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The cross-national epidemiology of specific phobia in the World Mental Health Surveys

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Conflict of interest

The other authors report no disclosures.

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Abstract

Background—Although specific phobia is highly prevalent, associated with impairment, and an important risk factor for the development of other mental disorders, cross-national epidemiological data are scarce, especially from low and middle-income countries. This paper presents epidemiological data from 22 low, lower-middle, upper-middle and high-income countries.

Method—Data came from 25 representative population-based surveys conducted in 22 countries (2001–2011) as part of the World Health Organization World Mental Health Surveys initiative (N=124,902). The presence of specific phobia as defined by the Diagnostic and Statistical Manual of Mental Disorders, fourth edition was evaluated using the World Health Organization Composite International Diagnostic Interview.

Results—The cross-national lifetime and 12-month prevalence rates of specific phobia were, respectively, 7.4% and 5.5%, being higher in females (9.8% and 7.7%) than in males (4.9% and 3.3%) and higher in high and higher-middle income countries than in low/lower-middle income countries. The median age of onset was young (8 years). Of the 12-month patients, 18.7% reported severe role impairment (13.3%–21.9% across income groups) and 23.1% reported any treatment (9.6%–30.1% across income groups). Lifetime comorbidity was observed in 60.2% of those with lifetime specific phobia, with the onset of specific phobia preceding the other disorder in most cases (72.6%). Interestingly, rates of impairment, treatment-use and comorbidity increased with the number of fear subtypes.

Conclusion—Specific phobia is common and associated with impairment in a considerable percentage of cases. Importantly, specific phobia often precedes the onset of other mental disorders, making it a possible early-life indicator of psychopathology vulnerability.

Keywords

specific phobia; epidemiology; comorbidity; cross-national; impairment; treatment

Introduction

Specific phobia is one of the most common mental disorders in the general population with lifetime and 12-month prevalence estimates in representative population surveys ranging from 7.7% to 12.5% and from 2.0% to 8.8%, respectively (Kessler et al., 1994; 2005; Bijl et al., 1998; de Graaf et al., 2012; Stinson et al., 2007; Alonso et al., 2004; Grenier et al., 2011; Wells et al., 2006). In addition, prospective studies have shown high incidence rates for specific phobia. Angst et al. (2016) found a cumulative incidence of 26.9% between ages 20 and 50 years. Bijl et al. (2002) found a 1-year incidence rate of 2.20 new cases per 100 person-years. Grant et al. (2009) found a lower 1-year incidence rate of 0.44 new cases per 100 person-years. Interestingly, prevalence rates (e.g. Kessler et al., 1994; Bijl et al., 1998; Stinson et al., 2007) and incidence rates (Bijl et al., 2002; Angst et al., 2016) have been

found to be higher in females than in males. Also, prevalence rates have been shown to decrease with age (e.g. Stinson et al., 2007; Sigström et al., 2016).

Because of its high prevalence, lifetime persistence (e.g. Goisman et al., 1998), associated impairment and high lifetime comorbidity rate with other disorders, specific phobia is important from both an epidemiological and a clinical perspective. Previous work has shown considerable role impairment in those with specific phobia, with 34.2% reporting significant role impairments in their daily life, compared to 26.5% in agoraphobia and 33.5% in social phobia (Magee et al., 1996). Depla et al. (2008) showed that up to 59.2% of patients reported interference with their daily life. Using data from the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC), Stinson et al. (2007) showed that impairment levels in specific phobia were comparable with other anxiety- and substance-use disorders. However, other studies have found low disability in specific phobia compared to other disorders (e.g. Wells et al., 2006; Ormel et al., 2008) and it has been suggested that observed functional impairment in specific phobia can be partly explained by high co-occurrence with other disorders (Comer et al., 2011). Nevertheless, the restricted lifestyle resulting from fear and avoidance in specific phobia is likely to contribute independently to functional impairment.

Previous surveys have shown that comorbidity rates between specific phobia and other mental disorders are high (Kessler et al., 1996; 1997), with estimated rates of up to 81.0% (Magee et al., 1996). Interestingly, these retrospective studies showed that in the majority of comorbid cases, the onset of specific phobia precedes the other disorder(s) (Magee et al., 1996; Kessler et al., 1996; 1997). Prospective work has shown that specific phobia is associated with a higher odds of later depressive, anxiety and eating disorders (Goodwin et al., 2002; Bittner et al., 2004; Trumpf et al., 2010; Lieb et al., 2016) but not of later substance-use disorders (Zimmermann et al., 2003). Grant et al. (2009) showed that specific phobia at baseline was associated with an increased incidence of other anxiety disorders. However, these associations could also be explained by other baseline disorders and sociodemographic factors.

Relatively effective treatments, such as behavior therapy and cognitive therapy are available for specific phobia (Choy et al., 2007). However, despite specific-phobia patients' need for care, only a minority of patients seeks treatment in their lifetime (Stinson et al., 2007: 8.0%; Magee et al., 1996: 46.6%). In addition it has been shown that specific phobia patients that do seek treatment take much longer to do so compared to other anxiety disorders (Ten Have et al., 2013; Iza et al., 2013).

Within specific phobia, the DSM distinguishes between different subtypes: *animal* (e.g. bugs, snakes), *natural environment* (e.g. heights, weather), *blood-injection-injury*, *situational* (e.g. flying on a plane, enclosed spaces) and *other* (e.g. vomiting, choking). Previously phobia subtypes have been shown to differ in terms of e.g. prevalence, impairment levels and comorbidity rates (e.g. Frederikson et al., 1996; Becker et al., 2007; Depla et al., 2008; Lebeau et al., 2011). Also, most patients have more than one subtype (Curtis et al., 1998; Burstein et al., 2012) and increasing numbers of subtypes have been shown to be associated

with more comorbidity, impairment and treatment-seeking (e.g. Curtis et al., 1998; Stinson et al., 2007; Burstein et al., 2012).

Although the above described findings indicate that specific phobia a highly relevant condition that deserves attention from both researchers and clinicians, they all come from surveys in western, high income countries. This makes it hard to judge the universal relevance of specific phobia as an impairing condition and a marker for increased psychopathology risk. In this study we therefore took a cross-national approach, combining World Mental Health (WMH) population survey data from 22 low/lower-middle income, upper-middle income and high-income countries (n=124,902) to gain a more complete insight into the epidemiological characteristics of specific phobia around the world.

Method

Sample

Data came from 25 World Health Organization (WHO) WMH surveys, conducted in 22 countries (Appendix Table 1). Of these countries, five are classified by the World Bank (World Bank, 2008) as low-income/lower-middle income (Colombia, Iraq, Nigeria, Peru and the Peoples Republic of China [PRC]), six as upper-middle income countries (Brazil, Bulgaria, Colombia [Medellin], Lebanon, Mexico and Romania) and twelve as high income countries (Belgium, France, Germany, Italy, Japan, Netherlands, New Zealand, Northern Ireland, Poland, Portugal, Spain and the USA). The sample sizes of the surveys ranged from 2,357 (Romania) to 12,790 (New Zealand) and the total combined sample size was 124,902. Most surveys were based on nationally representative stratified multistage clustered area probability samples of household residents. All respondents were 18 years or older. Response rates ranged from 45.9% (France) to 97.2% (Colombia) and the average weighted response rate across countries was 69.3%. The surveys were conducted face-to-face by trained lay interviewers. The same standardized procedures for interviewer training, translation of the used study materials and quality control were used in all countries (Kessler & Üstün, 2008)]. To reduce the burden of the interview it was often divided into two parts. In Part I, core mental disorders were assessed. In Part II, additional disorders and correlates were assessed. All respondents completed part I (n=124,902). Part II (n=60,345) was additionally administered to a subsample of respondents meeting criteria for any Part I disorder and in a probability subsample of the other part I respondents. Part II responses were weighted by the inverse of their probability of selection into the part II sample to adjust for any differential sampling. All respondents provided informed consent prior to the interview and the study protocols were approved by the institutional review boards of the organizations coordinating the surveys.

Measures

Diagnostic assessments—The lifetime and 12-month prevalence and AOO of specific phobia as defined in the Diagnostic and Statistical Manual, fourth edition was evaluated with the World Health Organization Composite International Diagnostic Interview (CIDI). In the screening section, respondents were shown a list of six specific fears (animals, still water/ weather events, blood/injuries/medical experiences [BIM], closed spaces, high places,

flying) and were asked if they ever had a strong fear of any of these things. If any specific fear was reported in the screening section, the specific phobia section was administered. The CIDI was also used to assess other psychiatric disorders, including mood (major depressive, dysthymic, bipolar-I, bipolar-II and sub-threshold bipolar disorder) anxiety (agoraphobia, social phobia, generalized anxiety, panic, post-traumatic stress and separation anxiety) substance use (alcohol and drug abuse, alcohol and drug dependence with abuse) and behavior disorders (attention-deficit/hyperactivity, oppositional-defiant, conduct, intermittent explosive disorder). The WMH interview translation, back-translation and harmonization was done by culturally competent bilingual clinicians, who reviewed, modified, and approved the key phrases describing the assessed symptoms (Harkness et al., 2008). Masked clinical reappraisal with a standardized clinical interview showed fair agreement for specific phobia (area under the receiver operating curve=0.67; Haro et al., 2006).

