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**AGORAPHOBIA: DEVELOPMENTAL ANTECEDENTS
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AGORAPHOBIA: DEVELOPMENTAL ANTECEDENTS AND DEFENSE PREFERENCE

By

Gary H. Paape

A DISSERTATION

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AGORAPHOBIA: DEVELOPMENTAL ANTECEDENTS AND DEFENSE PREFERENCE

This study investigated two sets of hypotheses pertinent to personological characteristics associated with panic disorder and agoraphobia. First, it was hypothesized that Bowlby's (1973b) three patterns in parenting which engender anxiety surrounding attachment characterize the developmental histories of persons suffering panic disorder. A second set of hypotheses contended that persons diagnosed with panic disorder without agoraphobia demonstrate a greater preference for the defense of repression and a lesser preference for the defense of projection than do persons diagnosed with panic disorder with agoraphobia.

To test the hypotheses, forty persons who were enrolled in hospital-affiliated panic disorder support groups and who also fulfilled the criteria for panic disorder were compared with a Nonclinical Control group (40 members of Parent-Teachers Association groups) and a clinical control group (20 members of an Alcoholism Support group) on the Anxious Attachment Inventory (AAI) and the Defense Mechanisms Inventory (DMI).

Statistically significant differences were evidenced between the Panic Disorder and Nonclinical Control groups across the AAI scales. This supported the developmental hypothesis. Whereas the Panic Disorder group scored lower than the Alcohol Support group across the scales of the AAI, the group failed to qualify as a clinical control due to an inordinately high report of symptoms of panic disorder and agoraphobia.

Whereas the differences between the groups on the DMI scales for repression and projection failed to attain statistical significance, the PRO scale was the only DMI scale to be consistently correlated with self-reported symptoms of agoraphobia. A post hoc analysis found that persons suffering panic disorder or agoraphobia were least likely to employ turning against others as a defense.

The findings of the study are congruent with current theories which suggest that a susceptibility to panic disorder or agoraphobia is

effected by pressures to resonate with the parent's projections and the failure of the parent to foster competent coping skills. The agoraphobic person's family seemingly promoted the use of defenses which served to keep conflict out of the family but which also undermined the individual's capacities for assertiveness and autonomy.

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Agoraphobia: Developmental Antecedents and Defense Preference

During the past 15 years, panic disorder and agoraphobia have become much-studied topics in mental health research. The impact of this increased interest has been most evident in a revision of pre-existing theory that has placed panic attacks at the core of the agoraphobic syndrome and has subsumed agoraphobia under the diagnosis of panic disorder. Within this formulation, the most popular etiological theory postulates that panic attacks are caused by a physiologically endogenous condition and that agoraphobic avoidance stems from the anxious anticipation of experiencing an attack under circumstances which might entail danger or embarrassment.

Whereas this conceptualization has been associated with improvements in the treatment of both panic anxiety and phobic avoidance, it has shortcomings as an etiological theory. It ignores possible psychogenic causes of panic anxiety and overlooks the role that unconscious defenses play in the formation of agoraphobic symptoms. A prime example of this shortcoming is evidenced in the failure of the prevailing orientation to incorporate a rather robust finding that the onset of panic attacks is typically preceded by circumstances which threaten or are perceived as threatening a relationship in which the person has formed a substantial attachment.

That this relationship has been ignored within the most popular etiological theory of agoraphobia might be accounted for, in part, by the lack of comprehensive research into developmental underpinnings of panic disorder and agoraphobia. In the panic disorder literature, investigators have simply tended to focus on the link between the undermining of individuation and a general susceptibility toward experiencing anxiety.

A noteworthy exception to this trend has been the work of Bowlby (1973b), who advanced a more varied developmental schema that described patterns in parenting behaviors which seem to undermine trust in the stability of attachment. According to Bowlby (1973b) it is this

"anxious attachment" that engenders a psychological susceptibility to panic anxiety. Bowlby's schema has yet to be put to an empirical test and, therefore, has not been integrated into the mainstream etiological theories of panic disorder.

Researchers have paid even less attention to the role that defense mechanisms play in the formation of agoraphobic symptoms. Whereas psychoanalytic theory has long linked the defenses of displacement, repression, and projection to the formation of phobic symptoms, only one research study in the agoraphobia literature has validated this theory. In addition to the need for replication of that study, further research into defense preference would help expand understanding of the broader range of interpersonal and psychological issues encountered by agoraphobic persons.

Whereas an elucidation of developmental conditions and defense preferences associated with panic disorder may not have a substantial impact upon current pharmacological and behavioral treatment interventions, research findings in these areas may effectively challenge the simplistic position of leaving panic anxiety to a biochemical anomaly and of viewing agoraphobia as solely a reactive condition. A review of the research literature on agoraphobia and panic disorder illuminates the deficiencies in current theory and points to the hypotheses of the present study.

CHAPTER I

The Agoraphobic Syndrome

Historical Background

The term "phobia" derives from the legend of Phobus, son of the Greek god of war, Ares. In Greek mythology, Ares was regularly accompanied on to the battlefield by his sons Deimus and Phobus: Terror and Fear (Grimal, 1981). Mindful of this legend, Greek soldiers of antiquity painted likenesses of Phobus on masks and on armor to frighten enemies. "Phobos" or "phobia," subsequently came to mean fear, panic, or flight (Webster's New Collegiate Dictionary, 1979).

It appears that the agoraphobic syndrome has been recognized by "health professionals" since antiquity. The concept has been traced back to Hippocrates who, during the fourth or fifth century B.C., reported the case of an individual whose experience of fear while in public places inhibited him from leaving his home (Thorpe and Burns, 1983). Thorpe and Burns (1983) cited accounts from the seventeenth, eighteenth, and early nineteenth centuries that similarly described individuals whose fear of death, dizziness, or illness--while in public places--led them to become increasingly housebound.

The term "agoraphobia" was coined by Westphal, a German psychiatrist who, in 1871, published a monograph on the subject. The prefix that he selected--"agora"--is derived from the Greek word for marketplace or place of assembly (Webster's New Collegiate Dictionary, 1979). Westphal's (1871) description of the condition and the case examples he cited (described in Mathews, Gelder, & Johnston, 1981; Tearnan, Telch, & Keefe, 1984; Thorpe & Burns, 1983), were consonant with the contemporary conceptualization. The patients whom Westphal (1871) described were unable to walk in certain public places without suffering palpitations, trembling, apprehensions, and fears of impending insanity or death. Trusted companions, inanimate objects invested with superstitions, and alcohol were called upon to assist in coping with the

dreaded encounters. Westphal (1871) reported that the patients' phobic avoidance tended to generalize steadily.

During the past century, proponents of various theoretical orientations have employed a number of terms to label the agoraphobic syndrome. A sampling of the labels includes: anxiety hysteria (Freud, 1933/1964), locomotor anxiety (Abraham, 1913/1953), street fear (Miller, 1953), phobic-anxiety-depersonalization syndrome (Roth, 1959), anxiety syndrome (Klein, 1964), and non-specific security fears (Snaith, 1968).

The Diagnostic Statistical Manuals of the American Psychiatric Association (DSM-I: APA, 1952; DSM-II: APA, 1968; DSM-II: APA, 1980; DSM-III-R: APA, 1987) have referred to agoraphobia with different diagnostic labels. The concept has, progressively, been categorized under diagnoses of anxiety neurosis, phobic neurosis, agoraphobia with and without panic, and most recently, panic disorder with agoraphobia. Following usual practice in the research literature, panic disorder with agoraphobia will be referred to as agoraphobia.

Description of the Syndrome

The role of panic attacks.

The agoraphobic syndrome has become increasingly well-defined. Agoraphobia is no longer conceptualized as the fear of public places but is regarded as a steadily generalizing fear of being in any situation where an easy retreat to safe territory is not possible (Chambless, 1982). This dread of constraint has been hypothesized to be caused by fear of the recurrence of panic attacks. A panic attack is experienced as a sudden, apparently unprovoked episode of extreme fear that is accompanied by somatic symptoms such as tachycardia, faintness, hyperventilation, sweating, incontinence, nausea, or tremor. The panic typically lasts only a few minutes but may persist for several hours (Thyer, 1986).

That agoraphobia may be conceptualized as a pattern of response to panic disorder was noted by investigators long before the contemporary

rediscovery of this relationship. In the early years of this century, Morton Prince (1912) observed that the essence of agoraphobia is the fear of suddenly being rendered helpless by an attack of panic.

Similarly, Freud (1895/1962) said of agoraphobia, that:

... we often find the recollection of a state of panic; and what the patient actually fears is a repetition of such an attack under those special conditions in which he believes he cannot escape it (p. 136).

In recent years, the temporal relationship between panic and agoraphobia has been at the center of theories advanced by researchers who are experienced in the treatment of agoraphobia (Goldstein & Chambless, 1978; Mathews et al., 1981; Mendel & Klein, 1969; Ost & Hugdahl, 1983; D. Sheehan & K. Sheehan, 1982b). The most convincing evidence of this relationship has, however, emerged from the results of a number of studies that have utilized diagnostic interview schedules and questionnaires in the evaluation of agoraphobic patients.

Three studies have directly evaluated this relationship. In a study of 60 consecutive patients referred to an anxiety disorders clinic, interview data revealed that, of 23 patients diagnosed with agoraphobia, each had experienced panic attacks prior to the onset of agoraphobic avoidance (DiNardo, O'Brien, Barlow, Waddell, & Blanchard, 1983). Questionnaire and interview data likewise demonstrated that each of 60 consecutive referrals to an agoraphobia clinic had experienced panic attacks prior to the onset of situational avoidance (Franklin, 1987). In a similar study, 12 of 13 agoraphobic patients reported the prodromal experience of panic attacks (Garvey & Tuason, 1984).

Whereas these studies have demonstrated a strong relationship between panic states and agoraphobia, the comparatively few cases wherein the presence of panic could not be demonstrated, raise the question of how phobic experiences began for these individuals. Thyer,

Parrish, Curtis, Cameron, and Nesse (1985) observed that 20 of their agoraphobic patients who apparently did not suffer panic, suffered some physical ailment such as epilepsy or spastic colitis. The episodic experience of the symptoms of these disorders were regarded as having served as the functional equivalent of a panic attack in producing agoraphobic-like avoidance behavior. Similarly, Donald Klein (cited in Spitzer & Williams, 1986) observed that agoraphobia without panic attacks is regularly associated with spells of autonomic symptoms, primarily light-headedness and gastrointestinal distress. Given that there is but a relatively small proportion of agoraphobic persons who fail to demonstrate panic experiences, the relationship to agoraphobia has been granted "official sanction" via DSM-III-R (APA, 1987), wherein agoraphobia has been subsumed under the classification of Panic Disorder.

Course of the Disorder

Age at onset.

Agoraphobia most often begins between the ages of 18 and 40. Studies that have addressed age at onset have reported mean ages ranging from 19.6 years (L. Solyom, Beck, C. Solyom, & Hugel, 1974) to 37 years (Mendel & Klein, 1969). Six of these studies were based on data gathered from outpatient samples (Bland & Hallam, 1981; Buglass, Clarke, Henderson, Kreitman, & Presley, 1977; Marks & Gelder, 1966; McDonald et al., 1979; Shafar, 1976; L. Solyom et al., 1974). Large-scale surveys of British agoraphobia organizations provided the data in another three studies (Berg, Marks, McGuire, & Lipsedge, 1974; Marks & Herst, 1970; Thorpe & Burns, 1983). It seems likely that the wide range of mean ages reported across the studies is due to varying demographic characteristics of the samples.

One substantive issue has emerged in the literature on age at onset. It is not clear that age at onset is distributed uniformly. Bimodal distributions were found in two studies (Marks & Gelder, 1966;

Mendel & Klein, 1969), with peak ages at approximately 20 years of age and the late 30's. Mendel and Klein (1969) suggested that, in cases of late onset, hormonal changes that occur around birth, menopause, and gynecological surgery were likely to have been etiologic factors.

Epidemiology

The epidemiological study most frequently cited in the agoraphobia literature was based on interview data from a probability sample of households in Burlington, Vermont (Agras, Sylvester, & Oliveau, 1969). In that study, the prevalence of phobia was estimated at 76.9 per 1000 of the population. Six per 1000 were diagnosed as agoraphobic. Of the phobic patients receiving psychiatric treatment (2.2 per 1000), 50 percent suffered agoraphobia. Chambless (1982) suggested that the rate of prevalence for agoraphobia cited by Agras et al. (1969), was likely to have been an underestimate as persons suffering the disorder tend to be very reluctant to reveal that they are phobic.

Researchers have also examined the population of agoraphobic persons for demographic characteristics that might distinguish them from the general population. Studies have failed to find differences between agoraphobic persons and controls across such variables as intelligence, education, occupation, and marital status (Marks & Herst, 1970; L. Solyom et al., 1974; Thorpe & Burns, 1983).

The disproportionate number of women.

A most extraordinary finding in regard to demographic characteristics associated with agoraphobia has been what seems to be an over-representation of women. In a recent National Institute of Mental Health epidemiological study which surveyed three U.S. cities (cited in Zitrin, 1986), 70 to 81 percent of persons diagnosed as suffering agoraphobia were women. These data are representative of the sex ratios that have typically been reported in the literature. Thorpe and Burns (1983) tabulated sex ratio data from 10 studies and reported that the percentage of females in the samples of agoraphobic persons ranged from

63 to 90 percent.

Much speculation has been offered but few studies have addressed possible causes for the unusually high proportion of women in the agoraphobia population. Differences between the social roles of males and females have been cited as central factors. Fodor (1978) argued that the stereotyping of women into roles defined by helplessness and dependency leave them relatively more vulnerable to the development of phobias. This position received some support in a finding that both male and female agoraphobic outpatients scored lower than a normative sample on sex-role inventory measures of masculinity (Chambless & Morgan, 1986).

Medically-oriented researchers have suggested that biological factors play an important role in the disparate sex ratio. Zitrin, Klein, and Woerner (1978) pointed to the role of endocrinological disorders--such as estrogen fluctuation--in susceptibility to panic attacks. In a review article on the origins of phobia, Marks (1970) argued that men are less susceptible to panic attacks insofar as testosterone brings about a more aggressive approach to feared situations. That there exists an inverse relationship between aggression and panic attacks is not, however, clear. Other researchers have noted that men who suffer panic attacks most often fear that they will lose control over aggressive impulses (Chambless, 1982; Hafner, 1979).

Whereas it is apparent that a disproportionate number of women seek treatment for agoraphobia, it seems likely that a large percentage of the agoraphobic men who participated in the surveys cited above, went undiagnosed. Mullaney and Trippett (1979) contended that a large percentage of male agoraphobics are diagnosed as alcoholic. This contention was based on a study which found that one-third of 102 alcoholic patients admitted to an alcoholism treatment unit--the large majority of whom were male--could have also been diagnosed as suffering

disabling agoraphobia or social phobia. The extent to which alcoholism may mask panic disorder, however, requires further study.

Differential Diagnosis

In spite of the clarity with which the panic-avoidance syndrome tends to be presented by agoraphobic patients, a number of physical disorders sufficiently resemble panic disorder to make differential diagnosis an important issue. In a study of 650 patients referred for psychiatric treatment, Hall (1980) found that, for 10 percent of the sample, primary medical conditions were responsible for symptomatology that had been diagnosed as a psychiatric disorder. The third most common psychiatric diagnosis given to these misdiagnosed, medically ill patients was anxiety disorder. The disorders most often mistaken for anxiety were caffeinism, hypocalcemia, hypoglycemia, thyroid disorder, and medication side-effects.

Within the past six years, several review articles have described physical symptoms that produce panic-like symptoms (Barlow & Cerny, 1988; Mackenzie & Popkin, 1983; E. McCue & P. McCue, 1984). The following disorders--which were described by Barlow and Cerny (1988) as requiring differential diagnosis--are representative of those described in the other reviews: hypoglycemia, hypothyroidism, hypoparathyroidism, Cushing Syndrome, pheochromocytoma, temporal-lobe epilepsy, caffeine intoxication, audiovestibular system disturbance, and mitral valve prolapse. After reviewing the anxiety-like symptoms of these disorders, Barlow and Cerny (1988) cautioned that any number of these conditions can also co-exist with panic disorder. It appears that this may especially be the case for mitral valve prolapse. Patients often misattribute the sensation of prolapse to a life-threatening heart condition and, therefore, chronically experience intense states of anxiety (Barlow & Cerny, 1988).

Etiological Theories

Biological Theories

During the past decade, biological theories of agoraphobia have had a major impact on the diagnostic conceptualization and treatment of the disorder. Whereas earlier biological theories had attributed the agoraphobic person's susceptibility toward experiencing intense anxiety to a relatively low threshold for autonomic arousal (Lader & Mathews, 1970), current investigators have presented what is, fundamentally, a reconceptualization of anxiety. These researchers have postulated that panic anxiety is a biological dysfunction that can be distinguished from general anxiety by its "endogenous" nature. Panic anxiety is considered by these investigators to be a condition which is not, in most cases, amenable to psychological intervention.

Two researchers--Donald Klein and David Sheehan--have been the most prominent proponents of this change. Rather than present a review of the voluminous research that has attempted to identify biological components of anxiety disorders, the positions of these two researchers who have so captured the imagination of contemporary psychiatry, will be summarized.

The distinction between panic anxiety and anxiety in its more general form, was first advanced by Klein (1964). During the 1960's, Klein and his colleagues noted that tricyclic antidepressants had a therapeutic effect for patients suffering recurrent, attack-like anxiety but was not helpful for persons experiencing more general symptoms of anxiety (Klein, 1964; Klein & Fink, 1962; Mendel & Klein, 1969). A host of studies have produced similar findings (Beaumont, 1977; Klein, 1967; Klein, Zitrin, & Woerner, 1977; McNair & Kahn, 1981; D. Sheehan, Ballanger, & Jacobsen, 1980).

Based on this differentiated effect of the antidepressants, Klein (1964) formulated a theory of pathological anxiety that made a qualitative distinction between what he termed "panic anxiety" and

chronic or anticipatory anxiety. From Klein's (1981) perspective, panic attacks often occur spontaneously and, in light of the efficacy of antidepressant medication, should be regarded as the outcome of a biochemical dysfunction. Chronic anxiety, by contrast, has been regarded as being triggered by the anticipation of feared situations (Klein, 1981).

Klein (1964) proposed that the biological dysfunction which produces panic attacks involves a dysregulation of the innate mechanism that produces a separation response. Klein (1981) based this hypothesis on observations that the help-seeking, dependent behavior of agoraphobic persons is reminiscent of the reactions of young animals when separated from their mothers and, on the finding that the majority of female agoraphobic patients report a history of childhood separation disorder (Gittelman & Klein, 1985). Klein (1981) suggested that separation anxiety is mediated by an unlearned "alarm mechanism" consisting of protest and despair components (as formulated by Bowlby, 1973a). Within this conceptualization, the protest component of the alarm mechanism includes the experience of panic and the despair component includes the experience of depression. Klein (1981) speculated that antidepressants are effective in regulating panic attacks insofar as they raise the threshold for the triggering of the alarm mechanism.

Whereas Klein (1981) proposed a distinct biological mechanism for panic disorder, D. Sheehan (1982) has argued for a biological model of anxiety disorders without identifying a specific physiological substrate. Contending that the DSM-III (APA, 1980) diagnostic categories contain so much overlap as to render them invalid, D. Sheehan and K. Sheehan (1982a; 1982b) argued that anxiety disorders should be reclassified according to the presence or absence of spontaneous attacks or, in other words, according to endogenous versus exogenous anxiety.

Despite their having acknowledged the impact of stressors upon the onset of the disorder, these researchers asserted that panic attacks

have a purely metabolic cause (D. Sheehan & K. Sheehan, 1983). Agoraphobic avoidance is, from this perspective, viewed as a reaction to anticipating the onset of a panic attack and is thought to progress according to the severity and frequency with which panic attacks are experienced (D. Sheehan, 1982). It is not surprising, then, that psychotherapy is regarded by D. Sheehan as being of little value in the treatment of panic anxiety (D. Sheehan et al., 1980).

