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Delineating Social Phobia

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The natural history—including psychiatric symptoms, precipitating factors, onset and course of illness, and personality characteristics—of 47 social phobics, 80 agoraphobics, and 72 simple phobics was examined. The social phobia group differed from the agoraphobia group by having a lower mean age, fewer females and married members, and a higher educational and occupational status. They were less fearful generally, less obsessive, and less likely to follow a fluctuating or phasic course. There was overlap between the two groups with regard to main phobias, and they were similar with regard to adjacent symptomatology. Both the social and agoraphobia groups differed in similar and significant ways from simple phobics.

DSM–III (American Psychiatric Association, 1980) lists three criteria for the diagnosis of social phobia:

(a) a persistent, irrational fear of, and compelling desire to avoid, a situation in which the individual is exposed to possible scrutiny by others, and fears that he or she may act in a way that will be humiliating or embarrassing
(b) significant distress because of the disturbance and recognition by the individual that his or her fear is excessive or unreasonable
(c) not due to another mental disorder, such as major depression or avoidant personality disorder.

In both DSM–III and ICD–9 (Commission on Professional and Hospital Acitivities, 1978), social phobia and agoraphobia (with and without panic attacks) are the only two phobic conditions accorded diagnostic categories separate from the general diagnosis of simple phobia. Before the third revision, the DSM included only one phobic disorder: phobic neurosis.

Theoretically one can develop a phobia to any object or situation (Mowrer, 1947), but the observed range of phobic objects is distinctly limited. The practice, until recently, of classifying each phobia on the basis of the feared situation and cataloguing each by adding the suffix *-phobia* to a Latin or Greek word denoting the thing feared, prevented the recognition that certain fears cluster together. However, if it can be shown that a certain cluster of phobias systematically and consistently differs from others in terms of aetiology, other symptomatology, age of onset, course and response to treatment, then a separate diagnostic category can be justified. Such is the case with the DSM–III sub-category of agoraphobia.

That agoraphobia differs fundamentally from other phobias is well documented. Most agoraphobic patients are women, and may also suffer from other phobias, have spontaneous panic attacks, depression, depersonalisation and mild obsessions. Snaith (1968) compared 27 agoraphobic patients with 21 patients suffering from either social or specific miscellaneous phobias: those suffering from agoraphobia were more anxious, their illness more often ran a remitting course, and their distribution of phobias was markedly different from the patients with discrete phobias. Factor analyses of the self-report data of phobic patients have consistently yielded a distinct factor of agoraphobia (Marks, 1967; Hallam & Hafner, 1978; Arrindell, 1980).

The evidence for a category of social phobia separate from both agoraphobia (with mild social phobias as part of the syndrome) and other simple phobias is less substantial. Marks (1969) assigned a separate category to social phobia 11 years before DSM–III, but the data he describes to define the category fail to distinguish social phobia from agoraphobia. Drawing on the results of six published and two unpublished studies (Gelder *et al*, 1967; Kelly, 1966; Lader, 1966; Lader & Wing, 1967; Marks & Gelder, 1966; Martin *et al*, 1969), Marks compared agoraphobics, social phobics, animal phobics, miscellaneous specific phobics, and illness phobics on 11 variables (percentage of women, onset age, treatment age, overt anxiety, modified Cornell Index, neuroticism, extroversion, galvanic skin response (GSR) spontaneous fluctuations, GSR habituation rate, resting forearm blood flow, and eye-blink conditioned response acquisition). The social phobics differed significantly from the animal phobics on six of these variables (onset age, overt anxiety,

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modified Cornell Index, neuroticism, GSR spontaneous fluctuations, and GSR habituation rate), but did not differ significantly from the agoraphobics on any of the variables. Marks (1969) concluded cautiously: "We need to know more about social phobics before definitely classifying them on their own". Amies *et al* (1983), on the other hand, compared a group of social phobic patients with a group of agoraphobics on demographic, clinical, and questionnaire data, and concluded that significant differences on important variables (age, sex, social class, age of onset, main phobic complaint, and type of autonomic response) justified the recognition of two distinct syndromes. They conceded, however, that 50% of the agoraphobic patients experienced anxiety in social situations and that 25% of social phobics experienced anxiety in agoraphobic situations, in both cases at significantly lower intensities; the two groups did not differ with respect to their symptoms (e.g. anxiety, depression, obsessional symptoms).