Healthcare use—The services module of the WMH-CIDI v3.0 (Kessler & Üstün, 2004) was used to assess if respondents ever received treatment for emotion regulation problems, psychological distress, anxiety, or substance use. If respondents reported ever receiving such care, follow-up questions were asked about their age at the first and last treatment and about the treatment they received in the past 12 months. Different sectors of treatment were distinguished. The *specialty mental health* sector included psychiatrists, psychologists or any other non-psychiatrist mental health specialists (social workers, counselors in specialty mental health settings, mental health helplines, overnight hospital admissions for mental health or substance-related problems). The *general medical sector* included general practitioners, other medical doctors, nurses, occupational therapists or any other healthcare professional. The *human services sector* included religious or spiritual advisors, social workers or counsellors in other settings than the specialty mental health sector. The *complementary and alternative medicine (CAM)* sector included any other type of healer (e.g. herbal healers, self-help groups).

Impairment—A modified version of the Sheehan Disability Scales (SDS; Leon et al., 1997) was used to assess 12-month role-functioning. Respondents were asked to remember the month in which their specific phobia was most severe and to rate its interference with functioning in four domains (home management, ability to work, relationships and social life) on a 10-point scale. Those with a score of 7 or higher on one or more SDS-domains were classified as severely impaired. Respondents with 12-month specific phobia were also asked how many of the 365 days in the past 12 months they had been totally unable to work or carry out their normal activities because of their specific phobia.

Demographic factors—The following demographic factors were investigated: age-group (18–29 years, 30–44 years, 45–59 years and 60+ years), gender, employment status (employed, student, homemaker, retired, other [unemployed, temporarily laid off, maternity leave, illness/sick leave, and disabled]), marital status (currently married, divorced/separated/widowed, never married), education level (no education, some primary, finished primary, some secondary, finished secondary, some college, finished college) and household income (low, low-average, high-average and high). Income categories were based on the quartiles of country-specific gross household income distributions (Levinson et al., 2010).

Statistical analyses—Analyses of prevalence, AOO and impairment were carried out for the cross-national sample, each country-income group, each country survey, and cross-national gender-groups. Cross-tabulations were used to estimate the lifetime, 12-month and 30-day prevalence. Only lifetime prevalence rates were calculated for subtypes of specific phobia and the prevalence of specific phobia with 1 to ≥4 lifetime subtypes.

The 12-month prevalence of specific phobia among lifetime cases was used as an indicator of recurrence or chronicity: e.g. a disorder can have a high lifetime prevalence, but a low level of recurrence as shown by a low 12-month prevalence among lifetime cases. The 30-day prevalence among 12-month cases was calculated as an indicator of disorder duration: e.g. a disorder can have a high 12-month prevalence, but a limited duration, as shown by a low 30-day prevalence. The percentages of lifetime and 12-month comorbidity in lifetime cases and the percentages of 12-month comorbidity in 12-month cases were estimated. In addition, the percentages of cases in which specific phobia was the temporally primary disorder were calculated. The percentages of 12-month specific phobia cases with severe role impairment and healthcare use across sectors were calculated with cross-tabulation. The mean number of days out of role was calculated for all 12-month specific phobia cases combined and for subsamples of 12-month cases, split out by their highest reported domain of role-impairment. Percentages of lifetime comorbidity, 12-month impairment and healthcare-use were calculated for each subtype and groups with 1 to ≥4 lifetime subtypes.

The AOO and the projected risk at age 75 were estimated with the two-part actuarial method implemented in SAS. The actuarial method assumes a constant conditional risk of onset in a given year of life across cohorts and allows for accurate estimations of the onset timings within a year (Halli et al., 1992). Associations of lifetime specific phobia with demographic factors were analyzed with survival models, adjusted for age cohort, gender, person-years and country. Associations of 30-day specific phobia with demographic factors were analyzed with logistic regression models, adjusted for time since specific phobia onset, AOO, gender and country. Associations of demographic factors with recurrence (12-month prevalence among lifetime cases) and duration (30-day prevalence among 12-month cases) were analyzed with logistic regression, adjusted for time since specific phobia onset, AOO, gender and country. The distributions of AOO and of sociodemographic were calculated for groups with different subtypes and subgroups with 1 to ≥4 lifetime subtypes.

All analyses were weighted to adjust for differential selection probabilities within households, to match the samples to population sociodemographic distributions and to adjust for nonresponse (Kessler & Üstün, 2008). Design-adjusted standard errors were estimated using the Taylor series linearization method (Wolter, 1985), implemented in SAS 9.4 (SAS Institute Inc., Cary, North Carolina). Design-adjusted Wald χ^2-tests were used to test the multivariate statistical significance of sets of predictors.

Results

Prevalence

Lifetime specific phobia prevalence ranged from 2.6% to 12.5% across countries (Table 1) and the averaged cross-national lifetime prevalence in was 7.4% for the whole sample

(median=6.8%; IQR=4.8%–10.2%), 4.9% for the male and 9.8% for the female subsample. The prevalence was 8.0–8.1% in high income and upper-middle income countries and 5.7% in the low-lower middle income countries. The overall mean 12-month prevalence was 5.5% in the whole sample (median=5.0%; IQR=3.8%–7.6%), 3.3% among males and 7.7% among females. The 12-month prevalence differed across countries (1.7%–10.6%) and income groups (4.0%–6.4%), with the lowest prevalence in the low-lower middle income group (4.0%). The overall mean 30-day prevalence was 3.9% in the total sample, with differences across gender (males: 2.1%; females: 5.5%), countries (1.0%–8.8%) and income groups (2.4%–4.8%), with the lowest prevalence (2.4%) in the low-lower middle income countries.

Of specific phobia subtypes (Table 2), animal fear had the highest cross-national lifetime prevalence (3.8%), followed by BIM (3.0%), high places (2.8%) and still water or weather events fear (2.3%). Fear of flying had the lowest prevalence (1.3%). The low-lower middle income countries showed the lowest prevalence rates for all subtypes (0.6%–1.6%) and considerably higher prevalence rates in upper-middle income countries (1.2%–4.4%) and high income countries (1.7%–3.7%). The clearest difference was seen for fear of flying, which had an almost three times higher prevalence in high income (1.7%) than in low-lower middle income (0.6%) countries. All subtypes were most common in females. Of the cross-national sample, 3.4% reported a single subtype, 1.8% reported two subtypes, 1.1% reported three subtypes and 1.1% reported ≥4 subtypes. Higher numbers of subtypes were more common among females than males.

Recurrence and duration

The averaged prevalence of 12-month specific phobia among lifetime specific phobia cases was 74.2% for the whole cross-national sample (median=73.0%, IQR=70.2%–81.3%; Table 1). The averaged prevalence of 30-day specific phobia among 12-month cases was 70.2% for the cross-national sample (median=72.6%, IQR=67.6%–78.3%). Both prevalence-rates were higher in females than in males. In addition, the 30-day prevalence among 12-month cases was the only that differed notably across income groups, with the lowest rate in the low-low middle income group (58.7%).

AOO

The median AOO was 8 years (IQR=5–13; Appendix Table 2) and differed slightly across surveys (IQR=8–9 years). The cross-national projected risk at age 75 was only 0.7% higher than the observed lifetime prevalence rate (8.1% vs. 7.4%), reflecting specific phobia's young AOO distribution. Early AOO was most common for all subtypes, but especially common for fear of still water/weather (Table 3; 37.1%), animals (36.6%), and closed spaces (35.2%). A slightly older onset distribution was seen for fear of flying and high places. Early onset rates increased and late onset rates decreased with the number of fears.

Comorbidity

In 60.5% of lifetime specific phobia cases, at least one other lifetime disorder was present, with 34.3% having a comorbid mood disorder, 41.2% an anxiety disorder, 15.9% a substance-use disorder, and 17.4% an impulse-control disorder (Table 4). In those with 12-month comorbidity of specific phobia with any other disorder, comorbid anxiety disorders

were most common (29.6%), followed by mood disorders (21.0%). Specific phobia preceded the other disorders in the majority of comorbid cases (71.6%–92.2%). Lifetime comorbidity with any other disorder ranged from 60.6% to 73.0% across subtypes (Table 3). Comorbidity was highest with anxiety (range: 41.1%–58.8%) and mood disorders (range: 34.7%–43.6%). Comorbidity rates were highest in those with fear of closed spaces and flying and increased with the number of subtypes from 49.7% (one subtype) to 82.1% (≥4 subtype).

