Masculinity–femininity as a national characteristic and its relationship with national agoraphobic fear levels: Fodor’s sex role hypothesis revitalized

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Abstract

for a changing society. New York: Brunner/Mazel]. A unique data set comprising 11 countries (total \( N = 5491 \) students) provided the opportunity of scrutinizing this issue. It was hypothesized and found that national Masculinity (the degree to which cultures delineate sex roles, with masculine or tough societies making clearer differentiations between the sexes than feminine or modest societies do) would correlate positively with national agoraphobic fear levels (as assessed with the Fear Survey Schedule—III). Following the correction for sex and age differences across national samples, a significant and large effect-sized national-level (ecological) \( r = +0.67 \) \((P = 0.01)\) was found. A highly feminine society such as Sweden had the lowest, whereas the champion among the masculine societies, Japan, had the highest national Agoraphobic fear score.

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### 1. Introduction

The essential feature of *Agoraphobia* is anxiety about being in places or situations from which escape might be difficult (or embarrassing) or in which help may not be available in the event of having panic-like symptoms (e.g. fear of having a sudden attack of dizziness or a sudden attack of diarrhea) or a panic attack. A panic attack is defined as a discrete period of intense fear or discomfort, in which a number of anxiety symptoms (e.g. ‘palpitations, pounding heart, or accelerated heart rate’, ‘sweating’, ‘trembling or shaking’, ‘fear of dying’, ‘sensations of shortness of breath’, ‘chest pain or discomfort’) developed abruptly and reached a peak within 10 min (American Psychiatric Association [APA], 1995, p. 405). The anxiety typically leads to a pervasive avoidance of a variety of situations that may include being alone outside the home or being alone at home; being in a crowd of people; travelling in an automobile, bus, or airplane; or being on a bridge or in an elevator (APA, 1995, p. 406). Some individuals are able to expose themselves to the feared situations but endure these with considerable dread; often an individual is better able to confront a feared situation when accompanied by a companion. In addition, individuals’ avoidance of situations may impair their abilities to travel to work or to carry out homemaking responsibilities (e.g. grocery shopping, taking children to the doctor) (APA, 1995, p. 406). The *Diagnostic and statistical manual of mental disorders*—fourth edition (DSM-IV; APA, 1995, p. 406) distinguishes between Panic Disorder With Agoraphobia and Agoraphobia Without a History of Panic Disorder.

Fodor (1974), among many others (e.g. Chambless & Goldstein, 1980; Chambless, 1982, 1989; Brehony, 1983; Wolfe, 1984), have advanced theoretical speculations for explaining the higher frequencies in adulthood of (agora)phobic conditions in females as compared to males by pointing to the dependence and superhelplessness that are inherent to the stereotypically feminine sex role. Thus, these authors have argued that as young girls grow to become women, traditional societal mores promote dependency, shaping their behaviour and aspirations by deemphasizing autonomy and mastery while fostering expectations of protection and guidance. By contrast, for boys socialization entails reinforcement for quite different behaviour: males are expected to be independent, confronting, and instrumental in their approach towards the world (cf. Woody & Chambless, 1989). In the classical view of Fodor (1974) in which, incidentally, high masculinity and high femininity are assumed to be mutually exclusive *traits*, phobic behaviour of any kind, albeit
agoraphobic fears in particular, is consistent with traditionally defined feminine roles (i.e. emotional, submissive, excitable, passive, house-oriented, not at all adventurous, avoidant of mastery experiences and of competition, displaying lack of assertiveness and a strong need for security and dependency) and at odds with the traditional male role (e.g. autonomous, achievement-oriented, initiative taking, assertive). Fodor (1974) notes that when the realistic stresses of adult life and marriage become overwhelmingly great, stereotypically emotional, passive, helpless women become anxious, wish to flee, dream of becoming more independent or of rescue or escape, and ultimately develop a phobia. In doing so they sink even further into an exaggerated version of the stereotypic feminine role, becoming dependent on those around them and avoiding autonomy, initiative or assertiveness. Fodor (1974) points out that this route is available for women since their socialization experiences have not prepared them to become mature adults.