Five lines of evidence have been used to support the current biological theories: drug specificity, panic induction or challenge tests, familial concordance of panic disorder, the spontaneity of panic attacks, and childhood history of separation disorder. Despite a large volume of research on these topics, investigators who reviewed the research have concluded that the findings tend to be equivocal (Margraf, Ehlers, & Roth, 1986a; Telch, Tearnan, & Taylor, 1983).

Drug specificity.

The argument that the differentiated effect of antidepressant medications upon panic versus anticipatory anxiety unmasked the endogenous nature of panic anxiety, has not gone unchallenged. In a critical review of the literature on antidepressant medication in the treatment of agoraphobia, Telch et al. (1983)--investigators from the Department of Psychiatry at the Stanford Medical School--questioned the validity of the contention that these compounds have a therapeutic effect which is specific to panic. They asserted that studies which have found effects were flawed by two methodological shortcomings: sole reliance on paper and pencil outcome indices and the confounding of pharmacological effects of the drug with exposure to feared situations.

Advancements in the development of medications have also weakened the specificity position. During the past decade, two benzodiazepines--alprazolam (Xanax) and clonazepam--have likewise been found to be effective in the treatment of panic anxiety (Hyman & Arana, 1987).

Challenge studies.

A second argument for the biological model stems from a series of studies which found that infusions of sodium lactate trigger panic attacks in 65 to 100 percent of panic disorder patients but fail to induce panic in controls (Gorman et al., 1981; Liebowitz et al., 1984; Liebowitz et al., 1985; Pitts & McClure, 1967). The conclusion drawn in the reports of these studies is that the differential effect of infusing lactate indicates a biological susceptibility to panic disorder. Researchers who possess a knowledge of neuroanatomical function have suggested that this susceptibility may stem from a dysfunction of the locus ceruleus (Redmond, 1985; Shader, 1985).

The validity of citing lactate induction of panic as evidence for a biological substrate has, however, been seriously questioned. Experiments that have included measurements of psychological expectancy (Ackerman & Sacher, 1974; Margraf, Ehlers, & Roth, 1986b; Van Der Molen, Van Den Hout, Vroemen, Lousberg, & Greiz, 1986) have determined that lactate infusion serves as a psychological stressor for agoraphobic persons insofar as they have been conditioned to over-react to altered body sensations. The same criticism has been applied to the use of carbon dioxide inhalation, a challenge test which has been proposed as an alternative to lactate infusion (Van Den Hout & Greiz, 1982).

Familial concordance for panic disorder.

What is perhaps the strongest evidence for the biological theory of panic disorder stems from the outcome of studies that have investigated rates of familial concordance for the disorders. The majority of this work has been carried out within a series of studies by Crowe, Noyes, and colleagues (Anderson, Noyes, & Crowe, 1984; Crowe, Noyes, Pauls, & Slymen, 1983; Crowe, Pauls, Slymen, & Noyes, 1980; Harris, Noyes, Crowe, & Chaudhry, 1983; Noyes, Crowe, Harris, Hamra, McChesney, & Chaudhry, 1986).

The findings of the final study in this series (Noyes et al., 1986)

are representative of the types and proportions of disorders that were observed among families of agoraphobic and panic disorder patients. In this most recent study, all available relatives of 40 agoraphobic patients, 40 patients who experienced panic disorder without agoraphobic avoidance, and 20 nonanxious controls, were interviewed and administered a series of psychiatric symptom inventories. The results indicated that the morbidity risk for panic disorder was increased among the relatives of agoraphobic patients (8.3%) and among the relatives of patients diagnosed with panic disorder (17.3%). The morbidity risk for agoraphobia was also elevated among the relatives of agoraphobic patients (11.6%) but not for the relatives of panic disorder patients (1.9%). Male relatives of the agoraphobic patients were found to be at a higher risk for alcohol disorders (30.8%). Probands and relatives diagnosed with agoraphobia reported an earlier onset of illness, more persistent and disabling symptoms, more frequent complications, and a less favorable outcome than did probands and relatives diagnosed with panic disorder. From these findings, the authors concluded that panic disorder breeds true and that agoraphobia is simply a more severe variant of panic disorder.

Whereas these findings are not inconsistent with the frequencies of agoraphobia and panic disorder that one might expect to find in the presence of a genetic factor (Noyes et al., 1986), proband studies cannot provide conclusive evidence for an inherited condition. These studies do, however, indicate that a substantial proportion of persons who suffer agoraphobia tend to be raised in environments where males are often-times alcoholic and families are characterized by anxiety.

The spontaneity of panic attacks.

The weakest argument for the biological theories is the premise which is at the center of D. Sheehan's (1984) conceptualization: that panic attacks occur spontaneously, without precipitants. Essentially, this hypothesis is premised upon the observation that people seeking

treatment for panic disorder are often-times unable to identify precipitants to the disorder. This difficulty has prompted some researchers (Marks, 1970; Ost & Hugdahl, 1983) to regard the delineation of precursing stressors or precipitants as a moot issue.

A number of studies have, however, been successful in this pursuit. Studies which have employed systematic questioning or in which some interview rapport had been established have found that approximately 80 percent of agoraphobic persons can describe a stressor which occurred in association with their first panic attack (Barlow & O'Brien, 1984; Bowen & Kohout, 1979; Buglass et al., 1977; Doctor, 1982; Mathews et al., 1981; Snaith, 1968; L. Solyom et al., 1974).

Perhaps the earliest study to have established precipitants was that of Roth (1959). Out of a sample of 135 persons who suffered agoraphobia, Roth (1959) found that, in 83 percent of the cases, onset of the disorder was preceded by circumstances of a painful, threatening, or disastrous nature (which was, in the majority of cases, a bereavement). In another 13 percent of his cases, the disorder began after pregnancy or childbirth. Roth (1959) noted that the incidence of stressors in the group of agoraphobic patients was significantly greater than that found in a control group of 50 patients with mixed neurotic diagnoses. Before extrapolating these findings to agoraphobic persons in general, it should be noted that Roth (1959) described his sample as having an unexpectedly high proportion of cases wherein the disorder first occurred after age 45.

A sample which was, demographically, more representative of the agoraphobic population, was interviewed by Barlow and O'Brien (1984). Eighty-one percent of a group of 58 persons diagnosed with agoraphobia were able to identify one or more stressful life event that was temporarily associated with the onset of panic attacks. About one-half of these involved an interpersonal conflict or a bereavement. Another 40 percent involved physiological reactions to birth, hysterectomy, or a

drug reaction. The authors suggested that the findings add support to the conclusion that psychological and physiological factors are involved in the etiology of panic anxiety.

The findings that interpersonal conflict and bereavement are associated with the onset of panic have been corroborated by other researchers. Bowen and Kohout (1979) found that 76 percent of those agoraphobic persons who had identified an event associated with the onset of panic attacks reported having experienced a rejection or loss. Other researchers (Goldstein & Chambless, 1978; Hafner, 1979) have offered anecdotal support for a temporal association between onset of initial panic and exacerbation of interpersonal difficulties with or the loss of an intimate other.

Clinical observations have also linked substance abuse to the onset of panic attacks. Use of marijuana and of cocaine have been linked to the triggering of repetitive panic attacks (Moran, 1986; Rosenbaum, 1986). In an experimental study of the anxiogenic effects of caffeine upon panic disorder patients, Charney, Henninger, and Jatlow (1985) found that 15 of 21 panic disorder patients experienced panic symptoms after administrations of 10 milligram dosages of caffeine. No such impact was noted for subjects in a healthy control group.

Patterns across these findings suggest that bereavement, interpersonal conflict, and physiological events (specifically, the effects of drug abuse and hormonal changes) are stressors that influence the onset of panic. On the other hand, the lack of comparison groups in these studies are cause for some caution in interpretation. In the only recent study to have employed a control group, Roy-Byrne, Geraci, and Uhde (1986) failed to find significant differences between a group of 44 patients suffering panic disorder and a matched group of healthy controls on both number and type of stressful life events. They did, however, find that the panic disorder patients reported greater subjective distress to the stressors. It would appear, then, that

moderating variables such as cognitive patterns, personality characteristics, and social support must be given equal consideration when making interpretations about the impact of stressful life events upon mental health.

Separation anxiety.

A finding cited by Klein (1981) in support of his theory, is that approximately one-half of female agoraphobic patients report a history of childhood separation anxiety (reported in Gittelman & Klein, 1985). Whereas it seems likely that the interviews employed by these researchers were able to elicit important information about childhood attachment anxiety, it is unclear whether the anxiety experienced was reflective of a syndrome caused by a physiological disorder.

One study attempted to replicate the finding reported by Gittelman and Klein (1985). Thyer, Nesse, Cameron, and Curtis (1985) attempted to test the separation anxiety hypothesis by administering a questionnaire to groups of 44 agoraphobic and 83 simple phobic patients. The questionnaire consisted of 14 items that described various situations wherein the person might have experienced anxiety during childhood. Results indicated that the agoraphobic patients could not be distinguished from the simple phobics in regard to childhood anxiety. The authors concluded that better evidence is needed before the separation anxiety hypothesis of agoraphobia is accepted.

The finding of Thyer, Nesse, et al. (1985) cannot, however, be considered a valid test of Klein's (1981) theory. In examining incidents of anxiety experienced during childhood, Thyer, Nesse, et al. (1985) did not focus specifically on anxiety surrounding separation or, put another way, anxiety surrounding security of attachment. It appears, therefore, that the lack of a finding points only to a similarity in tendencies toward anxiousness.

Conclusions.

Whereas the position that there is some type of heritable,

biological substrate for panic disorder has gained acceptance in the psychiatric literature, the evidence for this position is clearly equivocal. At best, the findings of the challenge studies and of the medication specificity studies point to a sensitivity toward bodily tension and to the usefulness of sedating medication in dampening that tension. Similarly, whereas proband studies may have yielded results which are not inconsistent with a genetic model, they more readily point to an observation of developmental relevance: the families of agoraphobic persons tend to have been marked by anxiety and alcoholism. Findings that panic disorder is most often preceded by circumstances involving loss or interpersonal conflict mesh well with the finding that agoraphobic persons tended to experience anxiety surrounding security of attachment during childhood. How the sensitivity to bodily tension, the developmental conditions, and interpersonal precipitants engender panic attacks and agoraphobic avoidance has been addressed by psychological theories of agoraphobia.

Psychological Theories

From the psychological viewpoint, perhaps the most interesting observations that have been used in support of the biological theories are those which pertain to childhood separation anxiety and to the common precipitants of panic disorder. Whereas retrospective, developmental studies of agoraphobic persons have not directly addressed factors which undermine security surrounding attachment, several prominent psychological theories of agoraphobia have cited a relationship between susceptibility to separation anxiety and the interpersonal nature of the common precipitants.

The Interactive Model of Goldstein and Chambless.

Alan Goldstein and Diane Chambless were among the first researchers to present a comprehensive etiological model for agoraphobia. Their "Interactive Model" (Goldstein & Chambless, 1978) has three basic components: (a) predisposing personological and developmental factors,

(b) onset variables, and (c) cognitive factors that perpetuate avoidance. Goldstein and Chambless (1978) emphasized that, what mental health professionals generally accept as agoraphobia, is only the tip of the iceberg. Their model asserts that most agoraphobic persons must also contend with problems such as generalized anxiety, depression, interpersonal difficulties, and characterological disorders. Accordingly, they contended that "these attendant difficulties both predispose to the development of agoraphobia and interact with agoraphobic symptoms" (Goldstein, 1982, p. 186).

According to Goldstein and Chambless (1978), the preagoraphobic person becomes susceptible to experiencing bouts of anxiety insofar as he or she typically employs two maladaptive techniques of dealing with stress. First, he or she tends to mislabel every state of arousal--be it tension, anger, sadness, happiness, or sexuality-- as anxiety or fear. Second, the chronic tension engendered by the mislabeling leads to a "hysterical" style of avoidance. Goldstein (1982) suggested that these characteristics of personality were fostered by childhood experiences marked by high levels of stress, unpredictable responses of parents, or an undermining of a sense of safety by alcoholic, phobic, or psychotic parents.

Perhaps the most interesting aspect of the interactive model, is its contention that agoraphobic symptoms tend to begin in a climate of interpersonal conflict or loss. Goldstein and Chambless (1978) supported this claim by noting that clinical histories regularly reveal that highly stressful and chronic, irresolvable conflicts--usually of an interpersonal nature--are present before and during the first occurrence of panic. Given an undermined capacity for separateness, the agoraphobic person is thought to maintain a protective denial of conflict within both relationships and internal experience. The inner turmoil experienced with eruptions of conflict is simplistically interpreted as increased fear and, this interpretation further

undermines confidence in one's capacity for autonomous functioning.

A second factor which was cited as being necessary to the onset of agoraphobic avoidance, is the experience of a panic attack. It is here that the model takes on the characteristics of the standard cognitive-behavioral approach which was pioneered and popularized by Claire Weekes (1973; 1976). Goldstein and Chambless (1979) contended that the experience of a panic attack brings a heightened emotional responsiveness to internal sensations. Obsessional focusing on these sensations was observed to feed the exacerbation of fears via catastrophic cognitions ("What ifs?"). This, along with the personological style, was portrayed as engendering the increase in avoidant behavior. Goldstein (1982) noted that the highly predictable and persistent cognitions--"I will die," "go crazy," "lose control,"--are triggered in anticipation of committing a humiliating act or of encountering dangerous situations when the arousal is sensed.

The etiological theory presented by Goldstein and Chambless (1978) must be applauded on several counts. First, though comprehensive in scope, it provides a concise conceptualization of agoraphobia. Second, it points to the prudence of supplementing cognitive treatment with interventions aimed at fostering insight into pathological relationship dynamics. Finally, the theory also presents a less obvious advantage, this being that it provides a psychological explanation for the onset of panic attacks.

The psychoanalytic investigation of panic disorder.

Unfortunately, Goldstein and Chambless (1978) did not directly acknowledge that their theory implies both a psychological and a "deficit" approach to conceptualizing panic disorder. Fundamentally, their Integrated Model asserts that panic anxiety is brought about by a deficit in or failure of the person to mobilize psychological resources that would serve to modulate anxiety. In direct opposition to the recent biological theories, this approach is rooted in Freud's

conceptualization of anxiety. In fact, most of what we know about the psychology of anxiety was first elucidated by Freud (1926/1959), coincident with the development of his structural and developmental theories.

Freud (1933/1964) described the phenomenology of anxiety as being influenced by psychological development in the following manner. During infancy and early childhood, psychological structures are inadequate to the task of modulating anxiety and anxiety is, therefore, experienced as an enveloping state of trauma ("traumatic anxiety"). The infant's experience at birth was regarded by Freud as the prototypic state of traumatic anxiety. As the ego becomes increasingly capable of taming the anxiety response, it begins to use it in an adaptive manner as a signal that danger is present ("signal anxiety"). Even during adulthood, however, the ego can fail to modulate anxiety with the result that it is again experienced in its traumatic form ("panic anxiety").

Much of the psychoanalytic writing on agoraphobia has focused on the types of intrapsychic conflict that are associated with attacks of anxiety. More pertinent to this investigation, however, is a second, prevalent theme in the psychoanalytic literature. This more pertinent theme involves the elucidation of developmental conditions that undermine the building of ego resources which serve to modulate anxiety.

For the greatest part, the developmental conditions described in the psychoanalytic case studies involve deleterious behaviors of parents. The most prevalent observation is that a symbiotic attachment with a parent circumvents movement toward autonomous functioning and, thereby, undermines the development of psychological resources with which the person modulates anxiety. For example, it has been noted that the agoraphobic person's mother tended to keep the child as a functioning part of herself after a fashion which was tantamount to a hostility toward the child's development of autonomous functions (Coleman, 1982). Others have noted how this "detachment blockage"

(Guidano & Liotti, 1983) crippled ego development by having failed to allow the child an adequate opportunity to experience and master phase-appropriate doses of anxiety (Frances & Dunn, 1975). Consequently, the deficient ego is left to cope with anxiety by regression to symbiotic attachments (Rhead, 1969).

A second pattern observed in the psychoanalytic case studies on agoraphobia is the failure of the agoraphobic person's parents to have responded with empathy to the child when he or she experienced strong anxiety states. Diamond (1985) reasoned that, because of such empathic failures, anxiety-modulating mental structures which are normally built by the step-by-step process of "transmuting internalizations" were never adequately developed. According to Diamond (1985), development of a signal function for anxiety was, thereby, undermined and the traumatic experience of anxiety tends to prevail. Whereas such empathic failure has typically been linked to the parent's own deficits in coping with anxiety (Frances & Dunn, 1975), others have noted more aggressive parental dynamics.

A number of case studies have described parents who, consciously or unconsciously, tended to induce anxiety in the child. For example, Rappaport (cited in Ferber, 1959) described the case of a "phobogenic" mother who regularly induced anxiety in her child by making aggressive threats to abandon or separate from the child. Similarly, Wangh (cited in Ferber, 1959) observed how an agoraphobic person's tendency to avoid conflict and tension was sparked by the mother's separating herself from the child at the slightest provocation. Where the aggressive behavior involved such threats of abandonment, case study material has noted a premature "crystallization" of the ego (Rhead, 1969). It is regularly noted throughout the case studies that, during adulthood, a separation or threat of separation is the stressor which typically fractures this precocious and fragile ego and leaves the individual with the regressed experience of traumatic anxiety (Diamond, 1985).

Undermined Security Surrounding Attachment

Overall, these psychological conceptualizations of agoraphobia might be credited with having offered more tenable etiological explanations of the agoraphobic syndrome than those provided by the biological model. A general weakness of the psychological investigations might also be cited. Whereas the psychological studies illuminate developmental conditions that render a susceptibility toward experiencing anxiety, they have failed to specify the developmental conditions that make individuals susceptible to the experience of panic anxiety. Put another way, they tend to be weak in differentiating developmental conditions that engender panic disorder from those associated with generalized anxiety disorder.

The review of the psychological theories does, however, point to a factor that might distinguish developmental underpinnings of the disorders. Across the descriptions of the developmental conditions associated with agoraphobia, there appears to be a common demoninator. This common denominator is the undermining of security surrounding attachment. This is to say that there tends to exist a core psychological condition--an undermined sense of security surrounding attachment--around which the person who suffers panic disorder has made a psychological adaptation. Accordingly, when conditions threaten security of an attachment relationship, this adaptation is susceptible to fracture and traumatic anxiety is re-experienced.

The tenet that a susceptibility toward experiencing panic anxiety is engendered by developmental conditions wherein there was an undermining of security surrounding attachment, explains a number of observations in the agoraphobia literature. First, it explains why the onset of panic attacks is typically preceded by a bereavement or by conflict in a relationship with a primary attachment person. Second, it accounts for the observation made by Gittelman and Klein (1985) that the majority of their agoraphobic patients reported a history of childhood

separation disorder. It also explains how such divergent conditions as a symbiotic relationship with a parent and aggressive or chaotic parenting behaviors could underlie the same condition. Finally, the presence of this core psychological condition appears to be congruent with the current psychoanalytic conceptualization of anxiety which traces panic anxiety to the initial awareness of separateness (Mahler, Pine, & Bergman, 1975).

Whereas most of the psychological theories cite traumatized security surrounding attachment as being one condition which underlies agoraphobia, only Bowlby (1973b) has placed it at the center of an etiological theory of agoraphobia. In fact, Bowlby (1973b) offered a detailed schema for the divergent conditions wherein security surrounding attachment might be undermined.

Bowlby's anxious attachment hypothesis.

