I feel that I am too impulsive, I tell myself "stop and think before you do anything." _____

27. Even when I am terribly angry at somebody, I consider my actions very carefully. _____

28. Facing the need to make a decision, I usually find out all the possible alternatives instead of deciding quickly and spontaneously. _____

29. Usually I do first the things I really like to do even if there are more urgent things to do. _____

30. When I realize that I cannot help but be late for an important meeting, I tell myself to keep calm. _____

31. When I feel pain in my body, I try to divert my thoughts from it. _____

32. I usually plan my work when faced with a number of things to do. _____

33. When I am short of money, I decide to record all my expenses in order to plan more carefully for the future. _____

34. If I find it difficult to concentrate on a certain job, I divide the job into smaller segments. _____

35. Quite often I cannot overcome unpleasant thoughts that bother me. _____

36. Once I am hungry and unable to eat, I try to divert my thoughts away from my stomach or try to imagine that I am satisfied. _____

ASSERTION QUESTIONNAIRE
by Peter Lewinsohn

Go over the list of questions twice.

First, rate each item using the "Frequency Scale" in the next column. Rate each o how often it has occurred during the past month.

Second, rate how comfortable you were when each situation happened, or how comfort you would be if it were to happen. For this rating, use the "Comfort Scale".

As Dr. Lewinsohn points out, there are no right or wrong answers to the items on t questionnaire. As with all the tests in The Mind Test, its primary purpose is to provi you with information about yourself.

FREQUENCY SCALE

Indicate how often each of these events occurred by marking the **Frequency Column**, using the following scale:

1 = This has not happened in the past 30 days

2 = This has happened a few times (1 to 6 times) in the past 30 days

3 = This has happened often (7 times or more) in the past 30 days.

COMFORT SCALE

Indicate how you feel about each of these events by marking the **Comfort Column**, usi the following scale:

1 = I felt very uncomfortable or upset when this happened

2 = I felt somewhat uncomfortable or upset when this happened

3 = I felt neutral when this happened (neither comfortable nor uncomfortable; neither good nor upset)

4 = I felt fairly comfortable or good when this happened

5 = I felt very comfortable or good when this happened

Important: **If an event has not happened during the past month, then rate it accordir to how you think you would feel if it happened. If an event happened mor than once in the past month, rate roughly how you felt about it on the average.**

		FREQUENCY	COMFORT
1.	Turning down a person's request to borrow my car		
2.	Asking a favor of someone		
3.	Resisting sales pressure		
4.	Admitting fear and requesting consideration		
5.	Telling a person I am intimately involved with that he/she has said or done something that bothers me		
6.	Admitting ignorance in an area being discussed		
7.	Turning down a friend's request to borrow money		
8.	Turning off a talkative friend		
9.	Asking for constructive criticism		
10.	Asking for clarification when I am confused about what someone has said		
11.	Asking whether I have offended someone		
12.	Telling a person of the opposite sex that I like him/her		
13.	Telling a person of the same sex that I like him/her		
14.	Requesting expected service when it hasn't been offered (e.g., in a restaurant)		
15.	Discussing openly with a person his/her criticism of my behavior		
16.	Returning defective items (e.g., at a store or restaurant		
17.	Expressing an opinion that differs from that of a person I am talking with		
18.	Resisting sexual overtures when I am not interested		
19.	Telling someone how I feel if he/she has done something that is unfair to me		
20.	Turning down a social invitation from someone I don't particularly like		
21.	Resisting pressure to drink		
22.	Resisting an unfair demand from a person who is important to me		
23.	Requesting the return of borrowed items		
24.	Telling a friend or co-worker when he/she says or does something that bothers me		
25.	Asking a person who is annoying me in a public situation to stop (e.g., smoking on a bus)		
26.	Criticizing a friend		
27.	Criticizing my spouse		
28.	Asking someone for help or advice		
29.	Expressing my love to someone		
30.	Asking to borrow something		
31.	Giving my opinion when a group is discussing an important matter		
32.	Taking a definite stand on a controversial issue		
33.	When two friends are arguing, supporting the one I agree with		
34.	Expressing my opinion to someone I don't know very well		
35.	Interrupting someone to ask him/her to repeat something I didn't hear clearly		
36.	Contradicting someone when I think I might hurt him/her by doing so		
37.	Telling someone that he/she has disappointed me or let me down		
38.	Asking someone to leave me alone		
39.	Telling a friend or co-worker that he/she has done a good job		
40.	Telling someone he/she has made a good point in a discussion		
41.	Telling someone I have enjoyed talking with him/her		
42.	Complimenting someone on his/her skill or creativity		

Self-Rating Questionnaire

STAXI Item Booklet (Form HS)

Name _____ Sex _____ Age _____ Date _____

Education _____ Occupation _____ Marital Status _____

Instructions

In addition to this Item Booklet you should have a STAXI Rating Sheet. Before beginning, enter your name, sex, age, the date, your education and occupation, and your marital status in the spaces provided on this booklet and at the top of the Rating Sheet.