In reviewing the empirical evidence, Arrindell, Kolk, Pickersgill, and Hageman (1993) found virtually no support for Fodor’s suggestion of a positive association between feminine traits and (agora)phobic fears. Rather, in line with the body of research on sex roles and mental health in general (e.g. Davidson-Katz, 1991), they observed that lack of masculine traits coincided with high (agora)phobic fear. Arrindell et al. (1993, p. 136) emphasized that they do not interpret this outcome in conjunction with the null finding of no relationship between feminine traits and phobic fears as offering (partial) support for the Fodor (1974) hypothesis, as was done by others (Chambless & Mason, 1986, p. 234; Hafner & Minge, 1989, p. 711) on the basis of observed significantly negative correlations between masculine traits and phobic behaviour. The argument advanced by Arrindell et al. (1993, p. 136) was that to do so would suggest that masculinity and femininity (measured as traits) are the opposite ends of one continuum, an assumption that has been challenged by empirical research (e.g. Heilbrun, 1976; Bem, 1981; Marsh, 1985).

Importantly, however, Fodor (1974) and Chambless and Mason (1986) also clearly pointed out that a society that does not teach women to be instrumental, competent and assertive, rather than just house-oriented or nurturing and expressive, is one that breeds (agora)phobic women. Fodor (1974, pp. 141–152) cites several sources (clinical observations, research findings, reports in the media, children’s readers) from which she concludes that:

[These sources] reflect the beliefs of the larger society where different expectations exist for males and females and where from birth onwards a social sex role curriculum is prescribed (p. 141, italics added).

Thus, Fodor (1974) actually also suggested that at the sociological or cultural level one should obtain a significant correlation between social sex roles and (agora)phobic fears, a possibility which hitherto has not been empirically examined. Three arguments (outlined below) led the present authors to re-examine Fodor’s hypothesis from this national- or cultural-level approach, an angle which differs from the individual-level approach applied to date. Both approaches may yield entirely different results (e.g. Hofstede, 1980, p. 169). At the national level of analysis, one can gain an understanding of how broad (environmental, demographic, epidemiological and unalterable, constitutional) factors may influence the health of large populations (e.g. Lynn, 1971; Lynn & Martin, 1995; Eysenck, 1977, 1982; Eysenck & Eysenck, 1983). Studies of this kind fall within the so-called holocultural tradition (e.g. Rohner, 1986, p. 38) where cultures (nations) are treated as units and culture (national) scores are correlated with one another.
The three arguments were as follows. First, as pointed out above, within-society (i.e. individual level) correlational studies have as yet not provided much support for Fodor’s hypothesis in relation to dimensional measures of phobic fears, including agoraphobic fears (Arrindell et al., 1993). Second, both females and males within the same society can and have actually been found to score high or low on feminine and masculine traits (e.g. Bem, 1981). This is related to the empirical observation previously noted that masculine and feminine traits are not located at the opposite ends of one dimensional continuum, but can be measured as separate dimensions (e.g. Bem, 1981; Marsh, 1985). Third, in spite of the fact that Fodor (1974) and others (e.g. Foa, Steketee, & Young, 1984) have referred to agoraphobia as a women’s syndrome, males too have been described in the clinical literature as agoraphobic sufferers (e.g. Hafner, 1986, ch. 7).

Taking a national-level approach, the present study examined whether societies that provide females and males with equal opportunities for attaining mastery over their lives as opposed to those that offer these possibilities to a lesser extent, and which also differ on other characteristics relevant to the Fodor (1974) and Chambless and Mason (1986) hypothesis, would report lower levels of agoraphobic fears. It will be demonstrated below that there are masculine and feminine societies (not to be confused with masculine and feminine traits as conceptualized by for example Bem, 1981) that provide the sex role imperatives to which Fodor (1974) referred.

1.1. Hofstede’s National Masculinity–Femininity dimension

Hofstede (1991, p. 5) defines ‘culture’ (or ‘mental software’) as the collective programming of the mind which distinguishes the members of one group or category of people from another; culture determines how common basic problems are dealt with worldwide. In the anthropological sense, Hofstede (1998, p. 5) sees culture as broad patterns of thinking, feeling, and acting that have important consequences for the functioning of societies, of groups within those societies, and of individual members of such groups.

Hofstede (1980) collected empirical evidence of differences in culture among paper-and-pencil responses on work-related value items from large samples of employees of subsidiaries of the same multinational business corporation (IBM) in 40 countries ($N > 116,000$). (The total number of countries was later expanded to 50 and three regions.) The national samples were very well matched by occupational status, biological sex and age. Taking the country ($n = 40$), not the individual respondent, as the unit of analysis, a country-level or ecological factor analysis revealed four factors which accounted for about 50% of the total variance. The factor of interest to the present study was labelled Masculinity–Femininity. [For the sake of saving space only this dimension will be thoroughly further discussed (see Hofstede, 1980, 1983, 1991, 2001 for a detailed description of the other three factors).]