Bowlby presented his formulation for the etiology of agoraphobia in his landmark work on attachment and loss (Bowlby, 1973a; 1973b). After reviewing the literature on agoraphobia, Bowlby (1973b) argued that the agoraphobic person's susceptibility to panic anxiety and seemingly exaggerated dependency behaviors are derived from qualities of their relationships with early attachment figures. Specifically, he contended that confidence in the availability of an attachment figure was undermined to the extent that the agoraphobic person might be said to suffer "anxious attachment." Bowlby (1973b) stressed that the anxiety surrounding attachment is a legitimate product of bitter experiences.

The nature of such bitter experiences was illustrated in specific "patterns" in parenting which Bowlby (1973b) presented as having undermined security of attachment. Bowlby (193b) observed three such patterns in the family backgrounds of persons presenting agoraphobic symptoms. These were described as:

Pattern A- mother, or more rarely father, is a sufferer from chronic anxiety regarding attachment figures and either did in

the past or still does retain the patient at home to be a companion

Pattern B- the patient fears that something dreadful may happen to mother, or possibly father, while he (the patient) is away from her; he therefore either remains at home with her or else insists that she accompany him whenever he leaves the house

Pattern C- the patient fears that something dreadful may happen to himself if he is away from home and so remains at home to prevent that happening. (p. 302)

These brief summations of the three patterns in parenting fail to portray the varied characteristics of the parent-child interactions that Bowlby (1973b) described. Elaboration of each pattern reveals a variety of pathogenic parenting behaviors.

In the summary statement cited above, Bowlby (1973b) described the Pattern A parent as suffering anxiety around attachment and as retaining the child in the home to serve as a companion. Bowlby (1973b) cited two primary characteristics of this type of Pattern A parenting. First, he noted that this type of parent forms an overly-close and intense relationship with the child. The parent thereby tends to be restrictive of the child's making of contacts outside of the immediate family circle and circumvents the achievement of important developmental tasks. Second, he noted that the Pattern A parent seeks the child's support and tends to burden the child with personal and marital concerns. Bowlby (1973b) observed that, within these parenting behaviors there are typically contained foreboding messages that movement toward separation or individuation would yield catastrophic results for either the parent or child.

Other characteristics that typify Pattern A parenting are, based on the definition, less obvious. Bowlby (1973b) described something of a paradox in the parenting of many Pattern A persons. Whereas in many of

the case examples, the child appeared to have been "spoiled" by the parent, Bowlby (1973b) encouraged one to look beneath the surface. He noted that, in a more subtle manner, the parent was actually dependent on the child and controlled the child in a domineering manner. Bowlby (1973b) cited a number of cases wherein the doting parent was also observed to subject the child to a good measure of hostility, after a fashion that he described as swinging from kissing him one moment to beating him the next.

In the Pattern B family, a child fears that something dreadful may happen to a parent while the child is away from the home and, therefore, he or she stays at home to prevent the tragedy from happening. Bowlby (1973b) observed that this pattern occurs fairly often in conjunction with Pattern A. In addition to trauma experienced with the actual loss of a family member, fear that something awful will happen to a parent was linked by Bowlby (1973b) to pathogenic behaviors of the parents. He noted that the most prevalent of such behaviors is a tendency of some parents to engage in violent, quarrelsome interactions. Bowlby (1973b) observed that, during the course of such interactions, a parent is commonly heard to threaten either self-harm or harm to the other parent and to voice intentions to leave the family.

Bowlby (1973b) observed that fear of harm befalling a parent is also engendered where a parent burdens the child with hypochondriacal complaints. This behavior seems to be most deleterious where it occurs in response to the child's natural needs for parenting. The predicament of children who are treated in this manner was poignantly illustrated in the words of a juvenile girl: "My mother wants me to stay home but tells me I'm killing her" (Bowlby, 1973b, p. 274).

Whereas Pattern B parents often-times veil hostility toward other family members by threatening self-harm, the expression of hostility which is described within Pattern C involves no such pretext. Within this pattern, anxious attachment stems from threats of being abandoned

by or of being ejected from the family. Such threats, Bowlby (1973b) suggested, tend to be employed by parents who are simply rejecting of the child or are uttered in response to the child's attempts at individuation.

Bowlby (1973b) also mentioned that, often-times, within this category are single mothers who lack supportive relationships. He stated that, out of the despair surrounding the demands of shouldering sole responsibility for raising a family, the single parent is susceptible to experiencing doubt about being able to retain custody. Unfortunately, such doubts are, according to Bowlby (1973b), too often voiced in the presence of the children and abandonment anxiety is the outcome.

In light of the severity of many of the behaviors described in the three patterns, it may seem puzzling as to why they have not been emphasized in the agoraphobia literature. It seems likely that the patterns had not been identified because the parenting behaviors do not actually manifest themselves in such a clear-cut fashion. In fact, Bowlby (1973b) cautioned that the patterns should not be regarded as independent categories. Nonetheless, the patterns do find support in and make sense of the divergent findings of studies which have investigated interpersonal dynamics within the families of origin of agoraphobic persons.

Family of origin studies.

The value of Bowlby's (1973b) schema in elucidating developmental conditions associated with agoraphobia is attested to by its ability to account for what appear to be, conflicting findings across the family studies. Whereas investigators have seemingly been determined to prove that agoraphobia is the outcome of overprotective parenting, the results of their studies have been far more varied.

Three early studies examined treatment records of agoraphobic patients to determine whether overprotection was the primary pathogenic

factor in parenting. The results of the studies were discordant. Terhune (1949) concluded that the agoraphobic patient tended to have at least one neurotic parent who permitted the preagoraphobic child to lead an irresponsible and avoidant lifestyle. In an attempt to replicate Terhune's (1949) finding, Tucker (1956) examined case records and found that the agoraphobic person's avoidant and fearful tendencies most often stemmed from intimidation by a dominant, sometimes rejecting, and judgmental mother. Webster's (1953) efforts produced an intermediate result. He found that the agoraphobic patient was likely to have experienced a mother's dominant overprotection but noted that the patient's father was equally likely to have demonstrated "psychopathic" qualities in the parenting relationship.

Almost two decades passed before studies again addressed family backgrounds of agoraphobic persons. As in the earlier research, investigators would be primarily concerned with testing the hypothesis that agoraphobia is engendered by the undermining influence of an overprotective mother.

In the only study to have directly assessed mothers of agoraphobic persons, L. Solyom, Silberfeld, and C. Solyom (1976), attempted to test the maternal overprotection hypothesis via a number of instruments. Twenty-one mothers of female agoraphobic patients were administered the Maternal Overprotection Questionnaire (MOQ, Furse & L. Solyom, 1968), the Parental Attitude Assessment Instrument (PARI, Schaefer & Bell, 1958), the Fear Survey Schedule (FSS, Wolpe & Lang, 1964), and the Institute Personality and Ability Test (IPAT). Comparisons were made with normative test data. Mothers of the agoraphobic patients scored higher on the Maternal Concern and Maternal Control scales of the MOQ, higher on four scales of the PARI which were thought to be related to maternal overprotection, and higher on the IPAT Anxiety scale. The authors concluded that the maternal overprotection may have been a manifestation of the mothers' general anxiety and speculated that

mothers of agoraphobic persons unwittingly tend to foster anxiety around separation. It was also acknowledged that the anxious child may evoke an anxious response from the mother such that the interaction would be analagous to a pulling at the umbilical cord from both ends.

In spite of the clarity of the findings, it does not appear that they are germaine to the entire population of agoraphobic persons. It would seem, instead, that the results of Solyom et al. (1976) were greatly influenced by sampling bias. Only 21 of 47 mother-daughter dyads who had been asked to participate in the study, did so. It seems likely that these "invested" mothers would, in comparison to the nonparticipants, have scored in the direction of overprotection.

Given the difficulties in enlisting the participation of a representative sample of mothers of agoraphobic persons, Parker (1979) attempted to test the overprotection position by assessing agoraphobic persons' attitudes concerning aspects of their parenting. Forty agoraphobic patients, 41 socially phobic patients, and a control group of general practice patients were compared on responses to the Parental Bonding Instrument (PBI, Parker, Tupling, & Brown, 1979). The PBI is a self-administered, 25-item questionnaire that measures attitudes toward amount of parental protection and caring (as expressed affection). Whereas the group of social phobics judged both their mothers and fathers as having been overprotective and as having provided an insufficiency of caring, the agoraphobic group differed from the controls only in assessing their mothers as having been low on the caring dimension. After highlighting how this finding contradicts the overprotection hypothesis, the authors recommended that dissonant parent-child attachment be the topic of future studies concerning developmental antecedents of agoraphobia.

Parker's (1979) finding that agoraphobic persons frequently view their mothers as having been deficient in caring, does not appear to be explained by anger toward overprotection. In a controlled study of 30

married agoraphobic women, Buglass et al. (1977) found reports of "painful ambivalence" toward their mothers and an excess of "anomalous home situations" such as having been adopted, living with relatives of the extended family, or living with a step-family.

Aggression and chaos in the parenting of persons who suffer panic disorder have been evidenced in a more recent study by Raskin, Peeke, Dickman, and Pinsker (1982). A relatively small sample of patients--18 diagnosed with panic disorder and 16 diagnosed with general anxiety disorder--were interviewed to obtain their developmental and psychiatric histories. The interview data were used to rate the patients along eight categories concerning aspects of early family environment.

The results were startling. Seventy percent of the panic disorder patients--as opposed to 30 percent of the general anxiety disorder patients--were rated as having experienced a grossly disturbed childhood environment. Criteria for "gross disturbance" included physical or sexual abuse and parenting that was greatly lacking in consistent or adequate support. Six of the 18 panic disorder patients had been physically abused and one reported sexual abuse. Five of the 18 panic disorder patients had been permanently separated from their mothers before age 10. Whereas the adolescent sample studied by Raskin et al. (1982) limits generalizability of these results, the findings clearly point to the presence of aggression and chaotic parenting within the spectrum of family backgrounds of agoraphobic persons.

Conclusions.

Neither the concept of the dominant, overprotective parent nor the popular psychoanalytic theory of symbiotic parenting, account for the diversity of findings in the family of origin studies. Conversely, Bowlby's (1973b) three patterns of parenting are consistent with the findings. This consistency lends credence to both Bowlby's (1973b) schema and to the hypothesis that it is undermined security surrounding attachment that fosters a susceptibility to the experience of panic

anxiety.

Regardless of how feasible Bowlby's (1973b) developmental schema appears, it must be emphasized that both his parenting patterns and anxious attachment tenet should still be regarded as hypotheses. Research has yet to directly assess whether the three patterns in parenting actually characterize the experiences of agoraphobic persons.

Accordingly, it is the purpose of this investigation to provide a more direct test of Bowlby's (1973b) hypothesis. The hypotheses and design of the study are deferred to the next chapter. First, a relatively neglected area of investigation in the study of agoraphobia will be reviewed; that being, the role of psychological defenses in the formation of agoraphobic symptoms.

Psychological Defenses in the Agoraphobic Syndrome

The failure of the popular etiological theories to recognize psychological causes of panic anxiety might be attributed to the impact of studies by medically-oriented researchers. The most recent psychological theories might also, however, be criticized for overlooking the etiological significance of unconscious psychological dynamics.

The popular psychological theories posit that the agoraphobic person becomes avoidant of situations wherein he or she fears that the onset of a panic attack might have humiliating or disastrous consequences (Goldstein & Chambless, 1978; Mathews et al., 1981; D. Sheehan et al., 1980; Weekes, 1976). Specifically, these theories assert that the agoraphobic person tends to avoid crowds, check-out lines, elevators, and sidewalks out of fear that, within these situations, the onset of a panic attack would cause a humiliating loss of control or the symptoms would be so visible that people would "begin to talk." Avoidance of driving, bridges, elevators, and heights are, from this perspective, avoided out of fear that the potential loss of control would lead to physically disastrous outcomes. Within the

popular theories, then, the formation of agoraphobic symptoms is, simply, a response to the susceptibility toward panic attacks.

Whereas this formulation has been associated with improvements in the psychotherapeutic treatment of agoraphobia (specifically, the in vivo behavioral treatment of agoraphobic symptoms), it is overly-simplistic as an etiological theory. The theories fail to take into account unconscious factors, most notably, the role of psychological defenses in symptom formation. An understanding of the role that defenses play in the formation of agoraphobic symptoms has been advanced by psychoanalytic case studies of agoraphobia.

The Concept of Defense Mechanism

The concept of defense mechanism is a product of Freud's structural theory of the psyche. Defense mechanisms were described by Freud (1926/1959) as unconscious processes of the ego that serve to keep disturbing and unacceptable impulses from being directly experienced. Freud (1940/1964) described ten defenses: repression, regression, turning against the self, reaction formation, undoing, introjection, projection, isolation, reversal, and sublimation.

Whereas Freud introduced the concept of unconscious defenses, the ten defense mechanisms did not receive systematic consideration in his work. The first comprehensive exploration of the functioning of the defense mechanisms was presented by his daughter, Anna, in her landmark work: The Ego and the Mechanisms of Defense (1937). A. Freud's (1937) conceptualization of the defenses was not a simple recapitulation of her father's ideas. She expanded the concept by contending that, in addition to protecting the ego against instinctual demands, the defense mechanisms serve to protect the ego from being overwhelmed by unpleasant aspects of external reality.

That the defense mechanisms protect the ego from threats which emanate from both intrapsychic conflict and external reality has been a consistent theme across the modifications in the concept that have been

made since the seminal work of the Freuds. In a recent review of the literature on the defense mechanisms, Ihilevich and Gleser (1986) offered a definition of the concept that retains the spirit of the Freuds' perspective while accommodating the viewpoints assumed by subsequent investigators:

Psychological defense mechanisms are relatively stable response dispositions that serve to falsify reality whenever a person's resources, skills, or motivation are insufficient to resolve inner conflicts or master external threats to well-being. Psychoanalysts attribute defensive responses to unconscious processes which are automatically activated whenever perceived threats are too painful to confront consciously. ... In contrast to other reactions to perceived threats, defenses are expressed in rigid, excessive, or inappropriate responses such as are evidenced in "exaggerated humility," "overkindliness" or "indiscriminate antagonism." (p. 5)

While this definition does not include sublimation, it includes the other defenses and is sufficiently clear to be useful for research purposes.

The Workings of Defense Mechanisms in Agoraphobia

The psychoanalytic conceptualization of symptom formation in anxiety and phobic disorders is tied to the concept of unconscious defenses. This conceptualization is especially well-illustrated in Freud's paper, "Analysis of a Phobia in a Five-Year-Old Boy" (Freud, 1909/1959). This is more commonly known as the case of "Little Hans."

Whereas much of psychoanalytic theory is based upon a method that relies on the reconstruction of remote events, the case of Little Hans is rather unique in that the phobia came under study almost as soon as it appeared, and the boy's father--who conducted the treatment under Freud's guidance--was able to supplement the patient's statements with his own knowledge of the pertinent events.

The case study of Little Hans deals with a child who refused to go

into the street for fear that a horse might bite him. At the root of the phobia, as the analysis revealed, was a conflict between the boy's impulses and his ego demands. Specifically, hostile Oedipal impulses toward his father gave rise to an intense fear of punishment, that is, to castration fears, which became transformed into the phobic fear of being bitten by a horse and into a fear that a horse pulling a heavily loaded vehicle would fall upon him.

Whereas the reasons for the choice of a horse as the phobic object is beyond the purview of this review, suffice it to say that Freud (1909/1959) described the choice as having been determined by several factors, which included a precipitating incident in which Hans saw a horse fall. The intrapsychic transformation of the fear of his father's aggressive retaliation was portrayed as the outcome of the defenses of repression, displacement, and projection. Freud (1909/1959) pointed out that the child's hostile feelings toward the father were replaced by a fear of the horse, such that the fear of his father was displaced to the horse and the child's aggressive impulses were projected on to the horse. The displacement and projection were made possible by and furthered the child's repression of the unacceptable, hostile impulses. A central rationale within this conceptionalization is that it is easier to save oneself from an external danger by flight than it is to flee from an internal danger (Freud, 1933/1964).

This model of symptom formation subsequently became the primary avenue for understanding agoraphobic symptoms. In the early psychoanalytic case studies, the focus of the investigations was on the unlocking of the symbolic meaning of the phobic stimulus by elucidating the nature of both the displaced threat and the unacceptable projected impulses.

From this perspective, agoraphobic symptoms can have a variety of remote meanings. Case study reports revealed repressed impulses underlying agoraphobic symptoms involving such experiences as the

sexualized stimulation of walking or locomotion (Abraham, 1913/1953), impulses toward exhibitionism (Deutsch, 1929; Katan, 1951; Weiss, 1935), and temptations of the street (Freud, 1926/1959; Miller, 1953). The commonly reported fears that exposure to the phobic stimuli might cause death, insanity, or the loss of control were explained by Fenichel (1945) as involving the projections of both unconscious murderous impulses and the phobic person's own potential libidinal or aggressive excitement.

Deutsch (1929) was the first to emphasize pregenital conflicts in the formation of agoraphobic symptoms. In a presentation of case material from the psychoanalyses of three women who suffered agoraphobia, Deutsch (1929) explored the significance of the agoraphobic person's "companion": that is, the person to whom the agoraphobic person regularly turns for safety. In each case, the analysis revealed that the phobic stimulus contained the projection of hostile impulses toward the companion and a displacement of fears of retaliatory actions by the patient's mother.

The case material presented by Deutsch (1929) made a compelling argument for these contentions. One patient, upon overcoming her phobic avoidance, subsequently developed an obsessional thought that she might throw her mother on to some train tracks.

Across the three case studies, Deutsch (1929) observed that the panic anxiety was also rooted in a continuation of the early infantile relations to the love-object and a response to the danger of losing it. As noted in the previous section, the symbiotic relationship with a parent and undermined security surrounding attachment would become the foci of later psychoanalytic studies of agoraphobia.

Another noteworthy aspect of Deutsch's (1929) paper was its presentation of cases of agoraphobia with more severe symptomatology and more regressed characterological adjustment than the less severe, neurotic cases that had, more typically, been presented. As the field

of psychoanalysis increasingly moved toward the investigation of pregenital psychological issues, presentation of the more severe cases became commonplace. Within this literature, reports of cases wherein intrapsychic conflict is contained by a displacement to a circumscribed phobic stimulus is the exception. More common is the description of cases in which there is the more generalized projection of aggressive impulses on to a host of phobic stimuli.

This is not to suggest that the more recent case studies portray agoraphobia as a paranoid disorder. Even though these presentations suggest that the ego of the agoraphobic person is more severely impaired than that of the person who suffers a simple phobia or an hysterical conversion, the propensity toward projection by the agoraphobic person is far less extensive than that which is present in paranoid psychosis. Unlike the paranoic, the agoraphobic person remains capable of reality testing, and is more often-times aware that the anxiety is subjective rather than based on objective danger (Nunberg, 1955).

It would seem that the psychoanalytic case studies suggest that panic disorder and agoraphobia exist along a continuum that ranges from neurotic conditions which involve relatively circumscribed symptoms to a borderline level of organization which involves more broad and severe symptomatology. Should this be the case, one might also expect defense preference of person who suffer panic disorder and agoraphobia to range from the higher-order to less developed defenses.

This hypothesis stems from the axiom that defensive structure differs by level of personality organization. Kernberg (1977) argued that one of the primary ways to determine the degree of structure that a personality possesses is to identify the constellation of defenses that the individual typically employs. Within his schema, the more advanced defenses are defined by the workings of repression (such as occur in the defenses of repression, isolation, rationalization, intellectualization, and undoing). Kernberg (1977) stated that the function of these

defenses is to protect the ego from intrapsychic conflicts by means of the rejection of a drive derivative or its ideational representation, or both, from the conscious ego. The more primitive defenses--which characterize the borderline level of organization--are, according to Kernberg (1977), those which protect the ego by keeping apart contradictory experiences of the self and significant others (such as that which occurs in the defenses of projection, omnipotence and devaluation, primitive idealization, denial, and splitting).