This booklet is divided into three Parts. Each Part contains a number of statements that people use to describe their feelings and behavior. Please note that each Part has *different* directions. Carefully read the directions for each Part before recording your responses on the Rating Sheet.

There are no right or wrong answers. In responding to each statement, give the answer that describes you best. DO NOT ERASE! If you need to change your answer, make an "X" through the incorrect response and then fill in the correct one.

Examples

1. ① ✖ ● ④
2. ① ● ③ ④

Reorder #1414-TB

Part 1 Directions

A number of statements that people use to describe themselves are given below. Read each statement and then fill in the circle with the number which indicates how you feel *right now*. Remember that there are no right or wrong answers. Do not spend too much time on any one statement, but give the answer which seems to *best* describe your *present feelings*.

Fill in ① for *Not at all*	Fill in ③ for *Moderately so*
Fill in ② for *Somewhat*	Fill in ④ for *Very much so*

How I Feel Right Now

1. I am furious.
2. I feel irritated.
3. I feel angry.
4. I feel like yelling at somebody.
5. I feel like breaking things.
6. I am mad.
7. I feel like banging on the table.
8. I feel like hitting someone.
9. I am burned up.
10. I feel like swearing.

Part 2 Directions

A number of statements that people use to describe themselves are given below. Read each statement and then fill in the circle with the number which indicates how you *generally* feel. Remember that there are no right or wrong answers. Do not spend too much time on any one statement, but give the answer which seems to *best* describe how you *generally* feel.

Fill in ① for *Almost never*	Fill in ③ for *Often*
Fill in ② for *Sometimes*	Fill in ④ for *Almost always*

How I Generally Feel

11. I am quick tempered.
12. I have a fiery temper.
13. I am a hotheaded person.
14. I get angry when I'm slowed down by others' mistakes.
15. I feel annoyed when I am not given recognition for doing good work.
16. I fly off the handle.
17. When I get mad, I say nasty things.
18. It makes me furious when I am criticized in front of others.
19. When I get frustrated, I feel like hitting someone.
20. I feel infuriated when I do a good job and get a poor evaluation.

Continued ▶

Part 3 Directions

Everyone feels angry or furious from time to time, but people differ in the ways that they react when they are angry. A number of statements are listed below which people use to describe their reactions when they feel *angry* or *furious*. Read each statement and then fill in the circle with the number which indicates how *often* you *generally* react or behave in the manner described when you are feeling angry or furious. Remember that there are no right or wrong answers. Do not spend too much time on any one statement.

Fill in ① for *Almost never*	Fill in ③ for *Often*
Fill in ② for *Sometimes*	Fill in ④ for *Almost always*

When Angry or Furious...

21. I control my temper.
22. I express my anger.
23. I keep things in.
24. I am patient with others.
25. I pout or sulk.
26. I withdraw from people.
27. I make sarcastic remarks to others.
28. I keep my cool.
29. I do things like slam doors.
30. I boil inside, but I don't show it.
31. I control my behavior.
32. I argue with others.
33. I tend to harbor grudges that I don't tell anyone about.
34. I strike out at whatever infuriates me.
35. I can stop myself from losing my temper.
36. I am secretly quite critical of others.
37. I am angrier than I am willing to admit.
38. I calm down faster than most other people.
39. I say nasty things.
40. I try to be tolerant and understanding.
41. I'm irritated a great deal more than people are aware of.
42. I lose my temper.
43. If someone annoys me, I'm apt to tell him or her how I feel.
44. I control my angry feelings.

Self-Rating Questionnaire

STAXI Rating Sheet (Form HS)

Name _____ Sex _____ Age _____ Date _____

Education _____ Occupation _____ Marital Status _____

PART 1

How I Feel Right Now

1.	①	②	③	④
2.	①	②	③	④
3.	①	②	③	④
4.	①	②	③	④
5.	①	②	③	④
6.	①	②	③	④
7.	①	②	③	④
8.	①	②	③	④
9.	①	②	③	④
10.	①	②	③	④

PART 2

How I Generally Feel

11.	①	②	③	④
12.	①	②	③	④
13.	①	②	③	④
14.	①	②	③	④
15.	①	②	③	④
16.	①	②	③	④
17.	①	②	③	④
18.	①	②	③	④
19.	①	②	③	④
20.	①	②	③	④