Demographic correlates of specific phobia onset

In the combined sample, higher risk of lifetime onset of specific phobia (Table 5) was observed in respondents aged younger than 60 compared to respondents aged 60 and older (OR=1.5–1.8), in women compared to men (OR=2.0), in homemakers and those with 'other' employment status compared to employed respondents (OR=1.2–1.4), in previously-married compared to currently married (OR=1.2), in those with some college or less education compared to those who completed college (OR=1.3–1.7), and in those with low and low-average income compared to those with a high income (OR=1.1–1.2). When analyzed per income group (Appendix Tables 3–5), the following associations with increased odds of lifetime specific phobia onset were consistently observed: being in the youngest age-cohort (OR=1.3–2.0), being female (OR=1.5–2.3), having employment status 'other' (OR=1.3–1.5), and having a lower education than finished college (OR=1.2–1.9).

The age-group distribution varied across subtypes (Table 3), with most young persons in animal and BIM phobia. The percentage of females was highest in all subtype groups and increased with number of subtypes. Employment status showed limited variation across subtypes, but the percentage of working persons was markedly lower (53.1%) in those with ≥4 subtypes compared to those with 1–3 subtypes (57.7%–60.8%). The percentages of cases with completed college showed some variation across subtypes (8.8%–12.8%), but a more striking difference between those with ≥4 subtypes (7.6%) and those with 1–3 subtypes (12.1%–13.8%). Income-group distributions showed limited variation across subtypes, but the percentages of low- and low-mid income increased with the number of subtypes.

Demographic correlates of persistence

12-month specific phobia prevalence among lifetime cases (Table 5) was higher in those with early AOO compared to those with late AOO (OR=1.4), in women compared to men (OR=1.8), in those who were retired or had employment status 'other' compared to the employed (OR=1.3 and OR=1.5), in those with some college or less compared to those with finished college (OR=1.3–1.7), and in those with low income compared to those with high income (OR=1.4). Only female gender was consistently observed to be associated with an increased odds of 30-day prevalence among 12-month cases (OR=1.5–1.9; Appendix Tables 3–5).

Impairment

In the combined sample, 18.7% of 12-month specific phobia cases reported severe role impairment in any domain (Appendix Table 6), with the highest percentage of severe impairment in the home domain (10.3%) and the lowest in the relationship domain (7.9%). The percentages of severe impairment differed across income groups on all domains, except

for work. The low-lower middle income group, especially Nigeria and PRC Shen Zhen, showed the lowest percentages of severe impairment. The upper-middle income group showed the highest percentages of severe impairment (range: 9.9–14.4%). The mean number of days out of role in the past year due to 12-month specific phobia was 12.2 (SE=0.9). However, those with severe impairment in any domain reported 29.1 days out of role (Appendix Table 7), with the number of days varying depending on the investigated domain of impairment (34.6–47.9). The percentage of cases reporting any impairment varied somewhat across subtypes (52.1%–57.3%; Table 3). However, impairment rates increased with the number of fear subtypes, with 11.6% reporting severe impairment in those with one subtype and 20.6% in those with ≥4 subtypes.

Treatment

Cross-nationally, the percentage of 12-month specific phobia cases reporting any treatment was 23.1%. Treatment was more common in those reporting severe impairment (32.5%) compared to those reporting mild or moderate impairment (respectively, 21.1% and 22.8%; Appendix Table 8). Treatment rates differed across income groups, with 9.6% in low-lower middle income, 16.0% in higher middle income, and 30.1% in high income countries. Overall treatment use showed some variation across subtypes (Table 3), with the highest rates for fear of flying (28.4%), closed spaces (27.5%), and high places (26.0%). Also, rates of treatment use increased from 16.7% in those with one subtype to 29.7% in those with ≥4 subtypes.

Discussion

Specific phobia is a common mental disorder with a cross-national lifetime prevalence of 7.4%. Interestingly, the prevalence, impairment and duration of specific phobia were considerably higher in high- and upper-middle income countries than in low-lower middle income countries. This could be due to cultural differences in the degree to which symptoms of specific phobia are recognized or attributed to a mental disorder and differences in catastrophic cognitions about phobic/anxious symptoms (Hinton & Pollack, 2009; Marques et al., 2011; Hofmann & Hinton, 2014). Also, there could be differences in how interview questions are interpreted, social norms, attitudes, and stigmas surrounding mental problems (Angermeyer & Dietrich, 2006; Lee et al., 2009). For instance, differences in specific phobia duration could be attributed to the reasons above but could also reflect differences in the kinds and/or frequencies of reported phobic stimuli. Although cross-national differences could not be investigated in-depth, the results suggest that the phenomenology and underlying processes of specific phobia vary across countries. As observed previously (e.g. Stinson et al., 2007; Lebeau et al., 2010), females showed higher specific–phobia prevalence than males.

Young age was also observed to be associated with specific phobia, aligning with previous work (Stinson et al., 2007; Sigström et al., 2016). Those with lower education had higher odds of specific phobia, which has been observed previously (Magee et al., 1996) but not in all surveys (Stinson et al., 2007). Those with employment-status ‘Other’ (e.g. disabled,

looking for job) showed higher odds of specific phobia. Magee et al (1996) found a similar association, but it has not been investigated in other surveys.

Subtype-specific analyses showed that animal phobia had the highest cross-national prevalence (3.0%; 1.4–8.7% across countries), in line with previous observations (3.3%–7.0%; Lebeau et al., 2010; Curtis et al., 1998; Depla et al., 2008). Fear of still water or weather events had a prevalence of 2.3%, aligning with previously reported prevalence rates for 'water' phobia (2.2–3.4%) and 'storm' phobia (2.0–2.9%; Lebeau et al., 2011). For fear of heights, the cross-national prevalence (2.8%) was somewhat lower than reported previously (3.1–5.3%; Lebeau et al., 2011). The cross-national prevalence of BIM phobia (3.0%) was in line with previously estimated prevalence rates (3.2–4.5%; Lebeau et al., 2011). The cross-national prevalence rates fear of closed spaces (2.2%) and fear of flying (1.3%) were both lower than reported previously (closed spaces: 3.2%–3.3%; flying: 2.5%–2.9%; Lebeau et al., 2010). Apart from methodological differences, some of the discrepancies between current and previous findings could be explained by variations across countries in culture (see above) and rates of exposure (e.g. flying is less common in low-income countries). Investigation of subtype co-occurrence showed that more than half of patients had two or more lifetime fear subtypes and that those with more subtypes had more severe clinical characteristics (e.g. impairment, comorbidity), aligning with previous results (e.g. Curtis et al., 1998).

The median AOO of specific phobia was found to be young, showing relatively limited variation across surveys (IQR=5–13 years). In line with this, the projected lifetime risk was only slightly higher than the observed lifetime prevalence rates (range of absolute differences across surveys: 0.1%–1.2%; range of proportional differences across surveys: 1.7%–22.0%). In line with previous work (e.g. Burstein et al., 2012), the AOO distribution showed some differences across subtypes, with more early AOO for animal and natural phenomena phobias. The observation of a younger AOO distribution in those with multiple fear subtypes also aligns with previous work (Burstein et al., 2012). Lifetime comorbidity levels in specific phobia were high (60.5%), with some subtypes being associated with higher levels than others. In the majority of comorbid cases, specific phobia onset preceded the other disorders(s). In addition, comorbidity became more common with increasing numbers of fear subtypes. Together, these results support the idea that specific phobia is an early-life indicator of psychopathology vulnerability.

Severe role impairment was reported in roughly a fifth of 12-month specific phobia cases, but reported impairment was lower in low-lower middle income countries than in the other countries. The mean number of days out of role in all subjects with 12-month specific phobia was 12.2, but in respondents reporting severe impairment, this number was much higher, often in excess of a month, depending on the domain of severe impairment. 12-month impairment increased with the number of reported fear subtypes, aligning with the idea that the presence of multiple lifetime fears marks increased clinical severity. Together, these results suggests that specific phobia can have severe impact on persons' lives.

Treatment for specific phobia was threefold higher in high-income countries than in low-lower middle income countries, which could be due to differences in the availability of care

and financial resources (Saxena et al., 2007; McBain et al., 2012), the perceived need for treatment (Andrade et al., 2014), knowledge about mental healthcare (Palazzo et al., 2014), and prejudices (Clement et al., 2015; Semrau et al., 2015). Despite differences in treatment rates, associations between the level of impairment and percentages of reported treatment were comparable across the income groups, with severely impaired cases reporting most treatment. These results indicate that self-reported impairment could be an informative clinical specifier indicating need for care.