Whereas elucidation of defense preference of the individual diagnosed with panic disorder or agoraphobia may seem irrelevant to the popular cognitive-behavioral treatment of the disorder, this should not be the case. Studies have shown that reliance on a particular ego defense mechanism correlates with specific modes of cognitive functioning (Gardner, Holtzman, Klein, Linton, & Spence, 1959; Gardner & Long, 1962; Ihilevich & Gleser, 1971). It would seem, therefore, that if panic disorder or agoraphobic patients differ according to defense preference, one could reasonably assume that they also differ on significant cognitive dimensions. Current research provides little insight into differences across panic disorder or agoraphobic persons in regard to defense preference.

Research Findings Concerning Defense Preference in Agoraphobia

Only three studies in the research literature have direct relevance to the assessment of defense preference of persons diagnosed with panic disorder or agoraphobia. Turner, Giles, and Marafiote (1983) reported that a group of nine agoraphobic patients scored, on the average, above the normative mean on the Byrne Repression/Sensitization (R-S) Scale of the MMPI (in the direction of Sensitization). The authors interpreted the finding as contradicting the psychoanalytic conceptualization of agoraphobia, which they interpreted as identifying repression as the primary defense in agoraphobic symptom formation.

The finding should not, however, be interpreted as disproving the

viability of psychoanalytic theory in regard to agoraphobia. As the review of the psychoanalytic studies indicates, it seems unlikely that a group of agoraphobic persons would, on the average, demonstrate a preference for the higher-order defenses that are characterized by repression. In fact, the psychoanalytic case studies seem to suggest that the severity of agoraphobic symptoms increases to the extent that the person employs the more primitive defense of projection. Turner et al. (1983) did not provide information about the severity of the agoraphobic symptoms experienced by the persons in the sample. On the basis of the finding, however, one might begin to wonder whether the individuals suffered relatively severe symptoms of agoraphobia.

Interpretation of the finding is also unclear in that the meaningfulness of Sensitization as a construct has been questioned. Thilevich and Gleser (1986) contended that, insofar as studies have shown that the scale is very highly correlated with measures of anxiety, it is unlikely that the R-S scale measures any construct other than anxiety.

In the most pertinent study to date, Seif and Atkins (1979) attempted to assess whether simple phobias can be differentiated from more severe phobic conditions in regard to the type of psychological defenses characteristically employed and in regard to the level of psychological differentiation possessed by persons suffering the disorders. Seif and Atkins (1979) hypothesized that persons diagnosed with simple phobia (as manifested in phobias of animals) would show greater use of obsessional defenses, such as intellectualization and isolation, than would situation phobics (as manifested in agoraphobia, social phobia, and multiple phobias). Conversely, it was hypothesized that the situation phobics would show greater use of hysterical defenses, such as repression and displacement, as well as greater reliance on projection than would simple phobics.

To test these hypotheses, 36 severely phobic adults--18 simple

phobics and 18 situational phobics--were administered the Defense Mechanism Inventory (DMI) and the Holtzman Inkblot Test. The findings supported the hypotheses. The authors concluded that persons who suffer simple phobia tend to utilize more intellectualized defenses and less repression and, appear to be more field-independent than the persons who suffer the more severe and generalized phobic conditions.

This finding is clearly congruent with the thrust of the psychoanalytic case studies on agoraphobia and support the theoretical stance that displacement and projection play principal roles in agoraphobic symptom formation. Whereas the authors emphasized the role of repression in the more severe phobic conditions, this interpretation seems to misrepresent the results. While there was a statistically significant difference between the groups on the DMI measure that represents repression (which is labelled Reversal), for both groups, the lowest mean score across the DMI scales was on the Reversal scale.

Viewing the results for defense preference by rank order, the situation phobics scored in order of: displacement, projection, masochistic defenses, intellectualization, and repression. The simple phobics scored in order of: intellectualization, displacement, masochistic defenses, projection, and repression. Based on this view of the results, it would appear that equal, if not more meaningful differences between the groups, were in the use of the higher-order defense of intellectualization and the more primitive defense of projection.

That projection is a defense which is characteristic of severe agoraphobia appears to have been substantiated by another study. To gain insight into how agoraphobic persons tend to cope with interpersonal conflict, Hafner and Ross (1984) administered the Fear Survey Schedule (Hallam & Hafner, 1978) and the Hostility and Direction of Hostility Questionnaire (Philip, 1973) to 160 female agoraphobic patients. A correlational analysis of responses to both of the

instruments revealed statistically significant correlations between an agoraphobic factor and elevations on scales for Projected Hostility, Self-Criticism, and Guilt. The authors concluded that these findings support clinical observations that agoraphobic persons involve themselves in maladaptive, self-punitive ideation and tend to perceive strangers and the world as malevolent.

Conclusions

The role of unconscious psychological forces has largely been ignored in the popular etiological theories of panic disorder and agoraphobia. Nevertheless, the scant research findings support the psychoanalytic conceptualization that places the psychological defenses of displacement, repression, and projection at the center of agoraphobic symptom formation.

Whereas the results of Seif and Atkins (1979) support the psychoanalytic formulation, caution must be exercised in interpreting the findings as the study has yet to be replicated. It must also be noted that the study did not focus specifically upon persons diagnosed with panic disorder or agoraphobia.

Seif and Atkins (1979) represented an initial effort at elucidating psychological defenses associated with agoraphobia and, therefore, did not examine the broader aspects of defense preference within the population of agoraphobic persons. Specifically, the psychoanalytic cases studies seem to suggest that agoraphobic avoidance increases as a function of the extent to which the more primitive defense of projection characterizes the individual's personality. If this is, in fact, the case, one might expect to find that as severity of agoraphobic symptoms increase, defense preference shifts from the higher-order to the more primitive defenses, i.e., from intellectualization and repression to projection. Similarly, one might expect to find increased manifestations of a borderline level of personality integration.

The finding of variation in defense preference across persons

diagnosed with panic disorder or agoraphobia is not only important to construction of an etiological theory, it is also likely to have treatment implications. Recall that Goldstein and Chambless (1978) criticized the popular tendency to focus on the symptomatic treatment of the disorder while failing to take into account serious personological issues. Investigation of defense preference might further insight into some of the more profound psychological issues encountered by agoraphobic persons which would demand attention within psychotherapeutic treatment.

CHAPTER II

Hypotheses

Pathogenic Patterns in Parenting

A major shortcoming of the popular etiological theories of panic disorder and agoraphobia is the failure to consider possible psychogenic causes of the susceptibility toward experiencing panic anxiety. As the review of the literature indicated, this oversight is especially noteworthy in that studies have regularly found that the onset of panic disorder is often-times preceded by circumstances which involve the loss or threatened loss of a primary attachment figure. Recall that even researchers with a biological orientation have noted a vulnerability toward experiencing separation anxiety among persons who suffer panic disorder. They, however, have attributed this vulnerability to a biological disorder.

The failure of the popular theories to incorporate psychological factors might have been effected, in part, by inconsistencies within developmental research on panic disorder and agoraphobia. Most of the developmental studies have attempted to demonstrate the impact of a symbiotic or overprotective relationship between mother and child. The primary rationale behind these studies has been that such parenting circumvents exposure to phase-appropriate dosages of anxiety and, thereby, forestalls the achievement of developmental tasks. The hypothesized result is that the individual fails to build transmuting internalizations with which to regulate anxiety and, therefore, copes by regressing to symbiotic relationships.

Again, this approach fails to differentiate developmental conditions underlying generalized anxiety disorder from those underlying panic disorder and agoraphobia. Furthermore, maternal overprotection has not been consistently found in the developmental histories of agoraphobic persons. In fact, the literature review indicates that findings have been split between overprotection and indications of the

presence of both low maternal caring and abusive situations.

The focus upon maternal overprotection appears to have missed what might be the central factor in the developmental underpinnings of panic disorder: the undermining of a sense of security surrounding attachment. Bowlby's (1973b) schema of patterns in parenting behaviors that undermine security surrounding attachment seem to account for the divergent developmental findings. His schema has yet to receive an empirical test.

Definitions of Bowlby's patterns.

One of the purposes of this study is, then, to test whether Bowlby's patterns of parenting behaviors actually characterize the developmental histories of persons diagnosed with panic disorder. Bowlby's three patterns in parenting might be defined as follows:

Pattern A: Anxiety around attachment developed because a separation-anxious parent tended to inappropriately keep the child at home and engage him or her in an overly-close relationship. In keeping the child enmeshed in the family, the parent undermined the child's capacity for autonomy and made the outside world appear dangerous. These enmeshed parents are also likely to have violated the intergenerational boundary by having been intrusive and by having inappropriately used the child for emotional support.

Pattern B: Anxious attachment developed out of the childhood fear that something dreadful would happen to a parent. For the greatest part, these fears stemmed from threatened or actual aggression between the parents, threatened or attempted acts of self-harm by a parent, and deterioration or threatened deterioration of a parent's physical or emotional health which the child, at some level, may have viewed as having been caused by the demands that he or she made upon the parent.

Pattern C: Anxious attachment was the outcome of childhood fears that something dreadful would happen to oneself. These fears tended to arise from a parent's threats to relinquish custody of the child, a

parent's expression of impulses to leave the family, and a parent's communication that ill would befall the child should the child attempt to act in an autonomous manner.

Hypotheses.

To test the hypothesis that the three patterns in parenting characterize the developmental histories of persons diagnosed with panic disorder, it was necessary to compare individuals diagnosed with the disorder with control groups on a measure for the patterns. Given that there has yet to be an empirical investigation of the prevalence of these patterns within developmental histories of persons in the general population, use of a nonclinical control group was indicated.

Employment of a clinical control group was also indicated to determine whether the patterns which undermine security surrounding attachment differentiate the developmental histories of persons who are susceptible to experiencing panic attacks from the developmental histories of persons who suffer other psychiatric disorders. Ideally, a test of this hypothesis would compare a group of persons diagnosed with generalized anxiety disorder and a group diagnosed with panic disorder on a measure for the patterns. Unfortunately, because such a group was not accessible, a comparison with an alternate clinical control group was necessitated.

A more general criterion for identifying a clinical control group is that of diagnosis with a DSM-III-R, Axis I diagnosis. A second criterion for comparison is similar type of treatment experience. In the cases of panic disorder and agoraphobia, a common treatment modality is that of the self-help or support group. An Axis-I diagnosis that is, likewise, commonly treated within the format of a self-help group is alcoholism. The most popular self-help group for alcoholic persons is Alcoholics Anonymous (AA). For purposes of this study, this control group is labelled the Alcoholism Support (ASP) group.

Three hypotheses were tested:

Hypothesis 1: A group of persons diagnosed with panic disorder will score higher than either a nonclinical control group or a clinical control group (ASP) on a measure of Pattern A parenting behaviors;

Hypothesis 2: A group of persons diagnosed with panic disorder will score higher than either a nonclinical control group or a clinical control group (ASP) on a measure of Pattern B parenting behaviors;

Hypothesis 3: A group of persons diagnosed with panic disorder will score higher than either a nonclinical control group or a clinical control group (ASP) on a measure of Pattern C parenting behaviors.

Defense Preference in Agoraphobia

The current etiological theory of agoraphobia posits that agoraphobic symptoms stem from the anxious anticipation of experiencing a panic attack under circumstances which might entail danger or embarrassment. From this perspective, agoraphobic symptoms are simply viewed as a response to panic attacks and the symptoms are thought to increase and generalize with increased experience of panic attacks.

Whereas this conceptualization of the formation of agoraphobic symptoms has been associated with improved efficacy in the treatment of the disorder, it is simplistic as an etiological theory. Specifically, it fails to take into account the role of defense mechanisms in the formation of symptoms.

As described in the literature review, recent studies have provided support for the psychoanalytic theory which describes phobic symptoms as being the product of the unconscious defenses of repression, displacement, and projection. These findings support the criticism made by prominent investigators of agoraphobia that the standard pharmacological and behavioral treatments of the disorder focus only on

the "tip of the iceberg" and ignore other adaptational issues.

The preceding review of psychoanalytic case studies concerning agoraphobia suggest that panic disorder and agoraphobia exist along a continuum that ranges from a neurotic condition which involves relatively circumscribed symptoms to a borderline level of integration which involves more broad and severe symptomatology. Accordingly, one might also expect defense preference to range from the higher-order to more primitive defenses.

If there is a continuum of defense preference across agoraphobic persons, one might expect that persons diagnosed with panic disorder without agoraphobia would tend to demonstrate a greater preference for repression and a lesser preference for projection than would agoraphobic persons who present moderate to severe symptomatology. Put another way, it seems likely that, within a group of persons diagnosed with agoraphobia, defense preference of projection would be positively correlated with severity of agoraphobic symptoms.

Hypotheses.

To ascertain whether these observations are accurate, three hypotheses were tested:

Hypothesis 4: The group of persons who present panic disorder without agoraphobia will score higher on a measure for defense preference of repression than will those who present panic disorder with agoraphobia.

Hypothesis 5: The group of persons who present panic disorder with agoraphobia will score higher on a measure for defense preference of projection than will those who present panic disorder without agoraphobia;

Hypothesis 6: Within the panic disorder with agoraphobia group, scores on a measure of projection will be positively correlated with severity of self-reported symptoms of agoraphobia.

CHAPTER III

Method

Participants

Participants for the agoraphobia and panic disorder groups were recruited from four hospital-affiliated, panic disorder support groups in western Oregon. The experimental protocols and postage-paid return envelopes were distributed to persons in each group who offered participation. Forty-six persons from the agoraphobia support groups returned completed protocols. Of these, 40 who fulfilled the criteria for agoraphobia or panic disorder, returned scoreable protocols. Characteristics of the participants are listed in Table 1.

For the nonclinical control group (NCC), participants were recruited from parent-teacher groups of several high schools in an Oregon city of approximately 100,000 population. Forty of 44 persons who returned protocols met the criteria for the nonclinical group.

Participants for the Alcohol Support group (ASP) were recruited from Alcoholics Anonymous (AA) groups in western Oregon. Twenty-two AA members returned protocols. Only 20 of these proved to be useable and were included in the study. The two that were not useable contained large amounts of missing data.

Instruments

The Demographics Questionnaire.

A questionnaire (Appendix C) was constructed to ascertain demographics and to gather information important to establishing the diagnosis of agoraphobia. The demographic variables addressed by the instrument included age, sex, marital status, ethnicity, and highest levels of formal education and occupation attained by the participant and the participant's spouse.

The Anxiety Disorder Interview Schedule-Revised.

In DSM-III-R (APA, 1987), the criteria for diagnosing panic disorder involve three factors. The first is that the individual must

Table 1
Characteristics of Participants

Variable	Panic Dis. (n = 40)	Pan-O (n = 10)	Pan-A (n = 30)	NCC (n = 40)	ASP (n = 20)
Age	44.3 (13)	45.5 (14)	43.9 (14)	41.5 (13)	36.5* (8)
Sex	30F/10M	7F/3M	23F/7M	31F/9M	15F/5M
Race	39W/1NA	10W	29W/1NA	39W/1A/1B	20W
Marital Status	5S/7D/28M	1S/2D/7M	4S/5D/21M	3S/8D/29M	9S/4D/7M**
Education	3.2 (.89)	3.2 (1.0)	3.2 (.86)	4.0 (1.1)**	3.1(.85)

- Notes.** (1) Standard deviations are in parentheses.
- (2) For Race, A = Asian, B = Black, NA = Native American, W = White.
- (3) For Marital Status, D = Divorced, M = Married, S = Single.
- (4) For Education, 1 = Grade School, 2 = Some High School, 3 = Completed High School, 4 = Associate's Degree, 5 = Bachelor's Degree, 6 = Graduate Degree.
- (5) The Pan-O and Pan-A groups are subsets of the Panic Disorder group. Pan-O includes the participants who reported experiencing panic disorder without agoraphobia (Panic-Only); the Pan-A group includes the participants who reported experiencing panic disorder with agoraphobia (Panic-Agoraphobia).

*: $p < .05$, two tailed, in comparison with the Panic Disorder group.

** : $p < .01$, two-tailed: in comparisons with the Panic Disorder group.

have experienced anxiety attacks which were unexpected. The manual spells out 13 characteristics of such unexpected attacks and states that a positive diagnosis requires the presence of at least four of the 13. Second, the manual stipulates that there should have occurred at least four unanticipated attacks within a period of four weeks or, that the fear of having an attack persisted for at least one month. Finally, DSM-III-R (APA, 1987) requires that, before arriving at a diagnosis of panic disorder, the presence of physical disorders which mimic panic attacks must be ruled out.

Barlow and Cerny (1988) published an interview schedule--the Anxiety Disorders Interview Schedule-Revised (ADIS-R)--that contains a section for diagnosing panic disorder. The schedule closely follows the DSM-III-R criteria for the diagnosis. Most important, diagnosis of panic disorder is not to be made if the respondent reports having been diagnosed with one of the physical disorders which mimic panic disorder.

The diagnosis of panic disorder was, then, primarily ascertained by a series of questions which were adapted from the ADIS-R (Items 13 through 18 of the experimental protocol, Appendix C). The sole change was that only those questions relevant to arriving at the diagnosis were selected.

The Agoraphobia Questionnaire.

The DSM-III-R criteria for diagnosing agoraphobia are less detailed than the criteria listed for panic disorder. The manual simply describes common agoraphobic situations and requires that the diagnostician rate the severity of the phobic avoidance according to whether it is mild, moderate, or severe.

To assess severity of agoraphobia, the majority of psychological studies on agoraphobia utilize an agoraphobia subscale (Hallam & Hafner, 1978) of the Fear Survey Schedule (Wolpe & Lang, 1964). For purposes of this study, however, the Fear Survey Schedule provides information which is superfluous to the DSM diagnosis.

Thorpe and Burns (1983) constructed an inventory--the Agoraphobia Questionnaire--which is more specific to the DSM criteria for diagnosis. This questionnaire inquires, via a four-point Likert scale, the extent to which agoraphobia has interfered with one's ability to travel, has hindered one's work, has interfered with one's ability to be in crowds, has strained relationships, and has interfered with one's ability to attend appointments. The Likert ratings allow one to ascertain whether the symptomatology might be considered mild, moderate, or severe. The pertinent items of this questionnaire are included in Items 19 through 23 of the experimental protocol (Appendix C).

The Anxious Attachment Inventory.

Examination of a number of bibliographies of psychological tests (Buros, 1970; 1975; Chun, Cobb, & French, 1975; Goldman & Osborne, 1985; Sweetland & Keyser, 1983), failed to locate any instrument that might adequately measure the three patterns in parenting. Neither the Maternal Overprotection Scale (Furse & L. Solyom, 1968) nor the Parental Bonding Instrument (Parker et al., 1979) focus specifically on the types of behaviors that Bowlby (1973b) described as undermining security in attachment. The Parental Attitude Rating Instrument (Schaefer & Bell, 1958) contains several relevant items but too few to constitute a valid assessment of the patterns.

It was necessary, therefore, to create an instrument which would measure retrospective report of the parenting behaviors within scales for each of the three patterns. Items for this inventory--The Anxious Attachment Inventory (AAI)--were constructed to closely adhere to those behaviors described by Bowlby (1973b).

The Anxious Attachment Inventory (AAI, Appendix D) is a list of parent's attitudes and behaviors that represent those described within Bowlby's (1973b) three familial patterns of anxious attachment. The instrument requires the participant to judge the extent to which each of 36 items characterized behaviors of his or her parents during the

participant's childhood and adolescent years. Items are to be rated for applicability to each parent along a three-point Likert scale which reads: "Not True"- zero points; "Somewhat or Sometimes True"- one point, "Mostly or Frequently True"- two points. The Inventory yields scores for the participant's mother, father, and any step-parents on Patterns A, B, and C of Bowlby's (1973b) schema.

Two main guidelines were followed in the construction of items. So as to enhance content validity, an effort was made to list attitudes and behaviors of parents which were actually cited by Bowlby (1973b) in his descriptions of the patterns. When these examples were exhausted, the types of parenting behaviors were broken down into categories and items were written to reflect these categories. These categories were based on the components of the definitions of the three patterns that were provided in the previous chapter.