PART 3

When Angry or Furious

21.	①	②	③	④
22.	①	②	③	④
23.	①	②	③	④
24.	①	②	③	④
25.	①	②	③	④
26.	①	②	③	④
27.	①	②	③	④
28.	①	②	③	④
29.	①	②	③	④
30.	①	②	③	④
31.	①	②	③	④
32.	①	②	③	④
33.	①	②	③	④
34.	①	②	③	④
35.	①	②	③	④
36.	①	②	③	④
37.	①	②	③	④
38.	①	②	③	④
39.	①	②	③	④
40.	①	②	③	④
41.	①	②	③	④
42.	①	②	③	④
43.	①	②	③	④
44.	①	②	③	④

Reorder #1415-RF

MARITAL-ADJUSTMENT TEST

1. Check the dot on the scale line below which best describes the degree of happines everything considered, of your present marriage. The middle point, "happy," repr the degree of happiness which most people get from marriage, and the scale gradua ranges on one side to those few who are very unhappy in marriage, and on the othe those few who experience extreme joy or felicity in marriage.

0	2	7	15	20	25	35
Very Unhappy			Happy			Perfectly Happy

State the approximate extent of agreement or disagreement between you and your mate on t following items. Please check each column.

	Always Agree	Almost Always Agree	Occasionally Disagree	Frequently Disagree	Always Disagree	Almost Always Disagree
2. Handling family finances	---	---	---	---	---	---
3. Matter of recreation	---	---	---	---	---	---
4. Demonstrations of affection	---	---	---	---	---	---
5. Friends	---	---	---	---	---	---
6. Sex relations	---	---	---	---	---	---
7. Conventionality (right, good, or proper conduct)	---	---	---	---	---	---
8. Philosophy of life	---	---	---	---	---	---
9. Ways of dealing with in-laws	---	---	---	---	---	---

For the following situations indicate by checking in the appropriate space what usually happens.

10. When disagreements arise, they usually result in:

___ husband giving in
___ wife giving in
___ agreement by mutual give and take

11. Do you and your mate engage in outside interests together?

___ all of them
___ some of them
___ very few of them
___ none of them

12. Is leisure time do you generally prefer:

___ to be "on the go"
___ to stay at home

Does your mate generally prefer:

___ to be "on the go"
___ to stay at home

13. Do you ever wish you had not married?

___ Frequently
___ occasionally
___ rarely
___ never

14. If you had your life to live over, do you think you would:

___ marry the same person
___ marry a different person
___ not marry at all

15. Do you confide in your mate:

___ almost never
___ rarely
___ in most things
___ in everything

SCL-90-R®

Symptom Checklist-90-R

Leonard R. Derogatis, PhD

Last Name First MI

ID Number

Age Gender Test Date

DIRECTIONS:

1. Print your name, identification number, age, gender, and testing date in the area on the left side of this page.
2. Use a lead pencil only and make a dark mark when responding to the items on pages 2 and 3.
3. If you want to change an answer, erase it carefully and then fill in your new choice.
4. Do not make any marks outside the circles.

DO NOT SEND TO NATIONAL COMPUTER SYSTEMS
USE ONLY FOR HAND SCORING

NCS Order #
05618

INSTRUCTIONS:

Below is a list of problems people sometimes have. Please read each one carefully, and blacken the circle that best describes HOW MUCH THAT PROBLEM HAS DISTRESSED OR BOTHERED YOU DURING THE PAST 7 DAYS INCLUDING TODAY. Blacken the circle for only one number for each problem and do not skip any items. If you change your mind, erase your first mark carefully. Read the example before beginning, and if you have any questions please ask about them.