In Hofstede’s view, Masculinity and Femininity differ in the social roles that are associated

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2 Briefly, the other three dimensions are power distance, uncertainty avoidance, and individualism–collectivism. Hofstede (1983) defines power distance as the extent to which the members of a society accept that power in institutions and organizations is distributed unequally. Uncertainty avoidance has to do with the degree to which the members of a society feel uncomfortable with uncertainty and ambiguity, leading them to support beliefs promising certainty and to maintain institutions protecting conformity. Individualism stands for a preference for a loosely knit social framework in which individuals are supposed to take care of themselves and their immediate families only, as opposed to collectivism, which stands for a preference for a tightly knit social framework in which individuals can expect their relatives, clan, or other in-group to look after them, in exchange for unquestioning loyalty.
with the biological fact of the existence of the two sexes, and in particular in the social roles that are attributed to men. Masculinity and Femininity refer to the dominant sex role pattern in the vast majority of both traditional and modern societies: that of male assertiveness and female nurturance (Hofstede, 1980, p. 277). Cultures labelled as masculine strive for maximal distinction between how men and women are expected to behave and to fulfil their lives: “[masculine cultures] expect men to be assertive, ambitious and competitive, to strive for material success, and to respect whatever is big, strong, and fast. [Masculine cultures] expect women to serve and care for the non-material quality of life, for children and for the weak. Feminine cultures, on the other hand, define relatively overlapping social roles for the sexes, in which, in particular, men need not be ambitious or competitive but may go for a different quality of life than material success; men may respect whatever is small, weak, and slow” (Hofstede, 1986, p. 308; Hofstede, 2000).

More specifically, survey findings and correlational data with country-level indices have shown that the general societal norms behind low Masculinity countries and high Masculinity countries are among others the following ones (Hofstede, 1980, 1991). For low Masculinity (i.e. high Femininity) countries:

- sex roles in society should be fluid: both men and women are allowed to be tender and to be concerned with interpersonal relationships; in the family, both fathers and mothers deal with facts and feelings; both boys and girls are allowed to cry, but neither boys nor girls should fight (unisex and androgyny as ideals);
- dominant values in society are caring for others and preservation;
- differences in sex roles should not imply differences in power between the sexes;
- both father and mother are used as models by boys and girls;
- men need not be assertive but can also take caring roles; everyone is supposed to be modest;
- stronger position of the mother in the family;
- people and warm relationships are important;
- women’s liberation means that men and women should take equal shares both at home and at work.

For high Masculinity countries:

- sex roles in society should be clearly differentiated: women are supposed to be tender and to take care of interpersonal relationships; in the family, fathers deal with facts and mothers with feelings; girls cry, boys do not, boys should fight back when attacked, girls shouldn’t fight (machismo [ostentatious manliness] as model);
- dominant values in society are material success and progress;
- men should dominate in all settings;
- father is used as model by boys, mother by girls;
- men should behave assertively, ambitious and tough; women should care for (nurture);
- weaker position of the mother in the family;
- money and material objects are important;
- women’s liberation means that women will be admitted to positions hitherto only occupied by men.
In addition to these norms, Hofstede (1980, pp. 296–297) has pointed to some consequences for society at large. For feminine societies:

- belief in equality of the sexes;
- less occupational segregation (e.g. male nurses);
- men and women can both be breadwinners;
- men and women follow the same types of higher education.

By contrast, for masculine societies:

- belief in inequality of the sexes;
- some occupations are considered typically male occupations, whereas other occupations are considered typically female;
- men are breadwinners, women are cakemakers;
- men and women follow different types of higher-level education.

1.2. Inferences and hypothesis

Three inferences can be drawn from these key differences between masculine and feminine societies.

First, based on Arrindell (1998), compared to masculine countries, the more feminine ones would offer both sexes, especially women, greater opportunities for the fulfilment of multiple social roles (employment, marriage, parenthood) that are associated with good self-rated health status, low morbidity, little restricted activity, infrequent use of medical care, low drug use (for both women and men), and that also have additive positive health effects for both sexes (see Barnett & Baruch, 1987; Cleary, 1987; Barnett & Rivers, 1996). In fact, many subjective well-being theories propose (and the empirical literature supports) that fulfilment of needs, goals, and desires is related to happiness (e.g. Emmons, 1986).