A second guideline in item-construction involved developmental considerations. Whereas it is likely that the behaviors of parents that undermine security in attachment would have had a more destructive impact during the child's early years, the categorization of items as to developmental stage did not seem to be indicated. Bowlby (1973b) suggested that these patterns of behavior tend to be relatively stable in families throughout the various stages of development. An attempt was made, therefore, to create items which, for the greatest part, were not stage-specific.

Construction of the inventory took place in several stages. Sixty-three items were written by the experimenter to reflect Bowlby's (1973b) three patterns. To establish construct validity, categorization of the items was carried out by two doctoral-level, clinical psychologists. These clinicians were asked to read the several chapters of Bowlby (1973b) that describe his patterns of anxious attachment. The raters were then required to categorize each item as to which pattern it represented. The ratings were done independently. An item was accepted

only if both of the raters were in agreement with the experimenter as to the appropriate category for the item.

The final instrument contains 12 items for each pattern. Seven items that had been rated concordantly by the raters were eliminated so as to make an equal number of items per scale. The seven items were primarily rejected by the criterion of redundancy.

The Defense Mechanisms Inventory.

Traditionally, clinical interviews and projective tests have been the principal methods for identifying the pattern of defenses employed by an individual. Within the past 30 years, however, a number of inventories have been constructed to assess defense preference (Goldstein, 1952; Joffe and Naditch, 1977; Plutchik, Kellerman, and Conte, 1979; Schutz, 1967). After reviewing the literature on the defense preference inventories, Ihilevich and Gleser (1986) concluded that each of these instruments have many unresolved validity problems. Of the defense preference instruments, only one--the Defense Mechanism Inventory (Ihilevich & Gleser, 1986)--has been demonstrated to possess sufficient reliability and validity to recommend its use in a design such as this.

The DMI (Appendix F) contains 10 vignettes that describe conflictual situations. Directions for the test instruct the participant to choose--from sets of answers that represent four levels of experience (actual behavior, fantasy behavior, thought, and affect)--one response that is most representative and one that is least representative of how he or she would react to each situation. The directions are clear and the level of reading comprehension required appears to be that which is required to understand a newspaper article (Ihilevich & Gleser, 1986). People typically take 30 to 45 minutes to finish the test (Ihilevich & Gleser, 1986). Separate test booklets are used for male and for female adults, adolescents, and the elderly. Test norms have been published for each of these groups.

Thilevich and Gleser (1986) describe their classification schema for the defenses as having been constructed to match a set of coping skills. The DMI defenses, therefore, represent general categories of defenses and these subsume the classical defense mechanisms. The five DMI categories of defense mechanisms are:

1. Turning Against Object (TAO). This defense category involves the expression of direct or indirect aggression in a manner that would protect the self from perceived external threats or mask inner conflicts which are too painful to confront consciously. The classical defense of identification-with-the-aggressor is considered to fall within this category.

2. Projection (PRO). This defense strategy involves the attribution of negative intent or characteristics to others so as to justify the expression of hostile thoughts, behaviors, and feelings toward others. This scale represents most forms of projection identified in the clinical literature.

3. Principalization (PRN). This defensive process falsifies reality by reinterpreting it through the use of general principles so that the individual's attention is redeployed from specific or affective issues to abstract issues. Principalization encompasses such classical defense mechanisms as intellectualization, rationalization, and isolation.

4. Turning Against Self (TAS). Under this defensive style are subsumed intrapunitive maneuvers which reduce threat to self-esteem by expecting the worst.

5. Reversal (REV). This group of defenses involves responses to internal or external threats which minimize the severity of the perceived threats or conflicts and fail to acknowledge the existence of otherwise obvious dangers. The classical defenses of denial, negation, repression, and reaction formation have been subsumed under this category.

Ihilevich and Gleser (1986) provided a comprehensive review of studies that are relevant to the reliability and validity of the DMI. Based on this review, the DMI appears to have good internal consistency, averaging about .72 for the five scales. Scores seem to be stable over time. Retest reliabilities of the scales after a period of one week have averaged in the mid-.80's.

Pertinent to the hypotheses of this study are the defenses of Reversal and Projection. Ihilevich and Gleser (1986) presented a variety of evidence to demonstrate that the defense of repression is represented by the REV scale and that the defense of projection is represented by the PRO scale. The REV scale has been found to be negatively correlated with the Aggression Index of the MMPI (Gleser & Ihilevich, 1969), the Suspiciousness Scale of the ISI (Shea, 1981), and a measure of coping ability (Yu, 1981). The PRO scale has been demonstrated to correlate with Cattell's 16 PF scale for Suspiciousness (Gleser & Ihilevich, 1979), with the Interpersonal Style Inventory scale for Hostility (ISI, Shea, 1981), and negatively with the Trusting scale of the ISI (Shea, 1981). It would appear, then, that the findings converge to support the validity of these scales for assessing the pertinent defense preferences.

The Borderline Syndrome Index.

For exploratory purposes and to provide a gauge of general level of psychopathology, the Borderline Syndrome Index (BSI, Appendix E) was also included in the protocol. The BSI (Conte, Plutchik, Karasu, & Jerrett, 1980) is a self-report questionnaire composed of 52 items presented in a yes-no format. The BSI was constructed to provide the clinician with information important to ascertaining a diagnosis of borderline personality disorder. The items reflect aspects of personality that have been cited in the literature as being characteristic of borderline patients and incorporate the criteria for borderline personality disorder listed in DSM-III (APA, 1980).

Three studies--Conte et al., (1980), Edell (1984), and Serban, Conte, & Plutchik, (1987)--yielded consistent findings concerning the reliability and validity of the instrument. In the initial study--Conte et al. (1980)--the BSI was completed by 50 "normal" individuals, 36 nonpsychotic, depressed outpatients, 35 patients diagnosed with borderline personality disorder, and 20 inpatients diagnosed with schizophrenia. The internal consistency of the BSI was .92 (computed by the Kuder-Richardson Formula 20). An item-analysis indicated that the most discriminating items were concerned with impaired object relations, impulsivity, emptiness, depression, depersonalization, and lack of self-identity.

The BSI appears to possess strong discriminant validity. Conte et al. (1980) found that the BSI significantly discriminated borderline patients from normal individuals, depressed outpatients, and schizophrenic inpatients. Cross-validation of the BSI was carried out on independent samples of borderline and nonborderline patients and, it was found to significantly discriminate between the two diagnoses. In a study of 132 patients, Edell (1984) failed to find any significant correlations between demographic variables and BSI scores.

The only substantive issue to emerge regarding discriminant validity concerns whether the BSI can discriminate persons who are best diagnosed with schizotypal personality disorder from those diagnosed with borderline personality disorder. Both Edell (1984) and Serban et al. (1987) found that the BSI is not effective in making this distinction. Based on this finding and the high correlation of BSI score with most of the scales on the MMPI, Edell (1984) concluded that the BSI taps a general rather than a specific dimension of psychopathology. He suggested that this dimension might be described as a generalized deficiency in coping with life and resultant feelings of hopelessness and worthlessness. For the purposes of this study, the capacity of the instrument to make this differential diagnosis is not

important as it is included for use as a gauge of general level of psychopathology.

Pertinent to this study is the normative data on the instrument. In Conte et al. (1980), only five percent of the borderline patients obtained a raw score of 13 or less. At the same time, approximately 92 percent of the subjects in the Normal group obtained a raw score of 13 or less. Similarly, two-thirds of the borderline patients obtained a raw score of 22 or greater, whereas only one percent of the Normal group obtained such a score. Across each of the three studies, the mean score for the borderline groups ranged between 22 and 23.8.

Procedure

The participant was provided a packet that contained a letter of introduction and purpose (Appendix A), a participant rights agreement (Appendix B), and the various instruments. The participant was instructed to telephone the experimenter (via a collect call) should he or she have any questions or concerns about any item, the nature of the study, or the procedures employed to ensure confidentiality. Only one call was received and this was in regard to two items of the DMI.

The tests were presented in a single order. This order was: the letter of introduction, the participant rights agreement, the Demographics Questionnaire, the AAI, the BSI, and the DMI.

Given the difficulties inherent to recruiting individuals who tend to be avoidant, it was considered necessary to increase incentive by offering a monetary payment to those who completed the protocol. The final page of the packet contained a form for the request of both a summary of the results and receipt of a \$15 check. A check for \$15 was, therefore, mailed to each participant upon receipt of the protocol.

Each packet was returned by mail to the Michigan State University Psychology Department in an envelope that had been stamped and addressed by the experimenter. Upon receipt of the completed protocol, the page which identified the participant was detached. This was done so that

the participants' identities could not be linked to the responses.

Design

Participants were assigned to the Panic Disorder (PD) group where four criteria were met. The first criterion was recruitment from a panic disorder support group. Second, the participant was to answer "yes" to the items that described experience of panic states (Demographics Questionnaire, Items 13 and 14) and was to report the experience of at least four of the DSM-III-R characteristics of a typical attack (Item 15). Third, assignment to the PD group necessitated that the individual reported having experienced at least four unanticipated attacks within a period of four weeks or, that the fear of having an attack persisted for at least one month (Items 16 and 17). Finally, if medical diagnosis with one of the five physical conditions that mimic panic attacks was reported (Item 18), the participant's protocol was dropped from the study. This occurred in six cases.

To test the hypotheses pertaining to defense preference, it was necessary to divide the PD group into a Panic Disorder without Agoraphobia (Pan-Only) group and a Panic Disorder with Agoraphobia (Pan-Agor) group. For the Pan-O group, a participant qualified for the PD group but did not indicate the experience of any symptoms of agoraphobia. Assignment to the Pan-A group required that the individual attain a score of at least four on the items for agoraphobic symptoms (Items 19 through 23). This indicated self-report of at least mild agoraphobia.

Assignment to the Nonclinical Control group (NCC) was made on the bases of recruitment from the parent-teacher groups and failure to satisfy the criteria for diagnosing panic disorder or agoraphobia. Individuals recruited from these groups were also to be dropped from the study if they indicated that they had been diagnosed with depression.

The Clinical Control group (Alcohol Support group, ASP) was

recruited from AA groups in western Oregon. Assignment to the ASP group was to be made on the bases of report of a diagnosis of alcoholism (item 18) and failure to satisfy the criteria for diagnosing panic disorder or agoraphobia.

CHAPTER IV

Results

The Anxious Attachment Hypothesis

Means and standard deviations of the groups' performances on the AAI scales and t -values for the hypothesis tests are presented in Table 2. The Panic Disorder (PD) group scored higher than the Nonclinical Control (NCC) group on each of the Anxious Attachment Inventory (AAI) scales for the patterns in parenting ($p < .001$). These differences were in the predicted direction.

However, the PD group scored lower than the Alcohol Support (ASP) group on the three AAI scales (Pattern A: $p < .05$; Pattern B: $p < .001$; Pattern C: $p < .01$). These differences were in the opposite direction of what had been predicted by the hypotheses.

Correlations between the AAI scales and the variables pertaining to demographics are presented in Table 3. Very small, statistically nonsignificant correlations were manifested between the AAI scales and the three demographic variables--age, sex, and race--which might have impacted the results as moderator variables. Without evidence of moderator variables, it appears that the t -tests provided an adequate analysis for the hypothesis tests.

There were, however, small but statistically-significant negative correlations between the AAI scales and the measures for marital status and education. Recall that the Nonclinical Control group scored higher than the two clinical groups on the measure for education and, the ASP group had fewer married participants than the NCC and PD groups. Therefore, analyses of covariance were carried out, correcting for Education and Marital Status.

Outcome of the comparisons between the NCC and PD groups corrected for Education, were the same. These are cited in Table 2.

The comparisons between the PD and ASP groups, corrected for Marital Status, resulted only in one change. The difference between

Table 2
Means, Standard Deviations, and Significance Tests
for the Anxious Attachment Hypotheses

AAI Scale						Corrected
Group	<u>M</u>	<u>sd</u>	2-Tailed <u>t</u> -value	DF	2-Tailed Prob.	2-Tailed Prob.
Pattern A						
<u>PD</u>	15.5	5.7	4.03	78	.0002	.002 (E)
<u>NCC</u>	10.6	5.0				
Pattern B						
<u>PD</u>	5.8	4.9	3.65	78	.0005	.004 (E)
<u>NCC</u>	2.6	2.6				
Pattern C						
<u>PD</u>	8.5	7.8	4.14	78	.0001	.001 (E)
<u>NCC</u>	3.1	2.9				
Pattern A						
<u>PD</u>	15.5	5.7	-2.11	58	.039	.109 (M)
<u>ASP</u>	18.9	6.5				
Pattern B						
<u>PD</u>	5.8	4.9	-4.77	58	.0002	.0005 (M)
<u>ASP</u>	14.5	9.3				
Pattern C						
<u>PD</u>	8.5	7.8	-3.32	58	.002	.028 (M)
<u>ASP</u>	15.9	8.8				

Notes. (E): Corrected for Education.

(M): Corrected for Marital Status.

Table 3
Correlations Between the AAI Scales and Variables for Demographics

Variable	Pattern A	Pattern B	Pattern C
Age	-.09	-.14	-.18
Sex	.10	.13	.16
Race	-.05	-.06	.01
Marital Status	-.27**	-.37***	-.37***
Education	-.26**	-.26**	-.32**

Note. N = 100.

*: $p < .05$, two-tailed.
 **: $p < .01$, two-tailed.
 ***: $p < .001$, two-tailed.

the PD and ASP groups on Pattern A failed to attain the .05-level of statistical significance ($p = .109$). This is still a trend.

There is, of course, a serious question as to whether correcting for Marital Status is appropriate. The difference in marital status--the lower percentage married in the ASP group--may reasonably be understood as having been effected, in part, by the deleterious impact of the developmental conditions measured by the AAI. If this were the case, correcting for Marital Status means correcting for a difference between the groups that we wish to study. However, with or without the corrections, the findings are largely the same.

Disqualification of the clinical control group.

The finding of differences in the opposite direction of those predicted for the ASP or clinical control group, unfortunately, cannot be interpreted in regard to the hypotheses. Within the ASP group, self-report of symptoms of panic attacks and agoraphobia violated the criteria set forth in the Design section and, thus, disqualified its use as a control group.

Prior to distribution of the protocols, each of the recruits from the ASP group stated in response to inquiry, that he or she had never been diagnosed with or treated for panic disorder or agoraphobia. In response to the diagnostic items on the questionnaire, however, 15 of the 20 participants indicated both a history of panic attacks and current symptoms of agoraphobia. A comparison of the groups along variables pertinent to panic disorder, agoraphobia, and other psychiatric disorders is presented in Table 4.

Whereas the PD group tended to score higher than the ASP group on each of the indicators of panic disorder and agoraphobia (Panic Symptom Severity, Fear of Dying, Fear of Losing Control, Fear of Going Crazy, Agoraphobic Severity, Work Interference, Crowd Avoidance, Interference with Daily Living, and Relationship Impairment), the only differences to attain statistical significance were reported Severity of Panic Disorder

Table 4
Group Means of the Panic Disorder Group and Alcohol Support Group on
Variables for Panic Disorder, Agoraphobia, and Psychiatric Disorder

	<u>PD</u>	<u>ASP</u>	<u>2-Tailed t</u>	<u>Probability</u>
Variable				
# of symptoms During Typical Attack (Panic Symptom Severity)	6.47	4.50	2.18	.033*
Fear of Dying	.40	.15	1.99	.051
Fear of Losing Control	.55	.30	1.85	.069
Fear of Going Crazy	.35	.25	.77	.441
Total Score on Agoraphobia Items (Agor. Severity)	4.97	3.45	1.39	.170
Travel Inhibition	1.42	.75	2.22	.030*
Work Interference	1.30	.95	1.08	.285
Crowd Avoidance	1.23	1.00	.72	.473
Interference with Daily Living	1.03	.75	.99	.322
Relationship Impairment	1.17	.75	1.48	.144
Depression	.55	.60	-.36	.718
Borderline Syndrome Index	17.70	24.10	-2.25	.028*

Note. DF = 58.

*: $p < .05$

($p < .05$) and report of Travel Inhibition ($p < .05$). For the ASP group, the level of agoraphobic symptoms might be classified as being in the mild range of severity. The symptom severity of the PD sample might be classified as moderate.

The only other statistically significant difference between the groups was on the Borderline Syndrome Index (BSI). The ASP group scored higher on the BSI than the PD group ($p < .05$) and, the mean score of the ASP group exceeded the criterion for diagnosis of borderline personality disorder (a BSI score of 22). It would appear, then, that the ASP group demonstrated more broad or severe symptomatology than did the PD group.

The Anxious Attachment Inventory.

Insofar as the AAI generates scores for each parent or parent-figure on the three scales, it was necessary to determine how to best summarize the scale scores for comparisons across the groups. For each participant, identification of two primary parents was readily accomplished by reading the brief descriptions of the participants' family compositions requested in the AAI. A comparison of the groups on scale scores for both mothers and fathers are listed in Table 5. The outcome of the comparisons were no different from those yielded in comparisons between the groups on scale scores that were constituted of the sum of both parents' scores. Accordingly, throughout the data analyses, the aggregated score is used to describe scores on the AAI scales.

Reliability of the AAI.

Reliability scores for the scales of the AAI are listed in Table 6. For this analysis, Cronbach's Alpha--a statistic which is based on the average correlation between items (the internal consistency) and the number of items in the scale--serves as the best estimate of reliability. The reliability estimates of the scales for Patterns B and C were satisfactory (.88 and .85, respectively). The reliability estimate of the scale for Pattern A was relatively weak (.62).

Table 5
Group Means on the AAI Scales
(Differentiated for Mother and Father Scores)

	<u>PD</u>	<u>NCC</u>	<u>ASP</u>
Scale			
Pattern A-Mother	8.32	5.90	10.50
Pattern A-Father	7.25	4.80	8.45
Pattern B-Mother	2.45	1.65	8.10
Pattern B-Father	3.17	1.05	6.45
Pattern A-Mother	4.35	1.92	9.00
Pattern B-Father	4.27	1.77	6.90

Table 6
Reliability Coefficients for the AAI Scales

AAI Scale	<u>M</u>	<u>sd</u>	<u>M</u> inter-item correlation	Cronbach's Alpha	Guttman Split-Half
Pattern A	14.24	6.42	.133	.616	.749
Pattern B	7.85	8.14	.393	.877	.884
Pattern C	6.23	6.81	.369	.846	.800

Note. N = 100.

Given the finding of statistically significant differences between the groups on the Pattern A scale, this level of estimated reliability is acceptable.

For the first trial of a newly constructed test, these reliability estimates might be regarded as favorable. It must be cautioned, however, that further work in test construction is necessary before the instrument can be regarded as a psychometrically-viable instrument. The most glaring need is, of course, investigation into the relatively low reliability of the scale for Pattern A.

A factor analysis of the 12 items that constitute this scale, indicated that the scale might best be defined according to three factors (with eigenvalues of 3.12, 1.90, and 1.15). An examination of the factor loadings (listed in Table 7) and the content of the corresponding items (Appendix D) is suggestive of both the make-up of the scale and the shortcomings of several of its items.

It appears that the items which primarily contribute to Factor 1 (Items 1, 2, 6, 11, 14, and 16) center around the closure of boundaries to the world outside of the family. These are the items which describe the parent's general mistrust of outsiders and discouragement from or restrictions upon activities outside of the family. Analysis of the groups' performances on these items (listed in Table 8), indicates statistically significant differences between the Panic Disorder and Nonclinical Control group on four of the six items. This would attest to the validity of these items for this scale.