	NOT AT ALL	A LITTLE BIT	MODERATELY	QUITE A BIT	EXTREMELY	EXAMPLE HOW MUCH WERE YOU DISTRESSED BY:
1	⓪	①	②	●	④	Bodyaches

	NOT AT ALL	A LITTLE BIT	MODERATELY	QUITE A BIT	EXTREMELY	HOW MUCH WERE YOU DISTRESSED BY:
1	⓪	①	②	③	④	Headaches
2	⓪	①	②	③	④	Nervousness or shakiness inside
3	⓪	①	②	③	④	Repeated unpleasant thoughts that won't leave your mind
4	⓪	①	②	③	④	Faintness or dizziness
5	⓪	①	②	③	④	Loss of sexual interest or pleasure
6	⓪	①	②	③	④	Feeling critical of others
7	⓪	①	②	③	④	The idea that someone else can control your thoughts
8	⓪	①	②	③	④	Feeling others are to blame for most of your troubles
9	⓪	①	②	③	④	Trouble remembering things
10	⓪	①	②	③	④	Worried about sloppiness or carelessness
11	⓪	①	②	③	④	Feeling easily annoyed or irritated
12	⓪	①	②	③	④	Pains in heart or chest
13	⓪	①	②	③	④	Feeling afraid in open spaces or on the streets
14	⓪	①	②	③	④	Feeling low in energy or slowed down
15	⓪	①	②	③	④	Thoughts of ending your life
16	⓪	①	②	③	④	Hearing voices that other people do not hear
17	⓪	①	②	③	④	Trembling
18	⓪	①	②	③	④	Feeling that most people cannot be trusted
19	⓪	①	②	③	④	Poor appetite
20	⓪	①	②	③	④	Crying easily
21	⓪	①	②	③	④	Feeling shy or uneasy with the opposite sex
22	⓪	①	②	③	④	Feelings of being trapped or caught
23	⓪	①	②	③	④	Suddenly scared for no reason
24	⓪	①	②	③	④	Temper outbursts that you could not control
25	⓪	①	②	③	④	Feeling afraid to go out of your house alone
26	⓪	①	②	③	④	Blaming yourself for things
27	⓪	①	②	③	④	Pains in lower back
28	⓪	①	②	③	④	Feeling blocked in getting things done
29	⓪	①	②	③	④	Feeling lonely
30	⓪	①	②	③	④	Feeling blue
31	⓪	①	②	③	④	Worrying too much about things
32	⓪	①	②	③	④	Feeling no interest in things
33	⓪	①	②	③	④	Feeling fearful
34	⓪	①	②	③	④	Your feelings being easily hurt
35	⓪	①	②	③	④	Other people being aware of your private thoughts
36	⓪	①	②	③	④	Feeling others do not understand you or are unsympathetic
37	⓪	①	②	③	④	Feeling that people are unfriendly or dislike you

	NOT AT ALL	A LITTLE BIT	MODERATELY	QUITE A BIT	EXTREMELY	HOW MUCH WERE YOU DISTRESSED BY:
38	0	1	2	3	4	Having to do things very slowly to insure correctness
39	0	1	2	3	4	Heart pounding or racing
40	0	1	2	3	4	Nausea or upset stomach
41	0	1	2	3	4	Feeling inferior to others
42	0	1	2	3	4	Soreness of your muscles
43	0	1	2	3	4	Feeling that you are watched or talked about by others
44	0	1	2	3	4	Trouble falling asleep
45	0	1	2	3	4	Having to check and double-check what you do
46	0	1	2	3	4	Difficulty making decisions
47	0	1	2	3	4	Feeling afraid to travel on buses, subways, or trains
48	0	1	2	3	4	Trouble getting your breath
49	0	1	2	3	4	Hot or cold spells
50	0	1	2	3	4	Having to avoid certain things, places, or activities because they frighten you
51	0	1	2	3	4	Your mind going blank
52	0	1	2	3	4	Numbness or tingling in parts of your body
53	0	1	2	3	4	A lump in your throat
54	0	1	2	3	4	Feeling hopeless about the future
55	0	1	2	3	4	Trouble concentrating
56	0	1	2	3	4	Feeling weak in parts of your body
57	0	1	2	3	4	Feeling tense or keyed up
58	0	1	2	3	4	Heavy feelings in your arms or legs
59	0	1	2	3	4	Thoughts of death or dying
60	0	1	2	3	4	Overeating
61	0	1	2	3	4	Feeling uneasy when people are watching or talking about you
62	0	1	2	3	4	Having thoughts that are not your own
63	0	1	2	3	4	Having urges to beat, injure, or harm someone
64	0	1	2	3	4	Awakening in the early morning
65	0	1	2	3	4	Having to repeat the same actions such as touching, counting, or washing
66	0	1	2	3	4	Sleep that is restless or disturbed
67	0	1	2	3	4	Having urges to break or smash things
68	0	1	2	3	4	Having ideas or beliefs that others do not share
69	0	1	2	3	4	Feeling very self-conscious with others
70	0	1	2	3	4	Feeling uneasy in crowds, such as shopping or at a movie
71	0	1	2	3	4	Feeling everything is an effort
72	0	1	2	3	4	Spells of terror or panic
73	0	1	2	3	4	Feeling uncomfortable about eating or drinking in public
74	0	1	2	3	4	Getting into frequent arguments
75	0	1	2	3	4	Feeling nervous when you are left alone
76	0	1	2	3	4	Others not giving you proper credit for your achievements
77	0	1	2	3	4	Feeling lonely even when you are with people
78	0	1	2	3	4	Feeling so restless you couldn't sit still
79	0	1	2	3	4	Feelings of worthlessness
80	0	1	2	3	4	The feeling that something bad is going to happen to you
81	0	1	2	3	4	Shouting or throwing things
82	0	1	2	3	4	Feeling afraid you will faint in public
83	0	1	2	3	4	Feeling that people will take advantage of you if you let them
84	0	1	2	3	4	Having thoughts about sex that bother you a lot
85	0	1	2	3	4	The idea that you should be punished for your sins
86	0	1	2	3	4	Thoughts and images of a frightening nature
87	0	1	2	3	4	The idea that something serious is wrong with your body
88	0	1	2	3	4	Never feeling close to another person
89	0	1	2	3	4	Feelings of guilt
90	0	1	2	3	4	The idea that something is wrong with your mind