The current study had several limitations. First, diagnoses were based on structured lay interviews. However, a previous clinical reappraisal study (Haro et al., 2006) showed sufficient concordance between CIDI-based and clinical diagnoses of specific phobia. Second, all information about lifetime prevalence and AOO was reported retrospectively. This could have led to recall bias, which has been suggested to lead to underestimated lifetime prevalence rates of common mental disorders (Moffitt et al., 2010). If this bias affected reporting of specific phobia in the current study, the true lifetime prevalence and comorbidity rates could be higher. Third, the included surveys differed in terms of their response rate and sampling frames. Fifth, not all phobia types were systematically assessed (e.g. fear of choking, vomiting, contacting an illness), which could have led to underreporting. Finally, the results are based on DSM-IV criteria for specific phobia and using DSM-5 diagnoses could have led to different results. Going from DSM-IV to DSM-5, two important modifications were made to the diagnostic criteria. First, persons above 18 are no longer required to recognize that their fear/avoidance is excessive/unreasonable. Second, the fear/avoidance should at least last 6 months in all persons. Interestingly, the former modification is likely to increase prevalence, whereas the latter is likely to decrease the prevalence, possibly counteracting each other's effects. Given the fact that the core features have remained the same and the nature of the modifications, strongly differing prevalence estimations would not be expected.

Although cross-national differences were observed in the prevalence, associated impairment and treatment use, the results suggest that specific phobia is associated with considerable impairment across the world and often precedes other disorders. These findings suggest that specific phobia deserves attention of clinicians and researchers in view of its direct effects on the global burden of disease, and its role in the developmental unfolding of psychopathology.

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Appendix

Appendix Table 1

World Mental Health sample characteristics by World Bank Income categories[a].

Country	Survey[b]	Sample characteristics[c]	Field dates	Age range[d]	Sample Size		
					Part 1	Part 2 sub-sample	Resp
I. Low-lower middle income							
Colombia	NSMH	All urban areas of the country (approximately 73% of thetotal national population)	2003	18–65	4426	2381	87.7
Iraq	IMHS	Nationally representative.	2006–7	18+	4332	4332	95.2
Nigeria	NSMHW	21 of the 36 states in the country, representing 57% of the national population. The surveys were conducted in Yoruba, Igbo, Hausa and Efik languages.	2002–3	18+	6752	2143	79.3
Peru	EMSMP	Nationally representative.	2004–5	18–65	3930	1801	90.2
PRC[f] Beijing/Shanghai	B-WMHS-WMH	Beijing and Shanghai metropolitan areas.	2002–3	18+	5201	1628	74.7
PRC[f] Shen Zhen	Shenzhen	Shenzhen metropolitan area. Included temporary residentsas well as household residents.	2006–7	18+	7132	2475	80.0
Total					36,498	16,480	82.9
II. Upper-middle income							
Brazil	São Paulo Megacity	São Paulo metropolitan area.	2005–7	18+	5037	2942	81.3
Bulgaria	NSHS	Nationally representative.	2003–7	18+	5318	2233	72.0
Colombia (Medellin)[g]	MMHHS	Medellin metropolitan area	2011–2	18–65	3261	1673	97.2
Lebanon	LEBANON	Nationally representative.	2002–3	18+	2857	1031	70.0
Mexico	M-NCS	All urban areas of the country (approximately 75% of the total national population).	2001–2	18–65	5782	2362	76.6
Romania	RMHS	Nationally representative.	2005–6	18+	2357	2357	70.9
Total					24,612	12,598	77.2
III. High-income							
Belgium	ESEMeD	Nationally representative.	2001–2	18+	2419	1043	50.6
France	ESEMeD	Nationally representative.	2001–2	18+	2894	1436	45.9
Germany	ESEMeD	Nationally representative.	2002–3	18+	3555	1323	57.8
Italy	ESEMeD	Nationally representative.	2001–2	18+	4712	1779	71.3
Japan	WMHJ	Eleven metropolitan areas.	2002–6	20+	4129	1682	55.1
New Zealand	NZMHS	Nationally representative.	2003–4	18+	12790	7312	73.3
Northern Ireland	NISHS	Nationally representative.	2004–7	18+	4340	1986	68.4
Poland	EZOP	Nationally representative.	2010–11	18–64	10081	4000	50.4
Portugal	NMHS	Nationally representative.	2008–9	18+	3849	2060	57.3
Spain	ESEMeD	Nationally representative.	2001–2	18+	5473	2121	78.6
Spain (Murcia)	PEGASUS-Murcia	Murcia region	2010–2	18+	2621	1459	67.4
The Netherlands	ESEMeD	Nationally representative.	2002–3	18+	2372	1094	56.4

Country	Survey[b]	Sample characteristics[c]	Field dates	Age range[d]	Sample Size		
					Part 1	Part 2 sub-sample	Resp
The United States	NCS-R	Nationally representative.	2002–3	18+	9282	5692	70.9
Total					68,517	32,987	62.3
IV. Total					124,902	60,345	
Weighted average response rate (%)							69.3

[a]The World Bank (2012) Data. Accessed May 12, 2012 at: http://data.worldbank.org/country. Some of the WMH countries have moved into new income categories since the surveys were conducted. The income groupings above reflect the status of each country at the time of data collection. The current income category of each country is available at the preceding URL.

[b]NSMH (The Colombian National Study of Mental Health); IMHS (Iraq Mental Health Survey); NSMHW (The Nigerian Survey of Mental Health and Wellbeing); B-WMH (The Beijing World Mental Health Survey); S-WMH (The Shanghai World Mental Health Survey); EMSMP (La Encuesta Mundial de Salud Mental en el Peru); NSHS (Bulgaria National Survey of Health and Stress); MMHHS (Medellín Mental Health Household Study); LEBANON (Lebanese Evaluation of the Burden of Ailments and Needs of the Nation); M-NCS (The Mexico National Comorbidity Survey); RMHS (Romania Mental Health Survey); ESEMeD (The European Study Of The Epidemiology Of Mental Disorders); WMHJ2002–2006 (World Mental Health Japan Survey); NZMHS (New Zealand Mental Health Survey); NISHS (Northern Ireland Study of Health and Stress); EZOP (Epidemiology of Mental Disorders and Access to Care Survey); NMHS (Portugal National Mental Health Survey); PEGASUS-Murcia (Psychiatric Enquiry to General Population in Southeast Spain-Murcia); NCS-R (The US National Comorbidity Survey Replication).

[c]Most WMH surveys are based on stratified multistage clustered area probability household samples in which samples of areas equivalent to counties or municipalities in the US were selected in the first stage followed by one or more subsequent stages of geographic sampling (e.g., towns within counties, blocks within towns, households within blocks) to arrive at a sample of households, in each of which a listing of household members was created and one or two people were selected from this listing to be interviewed. No substitution was allowed when the originally sampled household resident could not be interviewed. These household samples were selected from Census area data in all countries other than France (where telephone directories were used to select households) and the Netherlands (where postal registries were used to select households). Several WMH surveys (Belgium, Germany, Italy) used municipal resident registries to select respondents without listing households. The Japanese sample is the only totally un-clustered sample, with households randomly selected in each of the 11 metropolitan areas and one random respondent selected in each sample household. 16 of the 25 surveys are based on nationally representative household samples.

[d]For the purposes of cross-national comparisons we limit the sample to those 18+.

[e]The response rate is calculated as the ratio of the number of households in which an interview was completed to the number of households originally sampled, excluding from the denominator households known not to be eligible either because of being vacant at the time of initial contact or because the residents were unable to speak the designated languages of the survey. The weighted average response rate is 69.3%.

[f]People's Republic of China

[g]The newer Colombian survey in Medellin was classified as upper-middle income country (due to a change of classification by The World Bank) although the original survey Colombia was classified as a low-lower middle income country. For more information, please see footnote *a*.

Appendix Table 2

Age at selected percentiles on the standardized age of onset distributions of DSM-IV specific phobia with projected lifetime risk at age 75.

Country	Ages at selected percentiles								Lifetime prevalence of specific phobia		Projected risk at age 75	
	5	10	25	50	75	90	95	99	%	SE	%	SE
Low-Lower middle income countries	5	5	5	8	13	19	27	59	5.7	0.2	5.9	0.2
Colombia[a]	5	5	5	8	12	20	39	61	12.5	0.8	13.1	1.1
Iraq	5	5	5	7	13	15	18	41	4.2	0.4	4.3	0.5