Second, power inequalities (husbands’ dominance) in the family and the marital relationship are more frequently associated with satisfaction for husbands than for wives, whereas the highest levels of satisfaction are found in egalitarian couples (Gray-Little & Burks, 1983), especially in wives (Steil, 1997, p. 39). Sex role inequalities between spouses too have been found to be associated with unhappiness (Antill, 1983). In view of the Hofstede (1980, 1991, 1998) findings, one could then argue that sex role complementarities are more likely to be found in masculine than in feminine societies. By contrast, sex role similarities in terms of feminine traits are more likely to be found in feminine than in masculine countries. Antill (1983) demonstrated that couples in which both partners were high on feminine traits (androgy nous and feminine) were far happier than couples in which one or both were low on this dimension (undifferentiated and masculine). This empirical fact is not inconsistent with the emerging trend of feminine traits to be significantly positively (rather than negatively) associated with measures of positive affect (see Arrindell, Vergara et al., 1997).

Third, if Fodor’s hypothesis were correct, masculine societies would more likely than feminine societies be able to produce (agora)phobic individuals as the masculine ones would more likely be inclined to de-emphasize assertiveness, independence and other masculine traits in females
and to de-emphasize feminine behaviour in males than feminine societies would be inclined to do. By contrast, feminine societies are more likely than masculine societies to emphasize especially feminine traits in both females and males, without at the same time emphasizing or de-emphasizing masculine traits in either of the sexes. Hence, masculine societies are more likely than feminine ones to produce psychological ill-health.

Hence, it was hypothesized that on a dimensional measure of agoraphobic fears, masculine nations would score significantly higher than feminine ones, i.e. that Hofstede’s national Masculinity scores would correlate positively with national Agoraphobic fear scores.

The theoretical framework guiding the present study sees culture as a pathogenic agent (contributor to) and also as a pathoplastic modulator (e.g. the perception of illness is intimately influenced by culturally determined beliefs) of (sub)clinical symptoms (e.g. Hallowell, 1970; Draguns, 1990; Alarcón, Westermeyer, Foulks, & Ruiz, 1999; Matsumoto, 2000, ch. 9 and 10). With the present investigation an attempt is made to provide a further contribution to discovering whether differences (or similarities) across nations on dimensional measures of mental health can be predicted from Hofstede’s dimensions of national culture (Arrindell, 1998). The Cultural Clinical Psychology Study Group aims at formulating a functional relationship between cultural characteristics and dimensions of psychopathology. If such a relationship can be established, it should be possible to predict behavioural manifestations from cultural characteristics and to infer cultural characteristics from manifestations of normal or abnormal behaviour (Draguns, 1990).

2. Method

2.1. National samples and inhabitants

Eleven countries participated in the present study. Their inhabitants were students (volunteers) from the following countries: Australia (N = 701; 253 males, 448 females), East Germany (N = 357; 74 males, 283 females), Great Britain (N = 249; 98 males, 151 females), Greece (N = 446; 169 males, 276 females), Guatemala (N = 469; 208 males, 261 females), Hungary (N = 401; 143 males, 258 females), Italy (N = 1057; 475 males, 581 females), Japan (N = 275; 115 males, 160 females), Spain (N = 689; 303 males, 386 females), Sweden (N = 385; 184 males, 200 females), and Venezuela (N = 462; 164 males, 298 females). The mean ages for the national samples were as follows. For Australia, 23 years (SD = 8 years, range: 17–70); East Germany, 24 years (5 years, 18–54); Great Britain, 22 years (6 years, 17–58); Greece, 22 years (2 years, 18–48); Guatemala, 21 years (4 years, 17–37); Hungary, 22 years (2 years, 18–35); Italy, 22 years (3 years, 18–51); Japan, 21 years (2 years, 18–32); Spain, 22 years (3 years, 18–42); Sweden, 25 years (5 years, 18–68); and for Venezuela, 21 years (3 years, 16–37). (Variable N’s and df’s are due to missing data.)

Foreign born and visa students were excluded from the original national subsamples. Following their exclusion, total N across the 11 nations was 5491.

The data were collected in the mid 1990s.