The loadings for Factor 2 suggest that these items might be best interpreted as those that had been intended to tap report of the violation of intergenerational boundaries within the family (Items 9, 29, 33, and 36). An examination of Table 8 finds that, only for Item 29--relating to the inappropriate confiding of difficulties in the parent's marriage--was there a statistically significant difference in the expected direction. Conversely, there was also a statistically

Table 7

Normalized Factor Loadings for the Three Factors within Scale A

Item	Factor 1	Factor 2	Factor 3
Item 1	-.776	.044	-.042
Item 2	-.600	-.325	.271
Item 6	-.541	-.067	-.311
Item 9	.373	.516	.344
Item 11	-.530	-.120	.046
Item 14	-.610	-.067	-.138
Item 16	-.750	.045	.070
Item 20	-.250	-.298	.587
Item 29	-.258	.764	-.172
Item 30	-.292	.129	.589
Item 33	-.547	.619	-.146
Item 36	.061	.652	.314

Note. N = 100.

Table 8
Comparisons of the Groups on Pattern A Items

Item	PanDis		NCC		ASP	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
Item 1	.85	1.16	.22**	.57	1.55*	1.14
Item 2	2.85	1.21	1.40***	1.35	2.55	1.09
Item 6	1.55	1.31	1.30	1.45	2.10	1.37
Item 9	1.17	1.28	2.00**	1.36	1.15	1.27
Item 11	.60	1.10	.12	.46	1.10	1.16
Item 14	1.70	1.67	1.05	1.37	2.25	1.45
Item 16	1.07	1.44	.32**	.73	1.90*	1.25
Item 20	1.95	1.22	1.30*	1.21	1.45	1.27
Item 29	.75	1.06	.67	.86	1.15	1.39
Item 30	2.20	1.18	1.55*	1.34	2.15	1.42
Item 33	.32	.72	.05*	.22	.85*	1.22
Item 36	.60	1.10	.55	1.04	.75	.97

Note. (1) Significance levels are for comparisons between both the Panic Disorder group and the Nonclinical Control group (df = 78) and the Panic Disorder and the Alcohol Support group (df = 58).

*: $p < .05$, two-tailed;

** : $p < .01$, two-tailed;

***: $p < .001$, two-tailed.

significant difference on Item 9, but this was in the direction opposite to what was expected. An item-analysis indicated that elimination of Item 36 from the scale would increase Cronbach's Alpha to .71. Scores on this item did not significantly differ between the groups. Clearly, then, Items 9 and 36 fail to address the violation of intergenerational boundaries that is implied by the concept of Pattern A parenting and, consequently, they should be replaced by more suitable items.

The third factor might best be labelled "Parent's Competence." The two items that contribute significantly to this factor--Items 20 and 30--involve quality of the parent's involvement in life outside of the family and capacity to assist the child in coping with anxiety. Statistically significant differences on these items across the Panic Disorder and Nonclinical Control groups substantiate the suitability of these items of the scale.

Correlations of AAI scales and selected variables.

Correlations between the AAI scales and variables pertaining to symptomatology are presented in Table 9. Each of the patterns was correlated with the variables for depression, alcohol abuse, and borderline personality disorder ($p < .001$). This seems to attest to the validity of the AAI for tapping pathogenic aspects of the parenting behaviors.

The correlational analysis failed to indentify any clear-cut effects of the specific patterns in parenting upon variants of psychopathology. This might be accounted for, in part, by the substantial intercorrelation of the scales (ranging from .60 to .78). These are listed in Table 10. Again, the lack of differences might also be a product of a general pathogenic effect of the patterns.

Summary.

Statistically significant differences between the PD and NCC groups across the AAI scales, supported the developmental hypotheses. A correlational analysis did not reveal any moderating influence of

Table 9
Correlations Between AAI Scales and Variables for
Panic Severity, Agoraphobic Symptoms, and Psychiatric Disorder

Variable	Pattern A	Pattern B	Pattern C
Severity of Panic	.42***	.30**	.41***
Agoraphobic Severity	.40***	.31**	.37***
Travel Inhibition	.31**	.23*	.31**
Relationship Impairment	.36***	.30**	.32***
Work Interference	.41***	.30**	.33***
Crowd Avoidance	.41***	.31**	.41***
Interference with Daily Living	.39***	.31**	.33***
Depression	.42***	.36***	.52***
Alcohol Abuse	.34***	.60***	.60***
BSI	.50***	.46***	.57***

Note. N = 100.

*: $p < .05$, two-tailed.

** : $p < .01$, two-tailed.

***: $p < .001$, two-tailed.

Table 10
Correlations Between AAI Scales

AAI Scale	Pattern A	Pattern B	Pattern C
Pattern A	1.00	.60***	.61***
Pattern B	.60***	1.00	.78***
Pattern C	.61***	.78***	1.00

Note. N = 100.

***: $p < .001$, two-tailed.

demographic variables.

The disqualification of the ASP group as a control group because they manifested symptoms of panic disorder, precluded a test of the hypothesis that exposure to behaviors of parents which fostered anxiety surrounding security of attachment differentiates the developmental histories of persons who suffer panic anxiety from those who suffer other psychiatric disorders. Correlational analyses, however, seemed to point to a general pathogenic effect of the patterns of anxious attachment.

For the first administration of a test, the AAI scales demonstrated surprisingly satisfactory estimates of reliability. The one exception was the scale for Pattern A. Further efforts in test construction are needed before the AAI can be considered a psychometrically-viable instrument.

The Defense Preference Hypotheses

The statistical analyses pertaining to the defense preference hypotheses were carried out within the data from the PD group. Ten individuals within this group indicated that they experienced no symptoms of agoraphobia. This group of ten participants is referred to as the Panic-Only (Pan-O) group. The remaining 30 individuals attained a score of at least four on the items for self-report of agoraphobic symptoms. This indicates at least mild agoraphobia. This group is referred to as the Panic Disorder with Agoraphobia (Pan-A) group. Across the demographic variables, there were no statistically significant differences between the Pan-O and Pan-A groups.

Means, standard deviations, and significance tests for the first two defense preference hypotheses are presented in Table 11. Whereas the groups differed on the two pertinent DMI scales--REV (Reversal, i.e., repression) and PRO (Projection)--in the predicted directions, these differences were not statistically significant. It would appear that, on the REV scale, the difference between the groups began to

Table 11
Means, Standard Deviations, and Significance Tests
for the Defense Preference Hypotheses

	Pan-A (n = 30)		Pan-O (n = 10)		2-Tailed	2-Tailed
	<u>M</u>	<u>sd</u>	<u>M</u>	<u>sd</u>	<u>t</u> -test	probability
DMI Scale						
REV	38.67	8.93	41.80	7.63	-.994	.327
PRO	39.97	4.69	39.10	5.53	.485	.631

approach statistical significance ($p = .32$). It is feasible that the DMI scales were not sensitive enough to yield statistically significant differences with a sample this small.

The third defense preference hypothesis predicted that, within the Pan-A group, scores on the scale for projection (PRO) would be correlated with scores on the variable for severity of agoraphobia. Whereas a small correlation was manifested between these variables ($r = .24$), it failed to meet the .05 level of significance ($p = .425$). The pertinent statistics are cited in Table 12.

Whereas the correlation between the PRO scale and the variable for severity of agoraphobia was small, examination of Table 12 reveals that, of the DMI scales, the PRO scale was the most highly and consistently correlated with the agoraphobia variables. Correlations that approached statistical significance were also manifested between the scale for Turning Against the Object (TAO) and report of agoraphobic symptoms. These were, however, negative correlations.

Patterns of defense preference across groups.

That scores on the PRO scale tended to be correlated with scores on the variables for report of agoraphobic symptoms should not be interpreted as meaning that projection was the primary defense preference of the Pan-A group. Examination of the order of defense preferences across the groups--listed in Table 13--reveals that the Pan-O and the Pan-A groups actually scored highest on the PRIN (Principalization) scale.

Given that principalization is the highest-order defense, this finding may seem quizzical. It is possible that, prior to treatment, principalization did not characterize the groups. The Pan-O group presented an average length of treatment of nine months, the average length of treatment reported by the Pan-A group was 2 years, 10 months. Length of treatment was correlated with scores on the PRIN scale for both the Pan-O group ($r = .27$, $p < .05$) and the Pan-A group ($r = .43$,

Table 12
Correlations Between DMI Scales and Variables for Agoraphobic Symptoms

	PRO	REV	PRIN	TAS	TAO
Agoraphobia Variable					
Agoraphobic Severity	.24*	.15	.07	.05	-.22
Travel Inhibition	.05	.20	.20	.08	-.31
Work Interference	.34	-.06	.08	-.22	.05
Crowd Avoidance	.15	.07	-.06	.29	-.20
Interference with Daily Living	.23	.27	.02	.02	-.25
Relationship Impairment	.41**	-.29	-.22	.06	.10

Note. N = 30.

*: $p = .425$

** : $p < .05$.

Table 13
Order of Defense Preference for the Groups

	Pan-A n=30	Pan-O n=10	NCC n=40	ASP n=20
DMI Scale Order				
1.	PRIN	PRIN	PRIN	TAO
M:	45.70	46.20	47.52	43.45**
<u>sd:</u>	5.51	8.89	6.57	7.24
2.	TAS	REV	TAO	TAS
M:	41.67	41.80	39.25	43.15**
<u>sd:</u>	8.34	7.63	7.73	8.61
3.	PRO	PRO	REV	PRIN
M:	39.97	39.10	38.85	41.85*
<u>sd:</u>	4.68	5.53	7.90	7.50
4.	REV	TAS	PRO	PRO
M:	38.67	38.00	38.27	39.70
<u>sd:</u>	8.93	6.48	5.54	6.21
5.	TAO	TAO	TAS	REV
M:	35.23	34.90	36.10**	31.85*
<u>sd:</u>	10.45	14.42	8.23	9.11

Note. Significance levels are for comparisons with the PD group where
n = 40.

*: $p < .05$, two-tailed.

**: $p < .01$, two-tailed.

$p < .001$). It might also be noted that, based upon scores on the BSI, neither group could be diagnosed with borderline personality disorder (Pan-O, $M = 10$; Pan-A, $M = 19.80$; where a positive diagnosis requires a BSI score of 22).

More important to the investigation of panic disorder and agoraphobia are the differences in the rank-order of defense preference. Perhaps the most interesting of these differences is the position of performance on the scale for Turning Against the Self (TAS). For the Pan-A group, this defense was, on the average, second in order of preference. For the Pan-O group, TAS ranked second to last. The differences on this scale for these groups approached statistical significance ($p = .21$).

It is also noteworthy that both groups scored lowest on the TAO scale. The difference between the PD group and NCC group on the TAO scale also began to approach statistical significance ($p = .195$). Differences between the PD and ASP groups in performance on the TAO scale were statistically significant ($p < .01$), with the ASP group having the higher mean. Thus, alcoholic persons seem to defensively turn against others more often than do panic disorder patients.

Correlation of the AAI scales with the DMI scales.

At the outset of the study, it was hoped that the scores on the AAI scales would be correlated with scores on the DMI scales such that well-defined links between developmental conditions and defense preference could be identified. This did not turn out to be the case. As indicated in Table 14, the correlations tended to be quite small.

Summary.

The defense preference hypotheses were somewhat supported by the data. The Pan-O and Pan-A groups differed in their performances on the REV and PRO scales in the predicted direction but these differences were not statistically significant. It seems likely that these DMI scales were not sensitive enough to detect differences with samples this small.

Table 14
Correlations Between AAI Scales and DMI Scales
for the Panic Disorder Group

	PRIN	TAS	PRO	REV	TAO
AAI Scale					
Pattern A	-.23	.19	.16	-.06	-.07
Pattern B	-.05	.02	-.24	.23	-.10
Pattern C	.01	.07	-.20	.15	-.16

Note. N = 40.

The hypothesis that performance on the PRO scale would be correlated with performance on the variable for severity of agoraphobic symptoms received slight support. Whereas the correlation between these variables was low and failed to attain statistical significance, PRO was the only DMI scale to be consistently correlated with the self-reported symptoms of agoraphobia.

In spite of the presence of slight trends concerning the REV and PRO scales, the PD group scored highest on the PRIN scale. Along with scores on the BSI, correlations between the PRIN scale and report of length of treatment seem to suggest that the primacy of this defense preference was effected both by treatment and the lack of severe personality disorder.

More interesting to the investigation of panic disorder and agoraphobia were the differences in the relative position of scores on the TAS and TAO scales. Whereas TAS was a preferred defense of the Pan-A group, it ranked second to last within the Pan-O group. TAO ranked last in both of these groups but ranked second in the NCC group and first in the ASP group.

CHAPTER V

Discussion

Methodological Considerations

Prior to interpreting the results, a number of concerns about the methodology must be considered. Specifically, these concerns involve issues surrounding characteristics of the sample and aspects of the instruments.

The samples.

Application of the findings to the larger population of persons who suffer panic disorder and agoraphobia must be done with a measure of caution. The support groups utilized for recruitment yielded samples which were demographically homogenous. The great majority of the participants were Caucasian, middle-class women. Whereas this sample may be representative of the demographic characteristics of Oregonians who seek treatment for panic disorder or agoraphobia, it clearly lacks generalizability.

Of course, the greatest shortcoming of the methodology concerned the failure to attain a valid clinical control group. Assignment to the clinical control group was to require no indication of the experience of panic anxiety or agoraphobia. Unfortunately, there was such a high percentage of participants within the ASP group who reported symptoms of panic and agoraphobia that it was not possible to recruit a sufficient number of participants to achieve this criterion. Consequently, the hypotheses that were aimed at determining whether experience of parenting behaviors which undermined security surrounding attachment differentiates the developmental histories of persons suffering panic from those who suffer other psychiatric disorders were not directly tested.

In hindsight, it is apparent that the appropriate clinical control group would have been a group of people diagnosed with Generalized Anxiety Disorder. To control for length of treatment and to provide a

more valid means of diagnosis, recruitment might have been best carried out among incoming patients at an anxiety disorder clinic.

The measures.

One issue that undermined the straightforward interpretation of the data arose from a deficiency in the diagnostic items of the questionnaire. Among the items used to identify history of panic anxiety, there was no item to ascertain how long it had been since the participant last experienced a panic attack. Without this knowledge, the effect that remission of symptoms may have had upon defense preference could not be ascertained or controlled for.

A second concern pertaining to the measures involves interpretation of the DMI scores. Examination of the mean scores on the DMI scales reveals that the only statistically significant differences across the scales would be between the most and least preferred scales. It would appear, therefore, that utilization of fairly large samples would be required to identify more refined differences in defense preference, such as the differential employment of projection and reversal that had been hypothesized.

Pathogenic Patterns in Parenting

Examination of patterns in the groups' mean scores on the three AAI scales (Table 2) reveals a clear relationship: the mean scale scores of the Panic Disorder group fell midway between the mean scores of the Nonclinical Control and Alcohol Support (ASP) groups. In light of a parallel relationship between the groups' scores on the Borderline Syndrome Index (BSI) and a substantial correlation between the AAI scales and the BSI, it would appear that the AAI identifies developmental conditions that render a susceptibility to panic anxiety and borderline pathology. This is consistent with Bowlby's (1973b) contention that anxiety surrounding attachment underlies much of psychopathology. An understanding of the relationship between the developmental conditions and differences in symptoms of anxiety

experienced might be advanced by a consideration of the content of the scales and the patterns of defense preference.

The findings of the factor analysis provide some insight into the familial conditions described within Pattern A. Recall that the first or primary factor involved the parent's portrayal of the world outside the family as dangerous and his or her anxious restrictions upon the child's activities outside of the family. From these items, one gets the impression that this pattern indicates that there had been a good deal of pressure upon the child to resonate with the parent's projections. In light of the second factor, it seems likely that this pressure was compounded by the failure of the parent to provide the anxious child with competent coping skills. This type of enmeshment should not be mistaken for a healthy sense of closeness. The item analysis indicated that the participants in the PD group did not perceive relationships with their parents to be warm or intimate. In fact, it is feasible that parents who were deficient in a sense of competence would have demonstrated a substantial measure of intolerance toward the demands of parenting.

Patterns B and C appear to identify more direct threats of abandonment and more chaotic familial interactions. The increased severity of threat is likely to reflect a greater degree of deficiency in the parent's capacity for differentiation. The poorly differentiated parent is one who is little able to cope with anxiety on his or her own. When under stress, this parent tends to affectively spill over the boundaries of other family members by presenting fears about his or health, by threatening to leave the family, by aggressing, or by threatening to dispel the child from the family. The correlation of these patterns with the variables pertaining to psychopathology indicates both the tendencies of the poorly adjusted parent to threaten abandonment and the deleterious effect of such threats.

Perhaps the most interesting aspect of the relationship between the

patterns and the symptomatology is that the most obvious or more severe threats of abandonment do not appear to foster panic disorder, per se. This should not be construed as weakening the tenet that the undermining of security surrounding attachment plays a central role in engendering susceptibility to panic anxiety. Instead, it would seem that the more subtle or intermediate level of threat allowed the family to preserve a substantial degree of cohesion. The findings concerning defense preference suggest that this cohesiveness was likely to have been maintained by the repression of conflict and the projection of aggressive impulses on to strangers and phobic stimuli. These defenses, in turn, engender susceptibility to the experiencing of symptoms of panic and agoraphobia.

Defense Preference in Agoraphobia

The rank order of defense preference across the groups tends to support the psychoanalytic theory that repression (REV) and projection (PRO) are central defenses in panic and agoraphobic symptomatology. More important, the data seem to validate the impressions gathered from the review of psychoanalytic studies that panic disorder without agoraphobia is a neurotic condition that is characterized by higher-order defenses. Whereas the sample in this study might best be characterized as suffering mild to moderate agoraphobia, the correlation between the PRO scale and severity of agoraphobic symptoms begins to point to a relatively less developed level of personality organization among those who suffer more severe symptoms of agoraphobia.

The stronger and more interesting post hoc finding involves differences across the groups as to the type of defense employed in response to aggressive impulses. Whereas the ASP group preferred the aggressive defense of Turning Against the Object (TAO), this pattern of defense was least preferred by both the Panic-Only and the Panic with Agoraphobia groups. Conversely, the Panic with Agoraphobia group indicated that Turning Against the Self (TAS) was utilized as a primary defense.

These patterns in the data substantiate the popular observation that persons diagnosed with panic disorder tend to be repressive of aggressive impulses and that persons presenting agoraphobia tend to experience conflict concerning the outward expression of aggressive behavior. The preferred defenses seem to foster two outcomes. First, the tendencies toward repression and turning against the self help maintain familial cohesion by defusing conflict. Second, the defensive employment of turning against the self further undermines capacity for autonomous functioning as the person simply does not feel competent enough to meet the challenges presented in the world outside of the family. Accordingly, turning against the self fosters agoraphobic avoidance and retreat to the family. Ambivalence about the retreat or concomitant threats of abandonment would appear, in turn, to be dampened by repression.

The picture of defense preference presented by the ASP group is equally instructive. The primacy of the TAO and TAS scales indicates a more regressed and less stable psychological adjustment than the type of adjustment evidenced by participants in the Panic Disorder group. Vacillation between turning against others and turning against oneself is characteristic of the upheavals in emotional life experienced by persons diagnosed with borderline personality disorder. This, then, appears to be the outcome of the childhood experience of the more chaotic familial interactions and the more obvious or severe threats of abandonment that were indicated by the comparatively high scores on the AAI.

Interestingly, it is regularly noted that recovery from alcoholism involves the increased experience of anxiety. This is, perhaps, indicative of movement away from use of the aggressive defense defined by the TAO scale. This would also be congruent with the common observation that a motive or outcome of consuming alcohol is to act out conflictual impulses.

Implications for an Etiological Theory

In spite of the lack of a valid control group, consistent patterns in the results question the viability of the currently popular biological theory of panic disorder. The finding that repression was a primary defense preference of the participants diagnosed with panic disorder is more consistent with psychoanalytic theory. The intermediate score of the Panic Disorder group on the scales of the AAI does not undermine the position that threats to security surrounding attachment render one susceptible to panic disorder. Instead, it would seem to indicate that these families retain a sufficient degree of cohesion by utilizing repression or projection as a primary defense.