NAME:_____
Last First Initial

Age:_____ Date of birth:____/____/____
day mth yr

Sex (Check one): ____ male ____ female

Status (Check one): ____ Married or living with partner
____ Separated
____ Divorced
____ Widowed
____ Single

Work status (Check one):____ Employed
____ Employed part-time ____ Student
____ Unemployed ____ Homemaker
____ Retired ____ Other

What is your present occupation?_____
_____

What is the highest level of education you have attained (Check highest level):

____ No schooling
____ Some elementary school
____ Completed elementary school
____ Some secondary/ high school
____ Completed secondary/ high school
____ Completed trade school
____ Completed community collage
____ Some university
____ Bachelor's degree
____ Master's degree
____ Professional degree or doctorate
____ Other(specify):_____

Age of onset of problem:_____

Duration (How long;years and months):_____

Was there a specific incident that brought on your symptoms of agoraphobia (Check one):
____ Yes ____ No

If yes. What was the incident._____
_____

Were there any changes going on in your life when the symptoms first occurred? (check all applicable changes):

_____ Marriage
_____ Death of a spouse
_____ Death of a close family member
_____ Death of a friend
_____ Foreclosure on a mortgage or loan
_____ Pregnancy
_____ Major change in your health or behaviour
_____ Major change in health or behaviour of a family member or a close friend
_____ Sexual difficulties
_____ Major change in financial difficulties (e.g. alot better or alot worse off)
_____ Gain a new family member (e.g. through birth, adoption, or someone moving in)
_____ Separation from partner
_____ Being fired from work
_____ Divorce
_____ Major change in responsibilities at work (e.g. promotion, demotion)
_____ Retirement from work
_____ Other (specify):_____

Treatment (check all relevant treatments. From whom received):

PSYCHOLOGICAL	Psychiatrist	Psychologist	Family Doctor	Social worker	Other
_ Exposure to feared situation	—	—	—	—	—
_ Exposure to situations feared in imagination	—	—	—	—	—
_ Relaxation training	—	—	—	—	—
_ Self help groups	—	—	—	—	—
_ Self help manual or other reading material	—	—	—	—	—
_ Changing attitude based on an understanding of problems	—	—	—	—	—
_ Changing attitude to self and ability to control problem	—	—	—	—	—
MEDICAL					
_ Medication for panic attacks	—	—	—	—	—
_ Medication for anxiety	—	—	—	—	—
_ Medication for depression	—	—	—	—	—
_ Medication for sleep problems	—	—	—	—	—
_ Other (specify) _____	—	—	—	—	-

Did any of the above treatment received make a difference to your problem:__ Yes __ No

If yes, what was the most successful treatment you received and from whom: _____

_____

If more than one treatment received, rank treatment from most successful to least successful: _____

_____

Appendix P

We are trying to determine how agoraphobics are being treated and what determines G.P. referrals to different health professionals. To obtain information on this issue we would appreciate obtaining your opinions on what you would do presented with each of the following hypothetical case studies. In each case you are to select the answer(s) that you would employ for each of the client. If more than one answer is chosen, please rank the order of your choices from first choice (1) to second choice (2) and so on. Your treatment responses and name will be kept confidential, as all we require from you are the following items: (1) Sex. _Male _Female (2) Year that you qualified to practice independently ____.

CASE 1: Sheila is a 31-year-old homemaker who has been married for 11 years, with two school-age children. She has exhibited the following symptoms within the past two years: severe avoidance (i.e., unable to walk no more than one block away from her house accompanied), frequent panic attacks, and constant episodes of depression. She also complains of marital problems and lack of social support from her family. She has not received treatment prior to her appointment with you.

___1. I would handle the case myself
___2. Refer to a psychiatrist
___3. Refer to a psychologist
___4. Refer to a social worker
___5. Other. Specify_____

CASE 2: Mary is a 31-year-old homemaker who has been married for 11 years, with two school-age children. She has exhibited the following symptoms within the past two years: mild avoidance, infrequent panic attacks, and rare depressive episodes. She appears to have a very stable marriage. Furthermore, her husband and family seem very supportive of her condition. She, too, has not received treatment prior to her appointment with you.

___1. I would handle the case myself
___2. Refer to a psychiatrist
___3. Refer to a psychologist
___4. Refer to a social worker
___5. Other. Specify_____

Please return completed questionnaire in the self-addressed envelope enclosed. Thank you for your cooperation.

Appendix Q

Q1

Demographics of Agoraphobic Population Who Responded to Survey.