To maximize diversity on a relatively large number of measured and unmeasured variables, students within each country were recruited from different universities scattered across the country. In addition, each national sample was heterogeneous in terms of major course of study or
the faculty in which the students were enrolled. Thus, the samples did not include only psychology students (for further details see Arrindell, Eisemann et al., 2003). Despite being an atypical subsample relative to the general population of their own countries, several workers have argued that university students are still very much the products of their respective cultures. Thus, Williams, Satterwhile, and Saiz (1998, p. 57) have argued that while university students may have been influenced by educational experiences which have brought them into contact with other cultures, this would seem likely to produce a ‘conservative error’ in viewing them as cultural representatives, i.e., such experiences would tend to reduce differences between national samples. By making these national student samples comparable in terms of major variables that can be expected to covary with self-reports of fear (sex and age), one would obtain a narrow but very well comparable set of national samples which are functionally equivalent in many respects: education, intelligence (which enables the comprehension of abstract tasks), marital and work status, intellectual orientation (which enables students to appreciate the value of psychological research and be willing to cooperate in it).

2.2. Measures

2.2.1. Hofstede’s national Masculinity index

Hofstede (1991, p. 83) computed a Masculinity index score for each of the 50 countries and three regions involved in the IBM study. Scores were obtained in a range from about zero (0) for the most feminine (Sweden) to about 100 for the most masculine country (Japan) by multiplying factor scores by 20 and adding 50. Hofstede (1980, 1991, 1998, 2001) report an array of correlations supporting the construct validity of the dimension of interest. National Masculinity scores were retrieved from Hofstede (2001) and are displayed in Table 1.

<table>
<thead>
<tr>
<th>Agoraphobic fear observed/unadjusted</th>
<th>Agoraphobic fear adjusted for sex and age</th>
<th>Hofstede’s national Masculinity–Femininity index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spain 6.06</td>
<td>6.13</td>
<td>42</td>
</tr>
<tr>
<td>Great Britain 7.11</td>
<td>7.12</td>
<td>66</td>
</tr>
<tr>
<td>Italy 7.57</td>
<td>7.67</td>
<td>70</td>
</tr>
<tr>
<td>Guatemala 8.35</td>
<td>8.45</td>
<td>37</td>
</tr>
<tr>
<td>Australia 7.09</td>
<td>7.02</td>
<td>61</td>
</tr>
<tr>
<td>Hungary 9.11</td>
<td>9.02</td>
<td>88</td>
</tr>
<tr>
<td>Greece 7.47</td>
<td>7.42</td>
<td>57</td>
</tr>
<tr>
<td>East Germany 6.28</td>
<td>5.89</td>
<td>66</td>
</tr>
<tr>
<td>Japan 11.03</td>
<td>11.20</td>
<td>95</td>
</tr>
<tr>
<td>Venezuela 8.12</td>
<td>8.02</td>
<td>73</td>
</tr>
<tr>
<td>Sweden 5.67</td>
<td>5.85</td>
<td>5</td>
</tr>
</tbody>
</table>

Higher scores on the Fear Survey Schedule—III and Hofstede’s Masculinity–Femininity index point to higher scores on Agoraphobic fears and Masculinity.
2.2.2. Fear Survey Schedule (FSS)—III Agoraphobic fear subscale

The FSS-III Agoraphobic fear subscale was derived by Arrindell (1980) on the basis of a factor analysis of the responses of a large sample of non-institutionalized phobic club members (N = 703). This dimension has been shown to be replicable, and invariant across a limited number of Western national samples, the Netherlands, Australia, Canada and the UK (Arrindell, Emmelkamp, & van der Ende, 1984; Arrindell, Oei, Evans, & van der Ende, 1991; Arrindell et al., 1990). Data supporting the cross-national factorial validity of the FSS-III dimensions across the 11 national samples involved in the present study are given in Arrindell et al. (2003a). The internal consistency reliabilities (males and females pooled) pertaining to the FSS-III Agoraphobic fear subscale for the 11 national samples were as follows: 0.74 (Australia), 0.70 (East Germany and Spain), 0.76 (Great Britain and Greece), 0.79 (Guatemala), 0.82 (Hungary), 0.75 (Italy), 0.72 (Japan), 0.71 (Sweden), and 0.78 (Venezuela). These levels of internal consistency are considered to be satisfactory (e.g. Cicchetti, 1994).