In light of the pattern of results on the AAI, it would appear that there is a need for further elucidation of the role of undermined security of attachment in the formation of panic symptoms. The use of projective tests in conjunction with the AAI may be instructive in gaining further insight into the dynamics of this relationship. Pairing the AAI with other measures of family structure and functioning might similarly be useful in furthering insight into the nature of the deleterious familial forces that the scales are tapping.

The findings on the AAI are, at the very least, congruent with the current psychological theories of agoraphobia. Scores of the Panic Disorder group on the scales suggest that it is not overprotection, per se, which renders one susceptible to agoraphobia. A more accurate picture is that it is the pressure to resonate with the parent's projections and the failure of the parent to foster competent coping skills that promotes the susceptibility. This type of upbringing promotes the employment of defenses which would serve to keep conflict out of the family. Unfortunately, this style of defensive functioning creates a double-bind situation as it serves to make the outside world appear increasingly dangerousness when ambivalence within the family increases.

From this perspective, the comment of Goldstein and Chambless (1978) that the agoraphobic symptoms represent only the "tip of the iceberg" is better understood. Accordingly, efforts to build a more comprehensive etiological model for agoraphobia are likely to continue. In addition to focusing on the mechanisms of symptom formation, a productive etiological model might also address the difficulties inherent to the psychotherapeutic work of fostering the self-sufficiency of an individual whose familial system is likely to be resistant to such development.

Implications for Treatment

Practitioners who view the etiologies of panic disorder and agoraphobia within these broader psychological and interpersonal contexts are not likely to perceive the use of medication as being a viable intervention for long-range treatment. The long-range use of medication would, from this perspective, be regarded as providing the patient with a magically-imbued protector or as sedating the potential to experience the conflictual aggressive impulses. Based upon this formulation of the disorder, the overarching goals of long-term treatment would, instead, be to promote the individual's development of autonomous coping skills and to remedy the deleterious functioning of the defenses.

The use of behavioral techniques that address the symptoms of panic and agoraphobia--such as in vivo desensitization and relaxation training--are congruent with this psychological perspective. The findings might also be interpreted as providing caution to the behavioral therapist of the possibility that the patient may participate in such procedures for the purposes of safeguarding against conflict in the therapeutic relationship and, thereby, gaining assurance that the therapist will not be abandoning. Such other-directed motives would defeat the objective of fostering self-sufficient coping skills. Accordingly, emphasis upon following-through with behavioral

"homework"--outside of the interaction between the patient and therapist--becomes essential to the success of the intervention.

The findings might also be interpreted as suggesting that the success of the symptom-oriented interventions may lie in their capacity to bolster adaptive cognitive coping skills while maintaining the repression of conflictual aggressive impulses. Conversely, an optimal treatment might also utilize exposure to the phobic stimuli for the purpose of making accessible interpretation of the displaced fears or projected impulses.

Whereas the remediation of symptoms via behavioral techniques and the maintenance of repression may be preferred by some patients, others will be willing to make commitment to long-term therapy on the basis that susceptibility to the disorder is not likely to truly abate until the underlying psychological forces are addressed. Where there is a commitment to long-term psychotherapy or involvement in a therapy group, a productive avenue of intervention might involve working toward improvements in coping with anger. Given the function of the defenses in warding off conflict, maintaining familial cohesiveness, and diminishing abandonment anxiety, addressing anger must involve a more careful intervention that presupposes a longer time-frame for treatment.

In this regard, perhaps the most efficacious intervention would be to foster increased awareness of the link between aggressive impulses and projection within the context of the transference. The critical understanding to arrive at is that the experience and expression of anger does not have to eventuate in chaotic interactions or threats of abandonment. Interpretation of the developmental foundations would seem feasible at this point.

A second technique for fostering improvements in coping with aggressive impulses involves assertiveness training. Such training has been advocated by practitioners who have perceived the tendency of agoraphobic persons to turn against themselves when faced with conflict.

It would seem that the therapist who uses assertiveness training needs also to help the patient successfully cope with an inevitably increased awareness of ambivalence concerning primary relationships. Given that repression and projection had characteristically been employed after a fashion that kept such conflict from awareness, the increased awareness is likely to make the patient confused. One must also take into account that, regardless of how appropriate and clear the client asserts him or herself, the response of a marital partner or family member may be far from supportive. In essence, then, it would seem that assertiveness training should not be attempted without a cognizance of the potential ramifications of the intervention and a commitment to seeing the person through the entire process of the newfound adjustment.

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APPENDICES

APPENDIX A: Cover Letter to Participants

APPENDIX B: Research Consent Form

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APPENDIX A

COVER LETTER TO PARTICIPANTS

Developmental and Personological Factors in Agoraphobia

Your help in completing the questionnaires will be a very important contribution to helping agoraphobic persons! The purpose of this study is to test some theories about the roles that certain aspects of early family life and certain characteristics of personality play in the development of agoraphobic symptoms. The research is undertaken in the faith that working toward a better understanding of how agoraphobic symptoms develop will lead to more effective methods of treatment for the disorder.

If you have paged through the booklet, you are probably thinking that this is going to be an awful lot of work. Take heart, it is not as bad as it looks. A number of people have already filled out the booklet and it took them about 60 to 90 minutes to do so. I would suggest that you do not take too much time to think about how to respond to the items. For questionnaires like these, the first answer that comes into your mind is usually the most accurate.

I also realize that it is not realistic to expect people to use their valuable time simply for the sake of science. As an added incentive, I will send you with a check for \$15 if you complete all of the items and return the booklet by October 31, 1990. I apologize that I cannot afford to pay you a more appropriate fee. The check, however, will be mailed to the address that you are asked to provide on the last page of the booklet. This page will be separated from the pages that contain the questionnaires so that your identity will in no way be linked to your responses.

If you choose to participate in the study, you are free to discontinue your participation at any time, without penalty. Your responses to the questions will be held in strict confidence and your identity will remain anonymous. After all of the data are collected, I will send you a more detailed explanation of the study and a summary of its findings. These, again, will be mailed to the address that you provide on the last page of the booklet.

Instructions are provided with each questionnaire in the booklet. If you have any questions, please feel free to contact me by telephone. Please call collect to the telephone number listed below. I will gladly try to be of help to you.

Thanks so much for the consideration that you have shown by the interest you have expressed in the study. The efforts that you put forward in completing the questionnaires will be deeply appreciated!

With best wishes,

Gary H. Paape

Send Correspondence to:

Gary Paape, c/o Professor Bertram Karon
Psychology Research Building
Michigan State University
East Lansing, MI 48824

Or telephone: (507) 752-9630, collect

APPENDIX B

RESEARCH CONSENT FORM

MICHIGAN STATE UNIVERSITY

Department of Psychology

DEPARTMENTAL RESEARCH CONSENT FORM

1. I have freely consented to take part in a scientific study being conducted by Gary H. Paape, M.A. under the supervision of Bertram P. Karon, Ph.D., Professor of Psychology.
2. I agree to take part in the study entitled: Developmental and Personological Factors in Agoraphobia. I understand that the study investigates aspects of early family life and characteristics of personality that might play a role in engendering susceptibility to agoraphobia. I have been given a clear explanation of my part in this work.
3. I understand that I am free to discontinue my participation in the study at any time without penalty.
4. I understand that my responses to the questionnaires will be treated with strict confidence and that I will remain anonymous.
5. I understand that my participation in the study does not guarantee any beneficial results of a psychological nature to me.
6. I understand that, at my request, I can receive additional explanation of the study after my participation is completed.
7. I understand that, if I return my completed booklet by October 31, 1990, I will receive a check for \$15 as compensation for my efforts.

Return of the completed booklet will indicate your consent to participate.

APPENDIX C

DEMOGRAPHICS QUESTIONNAIRE

The following questions request information about aspects of your life and your experience of symptoms. Such information is an important part of most research of this nature. Remember, the information that you provide will be kept confidential. Please check the appropriate answer or make brief responses.

1. What is your sex? ☐ Female ☐ Male
2. How old are you? years
3. What is your race?
☐ Asian ☐ Black ☐ Hispanic ☐ Native American
☐ White
4. Are you married? ☐ Yes ☐ No ☐ Divorced ☐ Widowed
5. What is the highest level of education that you have achieved?
☐ Grade School ☐ Some High School
☐ Completed High School ☐ Associate's Degree
☐ Bachelor's Degree ☐ Graduate Degree
6. If you are married, what is the highest level of education that your spouse has achieved?
☐ Grade School ☐ Some High School
☐ Completed High School ☐ Associate's Degree
☐ Bachelor's Degree ☐ Graduate Degree
7. What was the highest level of education that your mother achieved?
☐ Grade School ☐ Some High School
☐ Completed High School ☐ Associate's Degree
☐ Bachelor's Degree ☐ Graduate Degree
8. What was the highest level of education that your father achieved?
☐ Grade School ☐ Some High School
☐ Completed High School ☐ Associate's Degree
☐ Bachelor's Degree ☐ Graduate Degree
9. What is your occupation?
10. If you are married, what is your spouse's occupation?
11. What is or was your father's occupation?
12. What is or was your mother's occupation?

For Items 15-17, if you have not regularly experienced panic attacks, please skip these items.

13. Have you had times when you have felt a sudden rush of intense fear or anxiety or feeling of impending doom?

_____ Yes _____ No (if No, skip to Item 20)

14. Have you had these feelings come "from out of the blue," or while you were at home alone, or in situations where you did not expect them to occur?

_____ Yes _____ No

15. Please check which of the symptoms you have experienced during anxiety attacks that have occurred unpredictably. Please make responses for both your most severe and you most typical anxiety attacks.

	<u>Most Severe</u>	<u>Typical Attack</u>
a. Shortness of breath or smothering sensations	_____	_____
b. Choking	_____	_____
c. Palpitations or rapid heart rate	_____	_____
d. Chest pain or discomfort	_____	_____
e. Sweating	_____	_____
f. Dizziness, unsteady feelings or faintness	_____	_____
g. Nausea or abdominal distress	_____	_____
h. Feelings of unreality	_____	_____
i. Numbness or tingling sensations	_____	_____
j. Hot flashes or chills	_____	_____
k. Trembling or shaking	_____	_____
l. Fear of dying	_____	_____
m. Fear of going crazy	_____	_____
n. Fear of doing something uncontrolled	_____	_____

16. When was your first anxiety attack?

Month _____ Year _____

17. During the time that the anxiety attacks were most frequent, how often did they occur?

_____ per week for _____ weeks

For items 19-25, if you do NOT suffer agoraphobia (chronic, intensely fearful avoidance of conditions wherein one might experience a panic attack), please skip these items!

18. Have you ever been medically diagnosed with any of the following conditions?

☐ Audiovestibular System Disturbance	
☐ Cushing Syndrome	☐ Hypoglycemia
☐ Hypothyroidism	☐ Mitral Valve Prolapse
☐ Pheochromocytoma	☐ Temporal Lobe Epilepsy

19. To what extent does agoraphobia interfere with you ability to travel?

☐ None ☐ A little ☐ Fair Amount ☐ A lot

20. To what extent does agoraphobia hinder your work?

☐ None ☐ A little ☐ Fair Amount ☐ A lot

21. To what extent does agoraphobia interfere with your ability to be in crowds?

☐ None ☐ A little ☐ Fair Amount ☐ A lot

22. To what extend does agoraphobia interfere with your ability to attend appointments?

☐ None ☐ A little ☐ Fair Amount ☐ A lot

23. How much strain is agoraphobia putting on your closest relationships?

☐ None ☐ A little ☐ Fair Amount ☐ A lot

24. Whom have you sought help with for agoraphobia?

☐ Family Doctor	☐ Psychiatrist
☐ Religious/Spiritual Healer	☐ Hypnotherapist
☐ Social Worker	☐ Psychologist
☐ Agoraphobia Support Group	☐ Other _____

25. If you have sought treatment for agoraphobia, for how long were you or have you been in treatment?

_____ Months, _____ Years

APPENDIX D

THE ANXIOUS ATTACHMENT INVENTORY

Before responding to the items of this questionnaire, please answer the following questions:

From birth to age 18, were you raised in the household of your biological (natural) mother and biological father? ☐ Yes ☐ No

If no, please describe briefly who were raised by and at what ages:

This questionnaire investigates certain aspects of one's family life from birth to age 18. It contains 36 statements that may or may not apply to your family life, during your first 18 years.

After reading the statement, please rate each parent as to whether the statement was: Not True of your parent; Somewhat True or Sometimes Happened; Mostly True or Frequently Happened. Please draw one circle around your rating for your mother (M), one circle for your father (F), and one circle for each stepparent (Stepmother: SM; Stepfather: SF).

Rate each parent on each item. Please do not skip any items, even if you have a difficult time making a rating. Don't think for too long about any one item. The first response that comes to mind is usually the best! If you were not raised by your biological parent(s), please rate the person or persons who you considered to be your true parents(s) and state that you are doing so in your response to the question that asked about who you were raised by.

	Not True	Somewhat or Sometimes True	Mostly or Frequently True
<u>Example:</u>			
Would discourage me from staying overnight at a friend's house even if it was at the invitation of my friend's parent.	M F SM SF	M F SM SF	M F SM SF
	(In this example, the person would have had a mother for whom this statement was mostly true, a biological or adoptive father for whom it was somewhat true, and a stepfather for whom it was not at all true.)		

Remember, your first thoughts are likely to be pretty accurate! Please answer each question, even if it does not seem to apply to your family experience.

	Not True	Somewhat or Sometimes True	Mostly or Frequently True
1. Described people outside of the family as being self-serving and not capable of genuine concern for my welfare.	M F SM SF	M F SM SF (Pattern A)	M F SM SF
2. Encouraged me to get involved in organizations or activities that took place after school.	M F SM SF	M F SM SF (Pattern A, - direction)	M F SM SF
3. Would tell me that I was driving him or her crazy or making him or her depressed.	M F SM SF	M F SM SF (Pattern B)	M F SM SF
4. I felt that he or she disowned me.	M F SM SF	M F SM SF (Pattern C)	M F SM SF
5. Gave me the impression that if I tried to say my true feelings to people, those people would be through with me.	M F SM SF	M F SM SF (Pattern C)	M F SM SF
6. Respected my right to privacy.	M F SM SF	M F SM SF (Pattern A, - direction)	M F SM SF
7. When angry, would throw or break things.	M F SM SF	M F SM SF (Pattern B)	M F SM SF
8. Would tell me that I was just too much for him or for her to handle.	M F SM SF	M F SM SF (Pattern B)	M F SM SF
9. Seemed to be happiest when I would spend a lot of time with him or with her.	M F SM SF	M F SM SF (Pattern A)	M F SM SF
10. When my parents had an argument, he or she would slap or push the other parent.	M F SM SF	M F SM SF (Pattern B)	M F SM SF
11. Gave me the impression that it was not that important for me to do well in school.	M F SM SF	M F SM SF (Pattern A)	M F SM SF
12. When I misbehaved, threatened to send me away from home, such as to an orphanage or to a relative's house.	M F SM SF	M F SM SF (Pattern C)	M F SM SF
13. Would hit me if I did not take care of things for him or for her.	M F SM SF	M F SM SF (Pattern C)	M F SM SF

	Not True	Somewhat or Sometimes True	Mostly or Frequently True
14. In regard to dating, gave me at least as much freedom as did the parents of most of my friends or classmates.	M F SM SF	M F SM SF (Pattern A, - direction)	M F SM SF
15. Would threaten to hurt himself or herself.	M F SM SF	M F SM SF (Pattern B)	M F SM SF
16. Gave me the impression that people outside of our immediate family were not to be trusted.	M F SM SF	M F SM SF (Pattern A)	M F SM SF
17. Let me know that if I were to do something embarrassing in public, people would ridicule me mercilessly.	M F SM SF	M F SM SF (Pattern C)	M F SM SF
18. When my parents had an argument, he or she would threaten to physically harm the other parent.	M F SM SF	M F SM SF (Pattern B)	M F SM SF
19. Gave me the impression that I should always maintain a tight control over myself.	M F SM SF	M F SM SF (Pattern C)	M F SM SF
20. Had interests in life that extended beyond parenting and the family.	M F SM SF	M F SM SF (Pattern A, - direction)	M F SM SF
21. When I was growing up, this parent self-inflicted physical injuries upon himself or herself.	M F SM SF	M F SM SF (Pattern B)	M F SM SF
22. This parent tended to give me the impression that I was a sickly person or had a weak constitution.	M F SM SF	M F SM SF (Pattern C)	M F SM SF
23. When things got stressful, he or she would leave the family for a period of at least a week.	M F SM SF	M F SM SF (Pattern B)	M F SM SF
24. This parent would attempt to control me by threatening to tell the other parent something that he or she thought would make the other parent reject or disown me.	M F SM SF	M F SM SF (Pattern C)	M F SM SF
25. Would tell me that things were too much for him or her to handle and would threaten to leave the family.	M F SM SF	M F SM SF (Pattern B)	M F SM SF

	Not True	Somewhat or Sometimes True	Mostly or Frequently True
26. Gave me the impression that most members of the opposite sex were out to take advantage of me.	M F SM SF	M F SM SF (Pattern C)	M F SM SF
27. I was worried about his or health.	M F SM SF	M F SM SF (Pattern B)	M F SM SF
28. Told me that I would probably not have a long life.	M F SM SF	M F SM SF (Pattern C)	M F SM SF
29. Shared a lot of his or her problems with me.	M F SM SF	M F SM SF (Pattern A)	M F SM SF
30. Comforted me when I had problems but didn't really help me learn how to deal with things in a better way.	M F SM SF	M F SM SF (Pattern A)	M F SM SF
31. Would get drunk or use drugs when things were not going well for him or for her.	M F SM SF	M F SM SF (Pattern B)	M F SM SF
32. Used to express doubts about whether he or she would be able to keep me.	M F SM SF	M F SM SF (Pattern C)	M F SM SF
33. Used to turn to me to talk about problems they were having in their marriage.	M F SM SF	M F SM SF (Pattern A)	M F SM SF
34. He or she actually tried to strangle, stab, or shoot the other parent.	M F SM SF	M F SM SF (Pattern B)	M F SM SF
35. Told me that he or she thought that I had some type of mental illness.	M F SM SF	M F SM SF (Pattern C)	M F SM SF
36. I felt that I was his or her most trusted companion.	M F SM SF	M F SM SF (Pattern A)	M F SM SF

APPENDIX E

THE BORDERLINE SYNDROME INDEX

The next two sections inquire into aspects of personality. In this section, please check "yes" or "no" according to whether or not each statement is, for the most part, descriptive of you or, for the most part, not descriptive of you. Please answer each item.