Method

The 199 patients in the present study were consecutive referrals, primarily from other psychiatrists, over a 16-year period (1965–1980) for behavioural treatment of phobia. Following the establishment of our behaviour therapy unit in 1965, patients who had not responded to other treatment were referred to the senior author. Diagnosis was confirmed or clarified during a semi-structured clinical interview: 80 patients were diagnosed as agoraphobic, defined as 'fear of leaving home, of being alone at home or on the street, in crowds, of travelling by car, bus or train' (Solyom *et al*, 1972); 47 were diagnosed as suffering from social phobia, defined as a fear of performing (e.g. speaking, writing, eating, using a public washroom) in the presence of others. By emphasising fear of performing, we distinguish social phobia from fear of crowds, where the patient is anonymous—a classic symptom of agoraphobia. Social phobics may have avoided social situation for fear of blushing, speaking, trembling, or panic attacks. However, the 72 simple phobics suffered from a single but life-disrupting fear—animals, heights, etc. (e.g. an estate agent, afraid of dogs, could not function adequately at work; a snake phobic could not watch TV for fear a snake might unexpectedly appear on the screen), and did not fall into the agoraphobia or social phobia categories. The most common simple phobias treated were fear of dogs or cats ($n = 10$), cancer and other diseases ($n = 9$), airplanes ($n = 6$), snakes ($n = 5$), and bees or spiders ($n = 5$). Patients whose avoidance was secondary to some other major disorder (e.g. social phobia due to paranoid fear or withdrawal, resulting from clinically significant depression) were not included in the sample. Despite being assessed during a 15-year period prior to its publication, these diagnostic criteria are identical to those of DSM–III.

After the diagnosis had been made, the following data were collected before treatment was administered.

Psychiatric Questionnaire (Solyom *et al*, 1971). This was administered in the form of a semi-structured interview by the senior author, and in some cases by a second psychiatrist as well. It included description and ratings of the phobic and obsessive symptoms, depression and other clinical features, course of disorder, and personal history. Symptoms were rated on a five-point scale (0–4), with a rating of 0 indicating no symptoms and 4 indicating incapacity. Only ratings of 2 (indicating definite uneasiness and frequent avoidance) or more were considered clinically meaningful.

Self-rating of symptoms. The patient was asked to rate his symptoms on a scale of 0–4 by choosing one of the five statements that best described how he had been feeling with respect to each symptom during the previous week. The five points roughly corresponded to absent, mild, moderate, severe, and extremely severe. Symptoms rated by the patient were his main phobia (his worst fear), two measures of anxiety (cognitive apprehensiveness and somatic symptoms of anxiety), depression, depersonalisation, obsessive symptoms, and change of habits.

Self-rating of social maladjustment. The patient was asked to rate on a similar five-point scale the extent to which his symptoms interfered with adjustment at work (either outside the home or as a housewife), adjustment with regard to leisure activities, sexual adjustment, social adjustment within and outside the immediate family, and expressed self-satisfaction.

The three rating scales listed above were adapted from Gelder & Marks (1966), who measured inter-rater reliability as well as the reliability of the psychiatrists' ratings compared with the patient's own ratings of the same symptoms.

IPAT Anxiety Scale Questionnaire (Cattell & Sheier, 1963). The patient completed the IPAT. Half of its 40 questions refer to overt, symptomatic, conscious anxiety; the remainder consist of covert, hidden-purpose probes.

Fear Survey Schedule (Wolpe & Lang, 1964). This is a patient self-rating, on a five-point scale (from 'not at all' to 'very much') of the amount of fear elicited by 72 common phobic stimuli. These stimuli fall into six clusters of fears: death and tissue damage (18 items); social (17 items); other, e.g. large open spaces, crossing streets, journeys by train, bus, car (16 items); animals (9 items); miscellaneous (8 items); and noise (4 items).

Maudsley Personality Inventory (MPI) (Eysenck, 1958). Eysenck's 48-question inventory yields scores on two orthogonal dimensions of personality: neuroticism or emotionality, and extroversion.

Leyton Obsessive Inventory (LOI). (Cooper, 1970). This consists of 69 items, 46 of which relate to symptoms

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of obsessive—compulsive neurosis and 23 to obsessive personality traits. In addition, the LOI has two intensity scales—resistance and interference—which measure the degree to which the patient resists his or her obsessive symptoms, and the extent to which the symptoms interfere with other activities. Because the questionnaire was published five years after our data collection began, scores are available on only 24 patients.