Country	Ages at selected percentiles								Lifetime prevalence of specific phobia		Projected risk at age 75	
	5	10	25	50	75	90	95	99	%	SE	%	SE
Nigeria	5	5	5	7	11	13	16	24	5.9	0.5	6.0	0.5
Peru[a]	5	5	7	10	13	20	27	36	6.6	0.4	6.8	0.4
PRC China	5	5	5	13	17	36	41	59	2.6	0.3	2.8	0.4
PRC Shen Zhen	5	5	6	8	13	19	26	33	4.0	0.3	4.1	0.3
Upper-middle income countries	5	5	5	9	13	29	50	68	8.0	0.2	8.6	0.3
Brazil	5	5	5	8	13	26	51	56	12.5	0.6	13.5	0.7
Bulgaria	5	5	5	11	16	33	51	70	5.8	0.3	6.1	0.4
Colombia (Medellin)[a]	5	5	5	7	11	19	30	46	10.2	0.8	10.5	0.9
Lebanon	5	5	5	11	13	29	48	68	7.0	0.5	7.9	0.7
Mexico[a]	5	5	7	9	16	31	50	63	7.0	0.5	7.7	0.6
Romania	5	5	5	9	18	48	53	58	3.8	0.5	4.3	0.5
High income countries	5	5	5	8	13	29	41	63	8.1	0.1	8.8	0.2
Belgium	5	5	5	9	18	51	65	72	6.8	1.0	8.0	1.4
France	5	5	5	8	13	29	41	45	10.7	0.6	11.5	0.8
Germany	5	5	5	8	14	26	41	63	9.9	0.7	10.7	0.8
Italy	5	5	5	8	14	28	44	61	5.4	0.5	5.7	0.5
Japan	5	5	5	8	13	26	33	56	3.4	0.3	3.7	0.3
New Zealand	5	5	5	8	13	26	39	56	10.9	0.4	11.9	0.4
Northern Ireland	5	5	5	8	13	22	31	63	9.7	0.6	10.3	0.6
Poland[b]	5	5	5	8	14	21	33	56	3.4	0.2	3.5	0.2
Portugal	5	5	5	8	13	31	47	59	10.6	0.6	11.5	0.7
Spain	5	5	5	7	16	43	56	66	4.8	0.4	5.5	0.5
Spain (Murcia)	5	5	5	9	22	48	55	68	5.4	0.5	6.6	0.8
The Netherlands	5	5	6	8	13	26	36	59	7.6	0.7	8.1	0.7
The United States	5	5	5	7	12	23	41	64	12.5	0.4	13.7	0.5
All countries combined	5	5	5	8	13	27	42	63	7.4	0.1	8.1	0.1

[a] the projected risk for these countries is at age 65 because the age range of these surveys is between 18–65.

[b] the projected risk for this country is at age 64 because the age range of this survey is between 18–64.

Appendix Table 3

Bivariate associations between socio-demographics correlates and DSM-IV specific phobia (low-lower middle income countries).

Correlates	30-day Specific Phobia[a]		Lifetime Specific Phobia[b]		12-month Specific Phobia among lifetime cases[c]		30-day Specific Phobia among 12-month cases[c]	
	OR	(95% CI)	OR	(95% CI)	OR	(95% CI)	OR	(95% CI)
Age-cohort								
18–29	1.5*	(1.0–2.1)	1.6*	(1.3–2.0)	–	–	–	–
30–44	1.2	(0.1.7)	1.2	(1.0–1.5)	–	–	–	–
45–59	1.2	(0.8–1.7)	1.2	(0.9–1.5)	–	–	–	–

Correlates	30-day Specific Phobia[a]		Lifetime Specific Phobia[b]		12-month Specific Phobia among lifetime cases[c]		30-day Specific Phobia among 12-month cases[c]	
	OR	(95% CI)	OR	(95% CI)	OR	(95% CI)	OR	(95% CI)
60+	1.0		1.0		–	–	–	–
Age-cohort difference[d]	χ^2_3 = 8.7*. P=0.03		χ^2_3 =31.7*. P<.001					
Age of onset								
Early	–	–	–	–	1.1	(0.7–1.7)	0.8	(0.5–1.4)
Early-average	–	–	–	–	1.0	(0.6–1.5)	0.8	(0.4–1.3)
Late-average	–	–	–	–	1.0	(0.7–1.5)	0.6*	(0.4–1.0)
Late	–	–	–	–	1.0		1.0	
Age of onset difference[d]					χ^2_3 = 0.3. P=0.96		χ^2_3 = 4.9. P=0.183	
Time since onset (Continuous)	–	–	–	–	1.00	(0.99–1.01)	1.00	(0.99–1.01)
					χ^2_1 = 0.0. P=0.84		χ^2_1 = 0.1. P=0.79	
Gender								
Female	2.0*	(1.6–2.5)	1.5*	(1.3–1.8)	1.5*	(1.1–2.1)	1.2	(0.9–1.7)
Male	1.0		1.0		1.0		1.0	
Gender difference[d]	χ^2_1 =35.8*. P<.001		χ^2_1 =7.2*. P<.001		χ^2_1 =7.5*. P=0.006		χ^2_1 = 1.7. P=0.190	
Employment status								
Student	1.1	(0.8–1.7)	1.1	(0.9–1.4)	0.8	(0.5–1.4)	1.3	(0.7–2.2)
Homemaker	1.6*	(1.3–2.1)	1.4*	(1.2–1.7)	1.3	(0.8–2.0)	1.3	(0.8–2.0)
Retired	1.4	(0.8–2.4)	1.6*	(1.1–2.2)	1.0	(0.4–2.4)	0.6	(0.2–1.4)
Other	1.5*	(1.2–2.0)	1.3*	(1.1–1.6)	1.8*	(1.1–3.1)	1.1	(0.7–1.7)
Employed	1.0		1.0		1.0		1.0	
Employment status difference[d]	χ^2_4 = 20.4*. P<.001		χ^2_4 =18.6*. P<.001		χ^2_4 = 6.1. P=0.19		χ^2_4 = 3.3. P=0.52	
Marital status								
Never married	1.2	(1.0–1.6)	1.2	(1.0–1.4)	1.0	(0.7–1.4)	1.1	(0.8–1.5)
Divorced/separated/widowed	1.1	(0.7–1.5)	1.1	(0.9–1.3)	1.1	(0.6–2.0)	0.9	(0.5–1.5)
Currently married	1.0		1.0		1.0		10	
Marital status difference[d]	χ^2_2 = 3.1. P=0.22		χ^2_2 = 4.1. P=0.13		χ^2_2 = 0.2. P=0.93		χ^2_2 = 0.4. P=0.81	
Education level								
No education	1.6	(1.0–2.6)	1.6*	(1.1–2.3)	1.3	(0.6–2.4)	1.1	(0.5–2.3)
Some primary	1.7*	(1.0–2.8)	1.9*	(1.4–2.7)	0.7	(0.3–1.4)	1.0	(0.4–2.1)
Finished primary	1.8*	(1.2–2.9)	1.9*	(1.4–2.6)	0.9	(0.5–1.7)	0.9	(0.4–1.9)
Some secondary	1.3	(0.9–2.0)	1.7*	(1.2–2.2)	1.0	(0.6–1.6)	0.6	(0.3–1.2)
Finished secondary	1.4	(0.9–2.1)	1.7*	(1.3–2.2)	0.7	(0.4–1.2)	0.9	(0.5–1.6)
Some college	1.2	(0.8–2.0)	1.8*	(1.4–2.4)	0.7	(0.4–1.2)	0.6	(0.3–1.1)
Finished college	1.0		1.0		1.0		1.0	
Education level difference[d]	χ^2_3 = 9.1. P=0.17		χ^2_3 =20.3*. P= .003		χ^2_3 = 5.6. P=0.47		χ^2_3 = 7.1. P=0.31	
Household income								
Low	1.4*	(1.1–1.9)	1.2	(1.0–1.5)	1.1	(0.8–1.7)	1.4	(0.9–2.1)
Low-average	1.2	(0.9–1.6)	1.1	(0.9–1.3)	1.4	(0.9–2.2)	1.1	(0.7–1.8)
High-average	0.9	(0.6–1.2)	1.0	(0.8–1.2)	0.8	(0.5–1.2)	0.9	(0.6–1.5)
High	1.0		1.0		1.0		1.0	

Correlates	30-day Specific Phobia[a]		Lifetime Specific Phobia[b]		12-month Specific Phobia among lifetime cases[c]		30-day Specific Phobia among 12-month cases[c]	
	OR	(95% CI)	OR	(95% CI)	OR	(95% CI)	OR	(95% CI)
Household income difference[d]	χ^2_3 =15.8*. P =.001		χ^2_3 = 6.7. P=0.08		χ^2_3 = 5.6. P=0.14		χ^2_3 = 4.3. P=0.23	
N[e]	31773		1158886		1748		1254	

*Significant at the .05 level. 2 sided test.

[a]These estimates are based on logistic regression models adjusted for age. gender and low-lower middle income countries.

[b]These estimates are based on survival models adjusted for age-cohorts. gender. person-years and low-lower middle income countries.

[c]These estimates are based on logistic regression models adjusted for time since specific phobia onset. age of specific phobia onset. gender and low-lower middle income countries.

[d]Chi square test of significant differences between blocks of sociodemographic variables.

[e]Denominator N: 31.773 = total sample; 1.158.886 = number of person-years in the survival models; 1.748 = number of lifetime cases of specific phobia; 1.254 = number of 12-month cases of specific phobia.

Appendix Table 4

Bivariate associations between socio-demographics correlates and DSM-IV specific phobia (upper-middle income countries).