Subjects	Age	Sex M=male F=female	Area R=rural U=Urban	Work Stat Unemployed Employed Student Retired	Marital Married Divorce Single Widowed	Educaton SHS HS TS SU UD
01	19	M	R	S	S	HS
02	37	F	U	E	M	TS
03	52	F	U	U	M	SU
04	37	F	U	E	M	TS
05	66	F	U	U	M	HS
06	28	M	U	U	S	HS
07	29	F	U	S	S	HS
08	39	F	R	E	M	SHS
09	18	F	U	S	S	SU
10	43	F	U	E	M	UD
11	17	M	U	S	S	SHS
12	26	M	R	E	S	SU
13	38	F	U	U	S	SHS
14	59	F	U	U	M	HS
15	39	F	U	U	M	SU
16	43	F	R	U	M	SU
17	44	F	R	E	M	TS
18	24	F	U	U	S	SU
19	41	F	R	E	M	TS
20	33	F	R	U	M	HS
21	39	M	R	E	M	HS
22	30	M	U	E	M	TS
23	43	F	U	E	W	TS
24	19	F	U	S	S	TS
25	44	F	U	E	M	TS
26	33	F	U	U	M	TS
27	35	F	U	U	M	SHS
28	23	F	U	E	M	TS
29	21	M	R	U	S	SHS
30	32	F	U	U	M	TS
31	19	M	R	S	S	SHS
32	48	M	U	R	M	SHS
33	38	F	U	U	M	SHS
34	29	M	U	U	D	TS
35	19	F	U	U	S	SU

Note: Educate=Education Obtained
SHS=Some High School
HS=High School
TS=Trade School
SU=Some University
UD=University Degree

Q-2
Individuals Scores on Behavioural Measures of Agoraphobia.

Subjects	Fear Total	Agora-phobia	Mobility Inventory accompany	Mobility Inventory Alone	SCL-90 Phobia
01	46	27	3.32	4.12	3.00
02	36	22	3.32	2.77	0.00
03	77	36	3.64	4.55	0.14
04	41	14	2.38	3.29	0.57
05	41	13	2.16	2.96	1.86
06	44	22	3.60	3.32	2.43
07	66	26	2.41	3.28	3.29
08	88	34	2.76	4.19	1.00
09	53	07	1.58	2.80	1.29
10	21	11	1.56	2.58	0.00
11	66	14	2.88	2.92	1.14
12	57	27	2.96	3.17	2.14
13	74	40	2.10	3.00	3.86
14	26	16	1.96	2.27	1.14
15	48	24	2.96	2.88	2.00
16	81	29	3.46	4.40	0.71
17	53	24	2.04	3.96	1.71
18	68	31	3.27	4.72	3.43
19	75	17	2.87	3.15	1.86
20	91	38	3.04	3.83	1.14
21	30	08	2.00	2.19	1.00
22	39	15	3.70	3.77	2.57
23	86	38	3.57	4.92	3.71
24	36	04	2.23	2.68	1.29
25	65	22	2.57	3.20	0.71
26	65	32	3.26	3.90	3.43
27	74	34	1.39	3.21	3.57
28	16	04	1.28	1.35	0.71
29	49	25	3.88	2.80	3.57
30	93	33	3.00	3.46	2.57
31	35	11	1.52	3.00	0.86
32	04	00	1.16	1.15	0.29
33	92	38	4.32	4.54	3.71
34	44	25	3.10	3.15	2.00
35	5	18	2.2	3.00	0.43

Q-3
Individual Scores on Physiological Indicators of Anxiety.

Subjects	BSQ	SCL90-R Anxiety	Arousal EFMAS	Tension EFMAS	Insecu -rity EFMAS
01	55	2.90	48	31	50
02	42	0.60	46	37	43
03	32	0.30	39	32	50
04	40	1.50	24	22	35
05	58	1.80	40	51	50
06	45	2.30	33	36	46
07	50	2.80	38	38	47
08	75	1.30	56	50	59
09	41	1.30	34	34	58
10	42	1.20	38	44	56
11	45	1.00	36	32	47
12	42	1.90	36	30	50
13	54	2.80	49	44	58
14	23	0.55	27	36	30
15	49	1.60	38	28	58
16	42	0.50	25	26	39
17	58	2.20	40	52	67
18	62	3.20	46	51	63
19	36	2.40	43	31	54
20	58	1.50	50	46	66
21	38	1.40	32	21	36
22	55	2.50	46	47	58
23	84	2.70	51	60	70
24	61	2.30	54	38	65
25	58	1.40	51	51	58
26	64	3.10	45	36	46
27	36	2.50	38	36	54
28	59	2.20	30	21	50
29	73	2.90	46	44	45
30	60	2.60	54	54	56
31	41	0.50	36	27	42
32	46	1.60	37	40	44
33	53	2.90	65	63	71
34	45	1.40	43	35	55
35	43	0.50	40	27	56

Q-4
Individual Scores on Parameters of Panic (i.e., Frequency and Severity).