General Information Sheet. This single-page questionnaire elicited demographic information about the patient, his parents and siblings.

The three groups of social, agoraphobic and simple phobics were compared with respect to symptomatology and other aspects of natural history and demographic and personality variables. On those variables that were ordinal or better with respect to level of measurement, the statistical analyses consisted of analyses of variance followed, when the overall difference among the three groups was significant at the one in twenty level, by *t*-test comparisons of the groups two at a time, using the Tukey B procedure (Wine, 1964) to test for differences. On nominal variables, the groups were compared using the chi-squared method. Missing data were not estimated; analyses of variance, *t*-tests and chi-squares were computed using available data only.

Results

Social phobics were found to differ from both agoraphobics, as Amies *et al* (1983) reported, and from simple phobics, as Marks (1969) demonstrated.

Demographic data

Demographic data for all groups are given in Table I. Compared with the agoraphobia group, the social phobia group was younger, had fewer women and married persons, was better educated and had more members in the professions. Compared with the simple phobics, the social phobics were younger and fewer were female or married, but they did not differ significantly with respect to education or occupation.

Symptomatology

The three groups differed in the content of their phobias, but not in the intensity of their main phobia (worst single fear, as described by the patient; for a social phobic this might for example be 'parties'; for an agoraphobic it might be 'supermarkets'). Among the three groups, the agoraphobic patients scored significantly higher on ratings of agoraphobia, the social phobics on social phobia, and the simple phobics on simple phobia (full details of results are obtainable from the authors on request).

On the total FSS score—a measure of general fearfulness—the agoraphobics obtained a score of 133, which was significantly higher than the 99 and 91 returned by the social phobics and simple phobics respectively.

The social fears score on the FSS was identical in the agoraphobia and social phobia groups. In addition, 55% of the agoraphobic patients suffered from clinically significant social phobias (≥ 2 on a 0–4 scale) as rated by a psychiatrist, and 30% of the social phobics suffered from clinically significant agoraphobic symptoms.

On measures of associated symptomatology, the social phobics and agoraphobics did not differ on the four measures of anxiety, on the two measures of depression, or on the self-rating of maladjustment. On each of these measures, the social phobics and agoraphobics had significantly higher scores than the simple phobics, with the exception of self-rated depression. The agoraphobics were rated higher on rituals, ruminations, and horrific temptations than the social and simple phobics, but the three groups did not differ on self-rated scores of rituals, pervasive doubts, and horrific temptations.

The mean symptom scores for all three groups on the LOI (social phobia, 18.6; agoraphobia, 19.1; simple phobia, 13.2) fell between the norm for obsessive patients (33) and the norm for normal men (9) and normal women (11) (Cooper, 1970). The three groups did not differ significantly on this measure.

History of illness

Data on the history of illness for all three groups are presented in Table II. The social phobics experienced their first phobic symptom significantly earlier than the agoraphobics, but significantly later than the simple

TABLE I
Demographic variables

Variable	*Agoraphobic*	*Social*	*Simple*	*P (overall)*
Age: years	36.0	30.5	34.2	0.01
Female: %	86	47	78	0.0001
Married: %	78	58	71	0.05
Professional: %	12	41[1]	30[1]	0.0001
Educational: years	10.2	13.1[2]	12.4[2]	0.0001

1, 2 Do not differ significantly

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TABLE II
History of illness variables

Variable	*Agoraphobic*	*Social*	*Simple*	*P (overall)*
Age of onset				
Age of 1st symptoms	24.5	16.6	12.8	0.001
Age of onset of illness	26.0[1]	23.5[1]	16.0	0.0001
Precipitating factors: % endorsing a precipitant	79[2]	79[2]	61	0.05
Course of disorder				
Constant static: %	30.0	43.6	45.5	
Constant worsening: %	6.7	10.3	12.7	
Fluctuating: %	35.0	25.6	30.9	NS
Phasic: %	28.3	20.5	9.0	
Getting better: %	0	0	1.8	
Delay in seeking help: years	1.0[3]	3.7[3]	21.0	0.0001
Mental disorder in parents				
Fathers: %	23.2	21.6	25.5	NS
Mothers: %	30.4	16.7	30.9	NS

1, 2, 3. Do not differ significantly

phobics. With respect to age of onset of the illness (i.e. when the symptoms for which the patient ultimately sought help became continuous), the social phobics and the agoraphobics did not differ significantly; both occurred significantly later than the simple phobics.