	<u>Yes</u>	<u>No</u>
1. I never feel as if I belong.	—	—
2. I am afraid of going crazy.	—	—
3. I want to hurt myself.	—	—
4. I am afraid to form a close personal relationship.	—	—
5. People who seem great at first, often turn out to disappoint me.	—	—
6. People disappoint me.	—	—
7. I feel as if I can't cope with life.	—	—
8. It seems a long time since I felt happy.	—	—
9. I feel empty inside.	—	—
10. I feel my life is out of control.	—	—
11. I feel lonesome most of the time.	—	—
12. I turned out to be a different kind of person than I wanted to be.	—	—
13. I am afraid of anything new.	—	—
14. I have trouble remembering things.	—	—
15. It's hard for me to make decisions.	—	—
16. I feel there is a wall around me.	—	—
17. I get puzzled as to who I am.	—	—
18. I am afraid of the future.	—	—
19. Sometimes I feel I'm falling apart.	—	—
20. I worry that I will faint in public.	—	—

	<u>Yes</u>	<u>No</u>
21. I never accomplish as much as I could.	—	—
22. I feel as if I were watching myself play a role.	—	—
23. My family would be better off without me.	—	—
24. I am beginning to think that I'm losing out everywhere.	—	—
25. I can't tell what I will do next.	—	—
26. When I get into a relationship I feel trapped.	—	—
27. No one loves me.	—	—
28. I can't tell the difference between what has really happened and what I imagined.	—	—
29. People treat me like "a thing."	—	—
30. Sometimes strange thoughts come into my head, and I can't get rid of them.	—	—
31. I feel life is hopeless.	—	—
32. I have no respect for myself.	—	—
33. I seem to live in a fog.	—	—
34. I am a failure.	—	—
35. It scares me to take responsibility for anyone.	—	—
36. I do not feel needed.	—	—
37. I don't have any real friends.	—	—
38. I feel that I can't run my own life.	—	—
39. I feel uneasy in crowds, such as when I'm shopping or at a movie.	—	—
40. I have trouble making friends.	—	—
41. It's too late to try to be somebody.	—	—
42. It's hard for me just to sit still and relax.	—	—
43. I feel as if other people can read me like an open book.	—	—

	<u>Yes</u>	<u>No</u>
44. I feel as if something is about to happen.	—	—
45. I am bothered by murderous ideas.	—	—
46. I don't feel sure of my femininity (or masculinity, if you are male).	—	—
47. I have trouble keeping friends.	—	—
48. I hate myself.	—	—
49. I often have sex with people I don't care for.	—	—
50. I feel afraid in open spaces or on the streets.	—	—
51. I sometimes keep talking to convince myself that I exist.	—	—
52. Sometimes I am not myself.	—	—

APPENDIX F

THE DEFENSE MECHANISMS INVENTORY

Instructions: Read carefully

On each of the following pages is a short story. Following each story are four questions with a choice of five answers for each. The four questions inquire about four kinds of reactions to the story: actual behavior, impulsive behavior (in fantasy), thoughts, and feelings. Of the four, it is only actual behavior which is outwardly expressed; the other three take place in the privacy of one's mind.

What I want you to do is to select the one answer of the five which you think is the most (M) representative of how you would react and, write the letter M next to that number. Next, select the one answer which you think is least (L) representative of how you would react and write the letter "L" next to that answer.

For example, let us assume that out of the five possible answers to a question (e.g., numbers 136, 137, 138, 139, 140), answer 137 is the one you consider most representative of the way you would react, and answer number 140 is the least representative. In this case, you would mark an "M" and an "L", like this:

- 136. Boiling anger, because he's making trouble for me.
- 137. Resentment, because he's picking on me.
- 138. Ashamed, because I was negligent.
- 139. Indifferent, after all, this sort of thing happens all the time.
- 140. Relieved, because I'd been prevented from getting into worse trouble.

Read each of the five answers following the question before you make your choices. If you change your answer, please be sure to erase the undesired one completely.

There are no right or wrong answers here; the only thing that should guide your selections is your own knowledge of yourself. Allow your mind to imagine for a moment that the event described in the story is really happening to you, even though you may never have experienced such an event. When you select your answers, remember I am not asking which answer you like most and like least, but rather the answers which would most and least represent the way you would act and feel in these situations.

If you have any questions, please feel free to give me a call! This part of the questionnaire takes the greatest amount of effort, but take heart, you're very close to completing it and receiving the \$15!

You are waiting for the bus at the edge of the road. The streets are wet and muddy after the previous night's rain. A car sweeps through a puddle in front of you, splashing your clothing with mud.

Remember, for each group of five responses, pick the one that is most likely for you (and write an M next to that number) and pick the one that is least likely for you (and write an L next to that item's number). Once again, your first impression is likely to be the most accurate answer. Don't spend too much time!

What would your ACTUAL reaction be?

1. I would note the car's license number so that I could track down that careless driver.
2. I'd wipe myself off with a smile.
3. I'd yell curses after the driver!
4. I would scold myself for not having at least worn a raincoat.
5. I'd shrug it off; after all things like that are unavoidable.

What would you IMPULSIVELY (in fantasy) want to do?

6. Wipe that driver's face in the mud.
7. Report that incompetent driver to the police.
8. Kick myself for standing too close to the edge of the road.
9. Let the driver know that I don't really mind.
10. Inform the driver that bystanders also have rights.

What THOUGHT might occur to you?

11. Why do I always get myself into things like this?
12. To hell with that driver!
13. I'm sure that basically that driver is a nice fellow.
14. One can expect something like this to happen on wet days.
15. I wonder if that driver splashed me on purpose.

How would you FEEL and why?

16. Satisfied; after all it could have been worse.
17. Depressed, because of my bad luck.
18. Resigned, for you've got to take things as they come.
19. Resentment, because the driver was so thoughtless and inconsiderate.
20. Furious, that that driver got me dirty.

In the army you hold a post or responsibility for the smooth operation of an important department which is constantly under great pressure to meet deadlines. Because things haven't been running as smoothly as they should lately, despite your initiative and resourcefulness, you have planned some changes in personnel for the near future.

Before you do so, however, your superior officer arrives unexpectedly, asks some brusque questions about the work of the department and then tells you that you are relieved of your post and your assistant is assigned to take your place.

What would your ACTUAL reaction be?

21. I'd accept my dismissal gracefully, since my superior is only doing his job.
22. I'd blame my superior for having made up his mind against me even before the visit.
23. I'd be thankful for having been relieved of such a tough job.
24. I'd look for an opportunity to undercut my assistant.
25. I'd blame myself for not being competent enough.

What would you IMPULSIVELY (in fantasy) want to do?

26. Congratulate my assistant on the promotion.
27. Expose the probable plot between my superior and my assistant to get rid of me.
28. Tell my superior to go to hell.
29. I'd like to kill myself for not having made the necessary changes sooner.
30. I'd like to quit, but one can't do that in the army.

What THOUGHT might occur to you?

31. I wish I could come face to face with my superior in a dark alley.
32. In the army it is essential to have the right person in the right job.
33. There is no doubt that this was just an excuse to get rid of me.
34. I'm really lucky that I only lost my job and not my rank as well.
35. How could I be so dumb as to let things slide?

How would you FEEL and why?

36. Resentful, because he had it in for me.
37. Angry, at my assistant for getting my job.
38. Pleased that nothing worse had happened.
39. Upset that I am a failure.
40. Resigned; after all one must be satisfied with having done the best one can.

You are living with your aunt and uncle, who are helping to put you through college. They have been taking care of you since your parents were killed in an automobile accident when you were in your early teens. On a night that you have a late date with your "steady," there is a heavy storm outside. Your aunt and uncle insist that you call and cancel your date because of the weather and the late hour. You are about to disregard their wishes and go out the door when your uncle says in the commanding tone of voice, "Your aunt and I have said that you can't go, and that is that."

What would your ACTUAL reaction be?

- 41. I would do as my uncle said because he has always wanted what was best for me.
- 42. I'd tell them, "I always knew you didn't want me to grow up."
- 43. I would cancel my date, since one must keep peace in the family.
- 44. I'd tell them it was none of their business and go out anyway.
- 45. I'd agree to remain at home and apologize for having upset them.

What would you IMPULSIVELY (in fantasy) want to do?

- 46. Knock my head against the wall.
- 47. Tell them to stop ruining my life.
- 48. Thank them for being so concerned with my welfare.
- 49. Leave, slamming the door in their faces.
- 50. Keep my engagement, rain or shine.

What THOUGHT might occur to you?

- 51. Why don't they shut up and let me alone?
- 52. They never have really cared about me.
- 53. They are so good to me, I should follow their advice without question.
- 54. You can't take without giving something in return.
- 55. It's all my own fault for planning such a late date.

How would you FEEL and why?

- 56. Annoyed, that they think I am a baby.
- 57. Miserable, because there is nothing much I can do.
- 58. Grateful for their concern.
- 59. Resigned; after all, you can't get your own way every time.
- 60. Furious, because they interfere with my private affairs.

You are extremely eager to do well in sports, but of all those at which you have tried your hand, only in basketball have you been able to achieve a measure of success. However, until now, whenever you have applied for membership in a team or sports club, although the judges have appeared impressed with your initial performance, their final decision has always been the same--they tell you that you've just missed making the grade.

One afternoon your car breaks down and you are forced to take a bus home during the rush hour. As you stand in the crowded bus, you hear your wife's voice. She is seated together with the manager of the team to which you have just applied. You overhear the manager tell her, "Your husband has a nice style of play, we're thinking of asking him to join our club." Then you hear your wife laugh and reply, "Take it from me, he hasn't got what it takes in the long run."

What would your ACTUAL reaction be?

61. I'd tell her off when we got home.
62. I would greet her affectionately as usual, when I arrived home, because I know she really appreciates me.
63. I'd be quiet and withdrawn for the rest of the evening, not mentioning what I had overheard.
64. I'd take it in my stride, for women's talk is never taken seriously.
65. I'd tell her that I wasn't surprised by what I'd overheard because I had always thought she was two-faced.

What would you IMPULSIVELY (in fantasy) want to do?

66. Tell my wife that I overheard her and was proud of her frankness.
67. Break her neck.
68. Tell her that men expect loyalty from their wives.
69. Let her know that I'd always suspected her of talking behind my back.
70. Stop off somewhere so I wouldn't have to face her.

What THOUGHT might occur to you?

71. I bet she talks about me that way to everybody.
72. What could I have done that makes her feel this way about me?
73. I'm sure she's only kidding.
74. One shouldn't be bothered by such talk.
75. She needs to be taught a lesson.

How would you FEEL and why?

76. Worthless, because I'd realize what a failure I was as a husband.
77. Furious at her for speaking about me that way.
78. Unconcerned, because women are like that.
79. Outraged, because her gossip has probably contributed to most of my past failures.
80. Serene, because I know the manager will realize that she doesn't know what she is talking about.

At your job you want to impress upon your foreman the fact that you are more skilled than your fellow workers. You are eagerly awaiting an opportunity to prove yourself.

One day a new machine is brought into the factory. The foreman calls all the workers together and asks whether anyone knows how to operate it. You sense the chance you have been waiting for, so you tell the foreman that you have worked with a similar machine and would like a chance to try your hand at this one. He refuses, saying, "Sorry, we can't take a chance," and calls a veteran worker to come over and try to get the machine started.

No sooner has the veteran worker pulled the starter, than sparks begin to fly and the machine grinds to a halt. At this point the foreman calls and asks you if you still want a chance to try and start the machine.

What would your ACTUAL reaction be?

81. I'd say that I doubt if I could do it either.
82. I'd tell my fellow workers that the foreman wants to hold me responsible for the machine's crack-up.
83. I'd tell the foreman that I appreciated being given the chance.
84. I'd decline, cursing the foreman under my breath.
85. I'd tell the foreman that I would try because one must never back down from a challenge.

What would you IMPUSIVELY (in fantasy) want to do?

86. Tell that foreman that he'll not make me the scapegoat for a broken machine.
87. Thank the foreman for not letting me try it first.
88. Tell the foreman that he should try to start the broken machine himself.
89. Point out to the foreman that experience doesn't guarantee success.
90. Kick myself for talking myself into an unbearable situation.

What THOUGHT might occur to you?

91. That foreman is really a pretty decent guy.
92. Damn him and his blasted machine.
93. This foreman is out to get me.
94. Machines are not always reliable.
95. How could I be so stupid as to even think of operating that machine.

How would you FEEL and why?

96. Indifferent, because when one's abilities are not appreciated one's enthusiasm is lost.
97. Angry that I was asked to do an impossible job.
98. Glad that I didn't wreck the machine.
99. Annoyed that I was purposely put on the spot.
100. Disgusted with myself because I risked making a fool out of myself.

On your way to catch a train, you are hurrying through a narrow street lined with tall buildings. Suddenly a piece of masonry comes crashing down from a roof where repairmen are working. A piece of brick bounces off the sidewalk, bruising your leg.

What would your ACTUAL reaction be?

- 101. I'd tell them I ought to sue them.
- 102. I'd curse myself for having such bad luck.
- 103. I'd hurry on, for one should not permit oneself to be diverted from one's plans.
- 104. I'd continue on my way, grateful that nothing worse had happened.
- 105. I'd try to discover who these irresponsible people are.

What would you IMPULSIVELY (in fantasy) want to do?

- 106. Remind the repairmen of their obligation to public safety.
- 107. Assure those men that nothing serious had happened.
- 108. Give them a piece of my mind.
- 109. Kick myself for not having watched where I was going.
- 110. See to it that those careless workers pay for their negligence.

What THOUGHT might occur to you?

- 111. Those repairmen don't know how to do their job right.
- 112. I'm lucky that I wasn't seriously hurt.
- 113. Damn those men!
- 114. Why do these things always happen to me?
- 115. One can't be too careful these days.

How would you FEEL and why?

- 116. Angry, because I was hurt.
- 117. Furious, because I was almost killed by their negligence.
- 118. Calm, for one must practice self-control.
- 119. Upset by my bad luck.
- 120. Thankful that I'd gotten away with no more than a scratch.

Driving through town in the late afternoon, you arrive at one of the busiest intersections. Although the light has changed in your favor, you see that pedestrians are not obeying the "wait" sign and are blocking your path. You attempt to complete your turn with due caution before the light turns against you, as the law requires. As you complete the turn, a traffic policeman orders you over to the side and charges you with violating the pedestrians' right-of-way. You explain that you had taken the only possible course of action, but the policeman proceeds to give you a ticket nevertheless.

What would your ACTUAL reaction be?

- 121. I'd blame myself for having been careless.
- 122. I'd go to court and bring counter charges against the policeman.
- 123. I'd ask the policeman why he has such a grudge against drivers.
- 124. I'd try to cooperate with the policeman, who, after all, is a good guy.
- 125. I'd take the ticket without question, since the policeman was just doing his duty.

What would you IMPULSIVELY (in fantasy) want to do?

- 126. Tell the policeman he can't use his position to push me around.
- 127. Kick myself for not having waited for the next green light.
- 128. Thank the policeman for saving me from a possible accident.
- 129. Stand up for my rights as a matter of principle.
- 130. Slam the door in his face and drive off.

What THOUGHT might occur to?

- 131. He's doing the right thing, actually I ought to thank him for teaching me an important lesson.
- 132. Each man must carry out his job as he sees it.
- 133. This guy ought to go back to pounding a beat.
- 134. How could I be so stupid!
- 135. I bet he gets a kick out of giving tickets to people.

How would you FEEL and why?

- 136. Boiling anger, because he's making trouble for me.
- 137. Resentment, because he's picking on me.
- 138. Ashamed, because I was negligent.
- 139. Indifferent, after all, this sort of thing happens all the time.
- 140. Relieved, because I'd been prevented from getting into worse trouble.

You return home after spending two years in the army. At the time you joined, you had had a choice between enlistment and a position in your father's business. You preferred the army despite parental advice. Now that you are home again, you find that your range of opportunity hasn't widened appreciably. You can either join your father's business or get a job as an untrained worker. You would like to open a coffee shop, but you lack the capital necessary to carry out such an enterprise. After a great deal of hesitation, you decide to ask your father to put up the money. After listening to your proposal, he reminds you that he had wanted you to take a job with his firm instead of joining the army. Then he tells you, "I'm not prepared to throw away my hard-earned money on your crazy schemes. It's time you started helping me in my business."

What would your ACTUAL reaction be?

- 141. I'd accept his offer since everyone depends on everyone else in this world.
- 142. I would admit to him that I guess I am a bad risk.
- 143. I'd tell him off in no uncertain terms.
- 144. I'd tell him that I'd always suspected that he had a grudge against me.
- 145. I'd thank him for holding a job open for me all these years.

What would you IMPULSIVELY (in fantasy) want to do?

- 146. Go to work for him and make him happy.
- 147. Give up trying and end it all.
- 148. Take my father's offer since offers like that don't grow on trees.
- 149. Let him know what a miser everyone thinks he is.
- 150. Tell him that I wouldn't work for him if he were the last man on earth.

What THOUGHT might occur to you?

- 151. He'll get what's coming to him one day.
- 152. Family considerations can't enter into business decisions.
- 153. Why was I so stupid as to bring the subject up.
- 154. I must admit that my father is acting for my own good.
- 155. This proves what I've suspected all along, that my father has never believed in me.

How would you FEEL and why?

- 156. Angry, because he doesn't want me to succeed on my own.
- 157. Grateful for his offer of a job with a future.
- 158. Resentful that he is sabotaging my future.
- 159. Resigned, since you can't have everything your own way all the time.
- 160. Hopeless, because I couldn't get my father's approval.

One afternoon while you and a close friend are cramming for exams, your girl friend drops by unexpectedly. Although you and she have been going steady for over a year, you have not been able to see much of each other lately; therefore you are very happy she has come. You invite her in and introduce her to your friend and the three of you spend a pleasant hour together. A few days later you ring her up and invite her to go out on the town to celebrate the end of exam week, but she tells you that she has come down with a bad cold and thinks it is best for her not to leave the house. After dinner you feel sort of let down and decide to go to the movies by yourself. Coming out of the movie theater, you come upon your pal arm-in-arm with your girl friend.

What would your ACTUAL reaction be?

- 161. I'd tell my girl she could have told me it was over instead of cheating behind my back.
- 162. I'd greet them politely as a civilized person should.
- 163. I'd make sure they both knew I wanted nothing more to do with them.
- 164. I'd tell them that I am delighted they have become friends.
- 165. I'd duck out of sight to avoid facing them.

What would you IMPULSIVELY (in fantasy) want to do?

- 166. Go home and sulk.
- 167. Knock him down and grab the girl away.
- 168. Show them that I really don't mind their being together.
- 169. Ask him if stealing is the only way he knows of getting a woman.
- 170. Indicate that it takes more than one battle to win a war.

What THOUGHT might occur to you?

- 171. This wouldn't have happened if I had been more attentive to her.
- 172. All's fair in love and war.
- 173. They certainly are a pair of double-crossers.
- 174. I hope they get what they deserve.
- 175. I was getting tired of her, anyhow.

How would you FEEL and why?

- 176. Relieved that I was free again.
- 177. Upset, because I shouldn't have been so trusting.
- 178. Resigned, because you've got to take life as it comes.
- 179. Disgusted, because of their dishonesty.
- 180. Furious at them because of what happened.

You and an old school friend are competing for a newly vacated executive position in the firm where you work. Although both your chances seem about equal, your friend has had more opportunity to show resourcefulness in critical situations. Recently, however, you have successfully pushed through some excellent deals. In spite of this, the board of directors decides to promote your friend rather than you.

What would your ACTUAL reaction be?

- 181. I'd try to find out which director "blackballed" me.
- 182. I'd continue to do my duty as a responsible person must.
- 183. I'd accept the outcome as proof that I'm not executive material.
- 184. I'd protest the decision of the board most vehemently.
- 185. I'd congratulate my friend on the promotion.

What would you IMPULSIVELY (in fantasy) want to do?

- 186. Ask the board to reconsider, since a mistake would be detrimental to the company.
- 187. Kick myself for having aspired to a job for which I wasn't qualified.
- 188. Show the board how biased they've been in their unjust treatment of me.
- 189. Help my friend make a success at the new job.
- 190. Break the neck of each and every member of the board of directors.

What THOUGHT might occur to you?

- 191. I guess I just don't have what it takes.
- 192. I probably wouldn't enjoy an executive position as much as the one I have now.
- 193. There certainly is something fishy about the board's decision.
- 194. One must take a blow such as this in one's stride.
- 195. Damn that board of directors.

How would you FEEL and why?

- 196. Happy that I still have the job I am used to.
- 197. Upset because my inadequacy was made public.
- 198. Furious at the directors because of their treatment of me.
- 199. Resigned, for that's the way it goes in the business world.
- 200. Angry, because I have been the victim of an unjust decision.

APPENDIX G
APPLICATION FOR REMUNERATION AND SUMMARY SHEET

Congratulations! You have completed the questionnaire. If you would like to receive the check for \$15 and/or the summary of the results through the mail, please provide your name and address. Remember, your responses will be treated with strict confidentiality!

If you do not receive the check within a month of your having returned the completed questionnaire booklet, please contact me at:
(503) 752-9630, collect.

If you have any comments or feedback to give me, please use the bottom or back of this form to do so.

THANKS AGAIN!