Subjects	Panic Frequency	Recent Panic Severity	Extreme Panic Severity
01	11	0.15	2.60
02	01	****	****
03	01	1.65	3.15
04	08	0.95	2.05
05	**	****	1.80
06	11	2.45	3.00
07	04	2.95	3.55
08	11	1.55	2.45
09	06	2.20	2.20
10	05	1.25	1.80
11	05	1.15	2.80
12	02	2.30	2.35
13	11	1.70	3.05
14	02	2.20	2.20
15	10	1.35	3.30
16	**	****	****
17	11	2.95	3.80
18	11	1.80	2.85
19	11	1.05	3.20
20	11	2.20	2.70
21	10	1.50	1.50
22	11	1.90	3.30
23	11	3.20	4.00
24	11	2.10	2.90
25	01	1.50	2.35
26	02	1.50	3.50
27	06	2.45	3.15
28	05	2.70	3.20
29	11	2.10	3.00
30	11	3.50	3.90
31	01	0.60	1.25
32	11	2.00	3.45
33	11	3.30	3.05
34	11	2.30	3.15
35	11	1.50	2.90

Note: ****=missing data

Q-5
Individual Scores on Measures of Depression.

Subjects	Physiological	Cognitive
	Beck Depression Inventory	Cognitive Checklist Depression
01	16	21
02	04	07
03	01	08
04	17	00
05	26	28
06	12	05
07	15	15
08	07	21
09	10	13
10	15	21
11	10	24
12	11	14
13	11	17
14	02	00
15	20	10
16	04	15
17	15	14
18	29	34
19	25	14
20	16	19
21	08	09
22	21	34
23	27	42
24	16	30
25	11	14
26	16	12
27	36	36
28	10	07
29	43	28
30	20	42
31	24	38
32	31	14
33	45	51
34	14	26
35	17	22

Q-6
Individual Scores on Cognitive Measures of Anxiety.

Subject	Agoraphobia Cognitions Questionnaire	Panic Attack Questionnaire (cognitive)	Cognitive Checklist (anxiety)	OCD
01	32	2.00	15	1.60
02	33	****	32	0.60
03	31	2.50	07	0.10
04	27	0.33	12	0.40
05	38	****	18	1.60
06	32	3.33	17	0.90
07	34	3.67	14	1.90
08	38	1.67	28	0.70
09	44	3.50	26	0.70
10	24	1.00	19	0.50
11	29	2.00	09	1.50
12	31	2.50	14	0.60
13	24	1.83	20	1.00
14	19	2.67	13	0.30
15	28	2.17	18	1.90
16	39	****	14	1.40
17	46	3.33	28	2.30
18	53	2.33	36	2.20
19	37	2.50	19	1.20
20	40	2.67	20	1.80
21	29	1.83	15	1.50
22	38	2.50	28	2.10
23	56	3.17	36	3.40
24	39	1.50	20	2.20
25	39	1.83	15	0.80
26	43	2.00	33	2.50
27	36	3.33	28	1.80
28	50	3.33	17	0.40
29	54	2.17	08	2.60
30	42	3.83	32	2.90
31	21	0.67	05	1.30
32	42	2.17	21	2.20
33	52	3.50	33	3.90
34	38	2.50	19	1.00
35	36	1.67	18	0.40

Note: OCD = SCL-90-R (Obsessive Compulsive)

Q-7
Individual Scores on Measures of Anger.

Subj	State Anger	Trait Anger	Angry Temp.	Angry Reaction	Anger In	Anger Out	Anger Control	Anger Expression
01	10	16	06	07	21	15	27	63
02	10	34	16	14	16	23	17	56
03	10	20	06	11	17	17	22	56
04	15	24	11	09	13	17	15	45
05	10	13	04	07	20	11	28	59
06	11	25	08	11	18	18	21	57
07	23	21	07	11	22	11	24	57
08	11	19	06	10	14	10	27	51
09	20	26	10	12	18	22	22	62
10	10	17	06	08	17	16	20	53
11	15	20	05	10	17	16	19	52
12	10	16	04	09	17	14	29	60
13	10	13	05	05	15	17	20	52
14	10	15	06	07	08	12	27	47
15	31	19	04	11	28	13	27	68
16	10	17	05	08	18	17	26	61
17	10	20	06	11	14	15	21	50
18	23	31	12	14	26	21	15	62
19	10	35	13	15	15	22	10	47
20	10	21	05	13	16	13	25	54
21	10	14	05	07	18	11	25	54
22	15	27	10	12	23	16	19	58
23	24	25	05	14	23	20	18	61
24	24	10	16	04	21	14	18	53
25	10	17	05	09	13	14	16	43
26	26	23	08	08	24	13	21	58
27	10	23	08	13	23	13	29	65
28	10	18	06	08	14	13	18	45
29	38	33	15	12	22	27	21	70
30	12	13	05	06	13	14	17	44
31	12	14	05	07	14	12	23	49
32	10	25	08	13	22	17	23	62
33	35	27	11	12	27	16	22	65
34	11	21	08	08	17	14	19	50
35	11	26	10	11	29	21	18	68

Q-8
Individual Scores on SCL-90-R subscales.