The Psychiatric Questionnaire listed 14 life events occurring during the six months preceding the onset of the present illness: fright, acute danger, serious illness, death of a relative or friend, domestic crisis, unavoidable conflict, sexual problem, bethrothal, occupational problem, school problem, childbirth, pregnancy, menopause, and other crises. A larger proportion of the social and agoraphobic groups, compared with the simple phobia group, cited one or more of the precipitating factors. The three groups differed significantly with respect to four precipitants: domestic crises, occupational or school difficulties, and fright. Compared with the agoraphobics, the social phobics more often cited occupational (7% vs 0%) or school (10% vs 0%) difficulties and less often domestic crises (19% vs 33%). Compared with the simple phobics, the social phobics more often cited occupational (7% vs 0%) or school (10% vs 2%) difficulties and less often mentioned fright (12% vs 23%). Fright among the simple phobics usually involved the phobic object (e.g. being stung by a bee).

The patients were categorised according to Ingram's (1961) four types of course of disorder (with the additional category of 'getting better', which characterised one of our patients). The modal course for agoraphobics was 'fluctuating and phasic' (63.3%). For social phobics the figure was 46.1%, and for simple phobics, 39.9%; these differences did not reach statistical significance.

Delay in seeking help was defined as the interim between the time the phobic symptomatology became continuous and when the patient first sought psychiatric help.

There were no differences among the three groups in the incidence of neurosis, personality disorder, psychosis, and organic brain syndrome among fathers, mothers, siblings, or other relatives regardless of the relative group examined.

Personality traits

The obsessional personality trait scores from the LOI of the social phobics (9.9) and the agoraphobics (10.5) were much higher than those of the simple phobics (6.2), but the overall difference among the three groups did not reach statistical significance ($F = 2.6$).

On the MPI, the neuroticism scores of the social phobics (29.4) and the agoraphobics (30.2) did not differ from each other, but both were significantly higher than the scores of the simple phobics (21.4), who scored in the same range as normals: 20.9 and 19.9 for American and English students respectively (Eysenck, 1958). A similar pattern emerged with respect to extroversion, with the social phobics (19.2) and the agoraphobics (20.6) differing significantly from the simple phobics (25.3), whose mean extroversion score was closer to the normal score: 28.5 and 24.9 for American and English students.

Discussion

The results of the present study support the recognition of social phobia as a distinct diagnostic category. Although sharing features with both agoraphobics and simple phobics, the social phobics do not fit satisfactorily into either category.

Our comparison of social phobics with agoraphobics confirmed many of the differences reported by Amies *et al* (1983), but produced a few

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discrepancies. Like them, we found more males, more single persons, better education, and higher occupational status among the social phobics. Like the British samples, our socially phobic patients were as anxious and depressed as were the agoraphobics, and had equally high neuroticism scores. We also found, like Amies *et al*, that the first symptoms appeared earlier in life in the social phobics than in the agoraphobics. Discrepancies between the two studies involve obsessive-compulsive symptoms, delay in seeking help, and extroversion scores: wheras Amies *et al* reported no differences between the two groups on obsessional symptoms (undifferentiated), we found higher ratings for rituals, ruminations, and horrific temptations among the agoraphobics. As was the case in Britain, however, few patients in either group had clinically significant obsessive symptoms (Amies *et al* reported obsessive symptoms in 20% of each group). Our data on delay in seeking help (social phobia 3.7 years, agoraphobia 1.0 year) are apparently substantially different from those of Amies *et al* (social 12 years, agoraphobia 10 years), but if delay is calculated from the time of first symptom, as was done in that study, rather than from the time when the illness became continuous, the delay for social phobics is increased to 11.2 years, which is closer to Amies' figure of 12 years. The revised definition of delay for the agoraphobia group, however, yields a figure of 2.5 years, which is much shorter than the 10 years that Amies reports. One possible explanation is that agoraphobic subjects came to therapy following considerable publicity about the diagnosis and its favourable response to behaviour therapy. Shortly thereafter, the Medicare system was introduced in the USA, enabling patients to come for treatment without direct cost.