Correlates	30-day Specific Phobia[a]		Lifetime Specific Phobia[b]		12-month Specific Phobia among lifetime cases[c]		30-day Specific Phobia among 12-month cases[c]	
	OR	(95% CI)	OR	(95% CI)	OR	(95% CI)	OR	(95% CI)
Age-cohort								
18–29	1.1	(0.9–1.3)	1.3*	(1.1–1.6)	–	–	–	–
30–44	1.3*	(1.0–1.5)	1.4*	(1.1–1.6)	–	–	–	–
45–59	1.3*	(1.0–1.6)	1.4*	(1.2–1.7)	–	–	–	–
60+	1.0		1.0					
Age-cohort difference[d]	χ^2_3=7.8*. P=0.05		χ^2_3=16.6*. P=0.001					
Age of onset								
Early	–	–	–	–	1.7*	(1.1–2.6)	1.1	(0.7–1.7)
Early-average	–	–	–	–	1.2	(0.8–1.9)	0.9	(0.6–1.5)
Late-average	–	–	–	–	1.0	(0.7–1.5)	0.9	(0.6–1.4)
Late	–	–	–	–	1.0		1.0	
Age of onset difference[d]					χ^2_3=7.1. p=0.07		χ^2_3=0.9. P=0.83.	
Time since onset (Continuous)	–	–	–	–	1.00	(0.99–1.01)	1.01*	(1.00–1.02)
					χ^2_1= 0.5. P=0.47		χ^2_1= 5.5*. P=0.02	
Gender								
Female	3.1*	(2.6–3.7)	2.3*	(2.0–2.6)	1.8*	(1.3–2.5)	1.9*	(1.4–2.5)
Male	1.0		1.0		1.0		1.0	
Gender difference[d]	χ^2_1= 175.5*.P<.001		χ^2_1= 161.0*. P <.001		χ^2_1= 13.6*. P<.001		χ^2_1= 16.5*. P <.001	
Employment status								
Student	0.8	(0.5–1.2)	1.2	(0.9–1.6)	1.9	(0.9–4.1)	0.5*	(0.2–0.9)
Homemaker	1.2	(1.0–1.4)	1.2	(1.0–1.3)	1.2	(0.7–1.8)	1.0	(0.7–1.6)
Retired	0.9	(0.7–1.2)	1.2	(0.9–1.5)	1.3	(0.7–2.4)	0.7	(0.4–1.3)

Correlates	30-day Specific Phobia[a]		Lifetime Specific Phobia[b]		12-month Specific Phobia among lifetime cases[c]		30-day Specific Phobia among 12-month cases[c]	
	OR	(95% CI)	OR	(95% CI)	OR	(95% CI)	OR	(95% CI)
Other	1.2	(1.0–1.6)	1.3*	(1.1–1.5)	1.0	(0.6–1.8)	1.1	(0.7–1.7)
Employed	1.0		1.0		1.0		1.0	
Employment status difference[d]	χ^2_4= 9.5. P=0.05		χ^2_4= 9.3. P=0.06		χ^2_4= 4.2. P=0.38		χ^2_4= 7.4. P=0.12	
Marital status								
Never married	0.9	(0.7–1.1)	0.9	(0.8–1.1)	1.1	(0.8–1.6)	1.0	(0.7–1.5)
Divorced/separated/widowed	0.9	(0.7–1.1)	1.1	(0.9–1.3)	0.9	(0.6–1.5)	0.7	(0.5–1.1)
Currently married	1.0		1.0		1.0		1.0	
Marital status difference[d]	χ^2_2 = 2.2. P=0.34		χ^2_2= 1.4. P=0.49		χ^2_2= 0.4. P=0.81		χ^2_2= 2.4. P=0.30	
Education level								
No education	1.4	(0.9–2.1)	1.2	(0.9–1.7)	1.0	(0.4–2.5)	3.3	(1.0–11.1)
Some primary	1.8*	(1.4–2.4)	1.7*	(1.4–2.0)	1.4	(0.7–2.7)	1.1	(0.6–1.8)
Finished primary	1.4*	(1.0–1.9)	1.3*	(1.1–1.6)	1.0	(0.5–2.1)	1.1	(0.6–1.9)
Some secondary	1.5*	(1.2–2.0)	1.5*	(1.2–1.8)	1.3	(0.7–2.3)	1.1	(0.6–1.8)
Finished secondary	1.2	(0.9–1.6)	1.1	(0.9–1.3)	1.5	(0.8–2.7)	1.2	(0.7–2.0)
Some college	1.4	(1.0–2.0)	1.4*	(1.1–1.8)	1.1	(0.6–2.2)	1.1	(0.6–1.9)
Finished college	1.0		1.0		1.0		1.0	
Education level difference[d]	χ^2_3= 31.0*. P<.001		χ^2_3= 49.1*. P<.001		χ^2_3= 3.2. P=0.79		χ^2_3= 4.2. P=0.65	
Household income								
Low	1.2	(1.0–1.5)	1.1	(0.9–1.3)	0.9	(0.6–1.3)	1.5	(1.0–2.4)
Low-average	1.2	(0.9–1.5)	1.2	(1.0–1.4)	1.3	(0.8–2.0)	0.9	(0.6–1.4)
High-average	1.2	(1.0–1.5)	1.1	(0.9–1.3)	1.3	(0.9–2.0)	1.3	(0.8–2.0)
High	1.0		1.0		1.0		1.0	
Household income difference[d]	χ^2_3 = 3.7. P=0.30		χ^2_3 = 2.3. P=0.52		χ^2_3 = 5.7. P=0.13 P		χ^2_3 = 5.9. P=0.12	
N[e]	24612		998615		2028		1630	

*Significant at the .05 level. 2 sided test.

[a]These estimates are based on logistic regression models adjusted for age. gender and upper-middle income countries.

[b]These estimates are based on survival models adjusted for age-cohorts. gender. person-years and upper-middle income countries.

[c]These estimates are based on logistic regression models adjusted for time since specific phobia onset. age of specific phobia onset. gender and upper-middle income countries.

[d]Chi square test of significant differences between blocks of sociodemographic variables.

[e]Denominator N: 24.612= total sample; 998.615 = number of person-years in the survival models; 2.028 = number of lifetime cases of specific phobia; 1.630 = number of 12-month cases of specific phobia.

Appendix Table 5

Bivariate associations between socio-demographics correlates and DSM-IV specific phobia (high income countries).

Correlates	30-day Specific Phobia[a]		Lifetime Specific Phobia[b]		12-month Specific Phobia among lifetime cases[c]		30-day Specific Phobia among 12-month cases[c]	
	OR	(95% CI)	OR	(95% CI)	OR	(95% CI)	OR	(95% CI)
Age-cohort								
18–29	1.5*	(1.4–1.8)	2.0*	(1.8–2.2)	–	–	–	–
30–44	1.5*	(1.3–1.7)	1.7*	(1.5–1.8)	–	–	–	–
45–59	1.5*	(1.3–1.7)	1.6*	(1.4–1.7)	–	–	–	–
60+	1.0		1.0					
Age-cohort difference[d]	χ^2_3 =50.0*. P<.001		χ^2_3 =182.3*. P <.001					
Age of onset								
Early	–	–	–	–	1.5*	(1.2–1.9)	0.9	(0.7–1.2)
Early-average	–	–	–	–	1.1	(0.9–1.4)	0.8	(0.6–1.1)
Late-average	–	–	–	–	1.1	(0.9–1.4)	0.8	(0.6–1.0)
Late	–	–	–	–	1.0		1.0	
Age of onset difference[d]					χ^2_3 =17.4*. P=0.001		χ^2_3 = 3.5. P=0.32	
Time since onset (Continuous)	–	–	–	–	0.99*	(0.99–1.00)	1.01*	(1.01–1.02)
					χ^2_1 =7.4*. P=0.007		χ^2_1 =20.2*. P<.001	
Gender								
Female	2.8*	(2.6–3.1)	2.2*	(2.0–2.3)	1.9*	(1.7–2.3)	1.2*	(1.0–1.5)
Male	1.0		1.0		1.0		1.0	
Gender difference[d]	χ^2_1 =453.6*.P <.001		χ^2_1 =508.7*. P <.001		χ^2_1 =77.3*. P <.001		χ^2_1 = 4.7*. P = 0.03	
Employment status								
Student	1.0	(0.8–1.3)	1.0	(0.9–1.2)	1.5	(0.9–2.4)	1.0	(0.6–1.4)
Homemaker	1.3*	(1.1–1.4)	1.1	(1.0–1.2)	1.2	(1.0–1.5)	1.4*	(1.1–1.8)
Retired	1.1	(0.9–1.3)	1.1	(0.9–1.2)	1.3*	(1.1–1.7)	1.1	(0.8–1.5)
Other	2.0*	(1.7–2.2)	1.5*	(1.3–1.7)	1.5*	(1.2–1.9)	1.5*	(1.2–2.0)
Employed	1.0		1.0		1.0		1.0	
Employment status difference[d]	χ^2_4 = 91.5*. P <.001		χ^2_4 = 64.4*. P <.001		χ^2_4 = 22.5*. P <.001		χ^2_4 = 15.1*. P = 0.005	
Marital status								
Never married	0.9	(0.8–1.0)	1.0	(0.9–1.1)	1.1	(0.9–1.3)	1.0	(0.8–1.2)
Divorced/separated/widowed	1.4*	(1.2–1.6)	1.3*	(1.2–1.4)	1.1	(0.9–1.4)	1.3*	(1.0–1.6)
Currently married	1.0		1.0		1.0		1.0	
Marital status difference[d]	χ^2_2 =30.3*. P<.001		χ^2_2 =26.0*. P<.001		χ^2_2 =1.5. P=0.47		χ^2_2 =5.6. P=0.06	
Education level								
No education	1.9*	(1.1–3.4)	1.6	(1.0–2.6)	2.2	(0.8–5.6)	1.2	(0.4–3.8)
Some primary	2.4*	(2.0–2.9)	1.7*	(1.4–2.0)	2.7*	(1.9–3.9)	1.7*	(1.1–2.6)
Finished primary	2.2*	(1.8–2.8)	1.6*	(1.3–1.9)	2.2*	(1.5–3.2)	1.6*	(1.1–2.3)
Some secondary	1.8*	(1.5–2.1)	1.5*	(1.3–1.6)	1.4*	(1.1–1.8)	1.4*	(1.1–1.9)