Subj	SOM	OCD	INT	DEP	ANX	HOS	PHO	PAR	PSY	TOT
01	1.33	1.60	2.00	2.08	2.90	0.67	3.00	0.83	1.00	0.23
02	0.08	0.60	0.67	0.31	0.60	1.17	0.00	0.67	0.30	0.12
03	0.17	0.10	0.33	0.31	0.30	0.33	0.14	0.50	0.10	0.05
04	1.17	0.40	0.44	1.23	1.50	1.17	0.57	0.17	1.20	0.23
05	1.67	1.60	1.89	2.46	1.80	1.67	1.86	1.67	1.60	0.39
06	0.50	0.90	1.22	1.77	2.30	0.83	2.43	1.17	1.80	0.32
07	2.33	1.90	2.89	2.08	2.80	1.50	3.29	2.00	2.40	0.49
08	0.83	0.70	0.89	1.00	1.30	0.17	1.00	0.17	0.60	0.12
09	0.33	0.70	1.00	1.69	1.30	1.67	1.29	0.50	1.00	0.22
10	0.33	0.50	0.67	1.46	1.20	0.67	0.00	1.00	0.30	0.15
11	1.08	1.50	1.33	1.08	1.00	1.33	1.14	1.50	1.30	0.23
12	0.58	0.60	1.56	1.23	1.90	0.67	2.14	0.17	0.90	0.15
13	1.17	1.00	0.67	1.62	2.80	0.83	3.86	0.50	0.40	0.30
14	0.83	0.30	0.44	0.54	0.55	0.00	1.14	0.33	0.30	0.06
15	1.00	1.90	1.56	2.15	1.60	1.00	2.00	0.33	1.20	0.30
16	0.50	1.40	0.89	1.08	0.50	0.33	0.71	0.67	0.20	0.13
17	2.17	2.30	1.33	1.23	2.20	0.83	1.71	0.17	0.50	0.30
18	2.17	2.20	2.11	2.92	3.20	1.83	3.43	1.67	1.10	0.38
19	1.00	1.20	1.56	2.15	2.40	2.17	1.86	1.17	0.90	0.22
20	1.67	1.80	0.89	1.31	1.50	0.33	1.14	0.67	1.10	0.22
21	0.83	1.50	1.11	0.69	1.40	0.50	1.00	0.67	0.80	0.11
22	1.67	2.10	2.67	2.31	2.50	1.67	2.57	2.00	1.60	0.38
23	3.00	3.40	3.00	2.77	2.70	1.33	3.71	2.17	2.60	0.52
24	0.92	2.20	1.56	2.15	2.30	1.17	1.29	1.17	2.40	0.33
25	2.08	0.80	0.33	0.92	1.40	0.33	0.71	0.00	0.20	0.15
26	2.42	2.50	1.44	2.38	3.10	1.00	3.43	1.50	2.40	0.39
27	2.00	1.80	2.33	2.69	2.50	0.33	3.57	2.67	3.00	0.40
28	1.00	0.40	0.44	1.08	2.20	0.17	0.71	0.33	1.00	0.16
29	2.75	2.60	2.44	3.23	2.90	1.83	3.57	1.50	1.70	0.37
30	3.33	2.90	2.89	2.54	2.60	0.50	2.57	1.50	2.20	0.41
31	0.25	1.30	2.00	2.31	0.50	0.00	0.86	0.00	1.10	0.15
32	2.17	2.20	0.56	2.38	1.60	0.83	0.29	1.17	1.50	0.26
33	2.83	3.90	3.33	3.62	2.90	3.50	3.71	3.17	3.60	0.62
34	1.17	1.00	1.33	1.15	1.40	0.17	2.00	1.00	1.30	0.31
35	0.25	0.40	0.33	0.62	0.50	0.33	0.43	0.00	0.10	0.07

Note: SOM = Somatization
OCD = Obsessive Compulsive
INT = Interpersonal Sensitivity
DEP = Depression
ANX = Anxiety
HOS = Hostility
PHO = Phobia
PAR = Paranoia
PSY = Psychoticism
TOT = Total Psychopathology