We found no differences between the social phobics and agoraphobics on either of Eysenck's orthogonal dimensions of personality, whereas the social phobics of Amies *et al* scored lower than their agoraphobic patients. This discrepancy may in part be accounted for by the fact that we used the MPI and Amies used the later version—the Eysenck Personality Inventory (Eysenck & Eysenck, 1964), which may support different spectra of the two dimensions.

The overlap between social phobia and agoraphobia, first reported by Amies *et al* (1983), also occurred in our groups. Among the social phobics, 30% had clinically significant agoraphobia (though rated at lower intensity than their social phobia), among the agoraphobics, 55% had clinically significant social phobia (again, rated at lower intensity than their agoraphobia). Thus, one can conceive of three groups—social phobia, agoraphobia, and a group with combined social and agoraphobia. The diagnosis was based, however, on the presenting complaint (the 'main phobia') of the patient. Had we assessed 'pure' social phobics and 'pure' agoraphobics, the differences between them may have been enhanced, most notably perhaps in terms of situations avoided and types of autonomic and cognitive responses. For instance, a social phobic woman also avoided supermarkets; the stated basis of her fear: 'What if I meet someone I know?'. Many agoraphobics, if not all of them, are also fearful of making fools of themselves because of their phobic responses.

The problem of overlap may also arise because both agoraphobia and social phobia may be based on fear of having a panic attack; i.e. both may suffer from panic disorder (DSM–III).

We have attempted to summarise the differences between social phobics and agoraphobics in Table III. The separations are derived by definition and from clinical observations, and would perhaps be supported by research findings on 'pure' social phobics and agoraphobics.

The data presented here support the view (Snaith, 1968; Solyom *et al*, 1974; Klein, 1981) that agoraphobia and also perhaps social phobia are produced by essentially different mechanisms from those which seem to produce simple phobia. The typically tangible onset (fright involving the phobic object is the most common precipitant), and their modal 'constant static' course are consistent with the view that simple phobias are conditioned classically and maintained instrumentally by avoidance (Mowrer, 1947). Mowrer's two-factor theory, however, should be amended to account for the non-random variation in the content of phobias by including the notion that humans are more 'prepared' to develop certain conditioned fears because of their importance to the survival of the species (Seligman, 1971; Seligman & Hager, 1972).

The significantly higher level of anxiety among the agoraphobics and social phobics, the less discrete nature of the phobic object, and the lack of correspondence in content between precipitating factors and avoidance of these phobic situations and adjacent symptomatology are inconsistent with the conditioning theory of aetiology.

How then might they develop? One possibility is that separation anxiety (agoraphobia) and fear of strangers (social phobia)—common fears in childhood that usually disappear by the age of four (Jersild & Holmes, 1935)—may be incompletely unlearned, so that later, when the person's general anxiety reaches a critical level because of calamitous

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TABLE III
Differences in features of main phobia, as described by social phobics and by agoraphobics

Feature	*Social phobics*	*Agoraphobics*
Situations avoided	Parties and social gatherings Meeting friends or acquaintances	Crowds in public places Public transport Being alone
Response	Blushing Tremor Stammering	Panic – dyspnea, tachycardia, faintness, etc.
Activity avoided	Speaking, eating, writing in public	Travel, shopping
Anticipatory thoughts	What if I stutter, blush?	What if I faint, die, lose control
Fear expressed	Embarrassment Loss of control	Panic, loss of control Embarrassment
Constancy of response	Constant	Fluctuates
Modifiers of response	A spouse (for some)	Presence of dependable other
Course	More frequently static (44%)	More frequently fluctuating and phasic (63%)

events, a domestic crisis, or difficulties at work or school, the fears re-emerge. The failure to unlearn may result both from maternal over-protection and modelling of maternal fear behaviour. There is evidence that mothers of agoraphobics are more anxious and more over-protective than mothers of normal subjects (Solyom, *et al*, 1976), and that both parents are perceived as less caring and more over-protective by social phobics (Parker, 1979). Whether maternal over-protection elicits fear behaviour in the child or the fearful child evokes over-protective behaviour in the mother, the general effect of over-protection seems to be the preservation of separation anxiety or attachment behaviour (Bowlby, 1969) and fear of strangers (Freedman, 1965; Schaefer, 1966)—the basis of 'preparedness' for agoraphobia or social phobia.

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