Correlates	30-day Specific Phobia[a]		Lifetime Specific Phobia[b]		12-month Specific Phobia among lifetime cases[c]		30-day Specific Phobia among 12-month cases[c]	
	OR	(95% CI)	OR	(95% CI)	OR	(95% CI)	OR	(95% CI)
Finished secondary	1.6*	(1.4–1.9)	1.3*	(1.2–1.4)	1.5*	(1.2–1.8)	1.4*	(1.1–1.8)
Some college	1.4*	(1.2–1.7)	1.2*	(1.1–1.3)	1.4*	(1.1–1.8)	1.2	(0.9–1.6)
Finished college	1.0		1.0		1.0		1.0	
Education level difference[d]	χ^2_3=102.1*. P<.001		χ^2_3 =80.5*. P<.001		χ^2_3 =37.1*. P<.001		χ^2_3 = 13.0*. P = 0.04	
Household income								
Low	1.5*	(1.3–1.7)	1.3*	(1.1–1.4)	1.7*	(1.3–2.1)	1.2	(1.0–1.5)
Low-average	1.2*	(1.1–1.4)	1.1	(1.0–1.2)	1.2	(0.9–1.4)	1.4*	(1.1–1.7)
High-average	1.1	(1.0–1.3)	1.0	(0.9–1.1)	1.1	(0.9–1.3)	1.2	(0.9–1.5)
High	1.0		1.0		1.0		1.0	
Household income difference[d]	χ^2_3 =30.4*. P <.001		χ^2_3 =24.8*. P <.001		χ^2_3 =24.0*. P <.001		χ^2_3 =6.2. P = 0.10	
N[e]	68517		2972757		5807		4256	

*Significant at the .05 level. 2 sided test.

[a]These estimates are based on logistic regression models adjusted for age. gender and high income countries.

[b]These estimates are based on survival models adjusted for age-cohorts. gender. person-years and high income countries.

[c]These estimates are based on logistic regression models adjusted for time since specific phobia onset. age of specific phobia onset. gender and high income countries.

[d]Chi square test of significant differences between blocks of sociodemographic variables.

[e]Denominator N: 68.517 = total sample; 2.972.757 = number of person-years in the survival models; 5.807 = number of lifetime cases of specific phobia; 4.256 = number of 12-month cases of specific phobia.

Appendix Table 6

Severity of role impairment (Sheehan Disability Scale: SDS) associated with 12-month specific phobia, by country.

Country	Proportion with severe role impairment (SDS score: 7–10)										Number of 12-month specific phobia cases
	Home		Work		Relationship		Social		Any[a]		
	%	SE	%	SE	%	SE	%	SE	%	SE	
Low-Lower middle income[d,e,f,g,h]	8.3	1.1	7.9	0.9	5.0	0.7	5.9	0.8	13.3	1.1	1254
Colombia[d,e,f,g]	10.5	2.2	11.7	1.7	6.5	1.3	7.0	1.4	17.8	2.4	398
Iraq[c,d]	15.3	4.0	11.2	3.9	10.7	3.2	11.4	3.5	18.3	3.6	163
Nigeria[f]	2.0	1.2	3.7	1.6	1.3	0.6	2.1	1.3	4.5	1.6	266
Peru	10.0	2.3	9.4	2.6	6.6	1.6	6.6	1.6	21.2	3.1	178
PRC China[d,h]	12.5	4.4	8.2	3.1	3.1	1.6	9.6	4.0	16.0	4.5	99
PRC Shen Zhen	3.2	1.3	1.2	0.6	2.0	0.9	2.1	1.0	4.2	1.5	150
Upper-middle income[c,d,e]	14.4	1.2	11.3	1.1	9.9	0.8	10.6	0.9	21.9	1.3	1630
Brazil[c,d,e]	20.7	2.6	14.7	2.3	13.1	1.4	13.5	1.8	27.7	2.7	572
Bulgaria	10.7	1.9	9.2	1.6	7.7	1.7	10.3	2.3	16.2	2.2	218
Colombia (Medellin)[d,e,f,g]	16.8	2.9	18.9	3.2	11.0	2.9	10.6	2.9	28.2	3.9	271
Lebanon[c,d]	8.2	2.2	1.0	0.8	3.3	1.7	3.5	1.8	13.9	3.4	185
Mexico[g]	8.7	1.9	6.6	1.7	8.5	1.5	10.3	1.9	15.2	2.3	302

Country	Proportion with severe role impairment (SDS score: 7–10)										Number of 12-month specific phobia cases
	Home		Work		Relationship		Social		Any[a]		
	%	SE	%	SE	%	SE	%	SE	%	SE	
Romania	10.9	4.4	12.6	4.5	11.3	3.9	10.0	3.1	23.0	5.3	82
High income[d,f,h]	9.3	0.5	9.5	0.6	8.0	0.5	9.4	0.6	19.2	0.7	4256
Belgium[c,f,g]	15.9	2.7	6.4	2.5	15.5	5.5	14.5	5.3	30.7	5.5	117
France[f]	11.4	2.5	15.2	2.7	10.4	2.4	11.0	2.5	21.6	3.2	226
Germany[e,h]	7.0	1.9	8.4	1.8	7.3	1.9	12.2	2.2	18.1	2.8	248
Italy[c]	13.5	3.0	7.1	2.5	10.6	2.7	9.0	2.3	20.9	3.2	181
Japan[d,e]	11.5	3.5	7.7	2.8	2.7	1.5	2.5	1.9	17.4	4.1	96
New Zealand	6.8	0.9	7.2	1.0	6.1	0.8	7.1	0.9	15.5	1.2	1098
Northern Ireland[h]	9.4	1.8	12.3	2.7	8.9	1.8	12.8	2.1	22.4	2.8	336
Poland[c,d]	11.3	2.2	7.6	2.1	6.3	1.7	8.6	2.2	16.9	2.5	250
Portugal	7.6	1.4	9.9	1.6	7.5	1.2	7.8	1.5	19.0	2.4	370
Spain[e,g]	13.1	2.8	13.8	3.6	9.5	3.0	8.4	2.5	26.0	4.3	206
Spain (Murcia)[c]	10.9	4.9	15.0	4.9	14.4	5.1	15.5	4.3	17.7	4.4	118
The Netherlands[e,g]	13.3	2.4	11.8	2.5	7.0	2.1	5.3	2.3	22.6	3.7	135
The United States[h]	8.6	1.2	9.2	1.1	7.8	1.2	10.7	1.4	18.7	1.8	875
All countries combined[d,e,f,h]	10.3	0.5	9.6	0.4	7.9	0.4	9.0	0.4	18.7	0.6	7140
Comparison between countries[b]	χ^2_{24} = 4.0*, p<.001		χ^2_{24} = 4.8*, P<.001		χ^2_{24} = 4.5*, P<.001		χ^2_{24} = 3.5*, P<.001		χ^2_{24} = 4.9*, P<.001		
Comparison between low, middle and high income country groups[b]	χ^2_2 = 9.2*, p<.001		χ^2_2 = 2.8, P=0.06		χ^2_2 = 11.2*, P<.001		χ^2_2 = 8.6*, P<.001		χ^2_2 = 13.5*, P<.001		

*Significant at the .05 level, 2 sided test.

[a]Highest severity category across 4 SDS role domains.

[b]Chi-square test of homogeneity to determine if there is variation in impairment severity across countries.