To ensure translation equivalence of the FSS-III, the original US version (Wolpe & Lang, 1964) was translated into each of the languages and independently back-translated in order to check for discrepancies between original and new versions so as to make adaptations, where necessary.

All questionnaire sets were completed anonymously.

3. Results

3.1. Foregoing analyses

The major demographic variables on which the national samples differed and which on the basis of previous findings (Arrindell et al., 1987, p. 220) were expected to correlate with self-assessed fears were biological sex (overall chi - square = 97.19, df = 10, P < 0.001) and, to a lesser extent, age (overall F = 25.46, df = 10 and 5367, P < 0.001). By using the approach of statistical control, these variables were treated as covariates in an analysis of covariance and controlled for in order to obtain corrected mean national FSS-III Agoraphobic fear scores for each national sample (e.g. Tatsuoka, 1971). The contributions of sex, age and their joint effects in reducing error in the statistical design were each statistically significant. For sex: F = 169.63, P < 0.0001; for age: F = 5.99, P < 0.025; for sex and age conjointly: F = 89.20, P < 0.0001. Table 1 gives for each national sample the observed and corrected means on the dimensional measure of interest. Next, the observed and corrected national means were correlated with the Hofstede national Masculinity index using Pearson’s product–moment correlation coefficient.

3.2. Main findings

The observed national FSS-III Agoraphobic fear scores correlated 0.995 (P < 0.0001) with their corrected counterparts. Japan had the highest national Agoraphobic fear scores (both uncorrected and corrected), whereas Sweden had the lowest scores (both uncorrected and corrected). The uncorrected national FSS-III Agoraphobic fear scores correlated +0.72 (P < 0.01) with Hofstede’s national Masculinity scores. As could be expected then, and in line with prediction, the
corrected national FSS-III Agoraphobic fear scores were also positively and significantly correlated with Hofstede’s national Masculinity scores: ecological $r = +0.67 \ (P = 0.012$, one-tailed test). In accordance with Cohen (1992), this association reflected a large effect size.

4. General discussion

On the basis of the large effect-sized, significantly positive ecological correlation found in the present study between Hofstede’s national Masculinity index and the national FSS-III Agoraphobia subscale scores, one could predict a pattern or trend reflecting the countries with highest Masculinity scores to have the highest Agoraphobic fear scores and vice versa. To illustrate, Arrindell et al. (1987) compared 558 US, 498 British and 339 Dutch university students on the FSS-III subscale of interest. Arrindell et al. (1987, p. 223) reported Agoraphobic fear scores adjusted for the influences of biological sex of 21.22 for US, 22.60 for British, and 18.88 for Dutch students. Individual-level analysis indicated that each of the between-country comparisons on the measure of relevance was statistically significant ($P < 0.001$). Indeed, paralleling this observation, Great Britain had the highest Masculinity score (66), followed by the US (62) and the Netherlands which clearly had the lowest Masculinity score (14).

The point in time at which Arrindell et al. (1987, p. 236) suggested that the Hofstede dimensions might be useful in explaining national differences in general stress and (un)well-being, they did not have sufficient national data at their disposal in order to empirically support the above-mentioned contention. In relation to the more intensive agoraphobic fears in Great Britain observed by Arrindell et al. (1987), Draguns (1990, p. 265) notes that:

[This outcome] curiously parallel[s] the distinguished contributions of British clinicians and researchers to the understanding and treatment of this disorder...

The present findings would however demonstrate that Hofstede’s Masculinity–Femininity dimension should not be overlooked as being a(nother) potential explanatory factor in relation to cross-national variations in agoraphobic (avoidance) behaviour. Indeed, as Draguns (1990, p. 252) suggested: the Hofstede dimensions, in spite of having originated in the domain of industrial–organizational psychology, are equally relevant to clinical psychologists.

It has been demonstrated that the Hofstede dimensions are useful in explaining national differences in subjective well-being, which is an element of positive affect (Diener, Diener, & Diener, 1995; Arrindell, Hatzichristou et al., 1997). The present findings thus expand this view in relation to agoraphobic fear, which is a subcomponent of the higher-order negative affect dimension. A forthcoming study extends these findings even further in relation to other forms of phobic fears as well (Arrindell et al., 2003b).

Further studies containing larger numbers of national samples than considered in the present investigation are needed to study how broad environmental, demographic, epidemiological and unalterable, constitutional factors independently of each other and in complex interactions with one another bring about national differences in phobic behaviour.
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