[c]McNemar's chi-square test to determine if there is a significant difference at the .05 level for home vs work impairment,

[d]McNemar's chi-square test to determine if there is a significant difference at the .05 level for home vs relationship impairment,

[e]McNemar's chi-square test to determine if there is a significant difference at the .05 level for home vs social impairment,

[f]McNemar's chi-square test to determine if there is a significant difference at the .05 level for work vs relationship impairment,

[g]McNemar's chi-square test to determine if there is a significant difference at the .05 level for work vs social impairment,

[h]McNemar's chi-square test to determine if there is a significant difference at the .05 level for relationship vs social impairment for each row entry. For example, subscript 'd' for Colombia indicates that the proportion with severe impairment associated with specific phobia is significantly higher for home than relationship.

Appendix Table 7

Days out of role due to 12-month specific phobia[b] by role impairment.

Sheehan Disability Domain	Days out of role due to 12-month specific phobia						
	Not severe (Score: 0–6)			Severe (Score: 7–10)			F-test. p-value[c]
	n	Mean	SE	n	Mean	SE	
Home	3063	7.1	0.7	727	34.6	3.8	57.9*. P<.001
Work	3125	6.0	0.6	659	42.1	4.3	75.0*. P<.001
Relationship	3254	6.4	0.7	547	47.9	5.0	75.5*. P<.001
Social	3174	5.9	0.6	630	45.1	4.5	79.5*. P<.001
Any[a]	2493	3.8	0.5	1313	29.1	2.6	104.6*. P<.001

[a]Mean days out of role presented for subgroups of respondents defined by their highest severity category across the 4 sheehan disability domains (home. work. relationship and social).

[b]Mean (SE) days out of role due to 12-month specific phobia: 12.2 (0.9) days.

[c]Bivariate linear regression to test for significant differences in severity. No controls were used.

Appendix Table 8

Among those with 12-month specific phobia. percent reporting treatment in the past 12 months by Sheehan impairment severity and country income categories.

Sector of treatment	Sheehan Disability Scale Category[a]							
	Mild Impairment (Score: 1–3)		Moderate Impairment (Score: 4–6)		Severe Impairment (Score: 7–10)		Any impairment	
	%	SE	%	SE	%	SE	%	SE
Specialty mental health[b]								
Total	8.6	0.7	9.8	0.9	16.6	1.2	10.4	0.4
Low-lower middle income	3.0	1.2	5.9	1.9	5.7	1.7	4.4	0.8
Upper-middle income	8.5	1.4	8.4	1.8	10.4	1.8	9.0	0.8
High income	11.2	1.1	11.6	1.3	21.7	1.7	12.9	0.6
General medical[c]								
Total	14.0	0.9	15.1	1.1	21.0	1.3	14.9	0.5
Low-lower middle income	4.1	1.1	4.2	1.3	7.7	2.6	4.5	0.7
Upper-middle income	5.0	0.9	8.8	1.8	9.7	2.0	6.8	0.7
High income	21.8	1.4	20.7	1.5	28.8	1.8	21.4	0.7
Health care[d]								
Total	19.0	1.0	20.7	1.2	30.1	1.5	21.0	0.6
Low-lower middle income	6.6	1.5	10.1	2.3	13.2	2.9	8.4	1.1
Upper-middle income	12.6	1.5	15.9	2.5	17.9	2.4	14.4	0.9
High income	26.9	1.6	25.6	1.6	39.3	2.0	27.6	0.8
Human services[e]								
Total	2.4	0.4	2.4	0.4	4.2	0.6	2.6	0.2
Low-lower middle income	–	–	1.3	0.7	–	–	0.9	0.3
Upper-middle income	1.7	0.9	–	–	2.5	0.9	1.2	0.3

Sector of treatment	Sheehan Disability Scale Category[a]							
	Mild Impairment (Score: 1–3)		Moderate Impairment (Score: 4–6)		Severe Impairment (Score: 7–10)		Any impairment	
	%	SE	%	SE	%	SE	%	SE
High income	3.5	0.6	3.3	0.6	5.3	0.8	3.7	0.4
CAM[f]								
Total	3.1	0.5	3.0	0.5	3.8	0.6	3.0	0.2
Low-lower middle income	1.0	0.5	–	–	2.1	1.1	1.1	0.3
Upper-middle income	2.6	1.3	1.1	0.6	1.3	0.6	1.8	0.5
High income	4.3	0.7	4.2	0.7	5.4	0.9	4.1	0.4
Non health care[g]								
Total	4.9	0.6	4.8	0.6	6.7	0.7	5.0	0.3
Low-lower middle income	1.3	0.6	2.6	1.0	3.6	1.6	1.9	0.4
Upper-middle income	4.3	1.5	1.3	0.7	3.5	1.0	2.9	0.5
High income	6.6	0.9	6.7	0.9	8.9	1.1	6.8	0.5
Any treatment[h]								
Total	21.1	1.1	22.8	1.3	32.5	1.5	23.1	0.6
Low-lower middle income	7.5	1.6	11.7	2.5	15.0	2.9	9.6	1.1
Upper-middle income	14.9	1.9	17.0	2.6	19.7	2.5	16.0	1.0
High income	29.6	1.7	28.2	1.7	42.0	2.0	30.1	0.8

[a]Highest severity category across 4 SDS role domains.

[b]The mental health specialist sector. which includes psychiatrist and non-psychiatrist mental health specialists (psychiatrist. psychologist or other non-psychiatrist mental health professional; social worker or counsellor in a mental health specialty setting; use of a mental health helpline; or overnight admissions for a mental health or drug or alcohol problems. with a presumption of daily contact with a psychiatrist).

[c]The general medical sector (general practitioner. other medical doctor. nurse. occupational therapist or any healthcare professional).

[d]The mental health specialist sector or the general medical sector.

[e]The human services sector (religious or spiritual advisor or social worker or counsellor in any setting other than a specialty mental health setting).

[f]The CAM (complementary and alternative medicine) sector (any other type of healer such as herbalist or homeopath. participation in an internet support group. or participation in a self-help group).

[g]The human services sector or CAM.

[h]Respondents who sought any form of professional treatments listed in the footnotes above.

A dash was inserted for small cell counts (<5).

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Table 1

Prevalence of DSM-IV specific phobia in the World Mental Health surveys.

Country	Lifetime prevalence		12-month prevalence		30-day prevalence		12-month prevalance of specific phobia among lifetime cases		30-day prevalence of specific phobia among 12-month cases		Part 1 sample sizes
	%	SE	%	SE	%	SE	%	SE	%	SE	
Low-lower middle income countries	**5.7**	**0.2**	**4.0**	**0.2**	**2.4**	**0.1**	**70.6**	**1.6**	**58.7**	**1.8**	**31773**
Colombia	12.5	0.8	8.9	0.8	5.7	0.5	71.5	2.6	64.2	3.2	4426
Iraq	4.2	0.4	3.8	0.4	3.2	0.4	90.4	3.5	82.4	4.2	4332
Nigeria	5.9	0.5	4.4	0.3	2.2	0.2	74.5	3.2	49.6	3.8	6752
Peru	6.6	0.4	4.6	0.3	2.5	0.2	69.7	4.8	54.4	3.6	3930
PRC China	2.6	0.3	1.7	0.3	1.0	0.2	63.2	3.6	56.9	8.0	5201
PRC Shen Zhen	4.0	0.3	2.2	0.3	0.9	0.1	54.9	5.4	42.6	4.1	7132
Upper-middle income countries	**8.0**	**0.2**	**6.4**	**0.2**	**4.8**	**0.2**	**80.6**	**1.1**	**75.1**	**1.5**	**24612**
Brazil	12.5	0.6	10.6	0.5	8.8	0.5	85.2	1.6	82.9	2.6	5037
Bulgaria	5.8	0.3	3.9	0.3	3.1	0.3	68.1	3.3	78.3	2.9	5318
Colombia (Medellin)	10.2	0.8	8.3	0.7	6.4	0.6	81.7	3.1	76.9	3.0	3261
Lebanon	7.1	0.6	6.6	0.5	5.0	0.5	93.0	1.7	75.9	3.8	2857
Mexico	7.0	0.5	5.2	0.4	2.8	0.2	74.3	2.6	54.3	3.9	5782
Romania	3.8	0.5	3.3	0.5	2.8	0.5	86.1	4.9	84.3	5.2	2357
High income countries	**8.1**	**0.1**	**5.9**	**0.1**	**4.2**	**0.1**	**73.2**	**0.8**	**71.9**	**0.8**	**68517**
Belgium	6.8	1.0	5.0	0.7	3.6	0.5	73.2	3.5	71.1	5.4	2419
France	10.7	0.6	7.7	0.7	6.0	0.5	71.7	3.8	78.3	3.3	2894
Germany	9.9	0.7	6.9	0.6	4.8	0.3	69.5	2.6	70.6	3.5	3555
Italy	5.4	0.5	3.9	0.4	2.8	0.3	72.6	2.2	72.6	2.8	4712
Japan	3.4	0.3	2.3	0.2	1.8	0.2	68.0	4.5	77.9	4.7	4129
New Zealand	10.9	0.4	7.6	0.3	5.2	0.3	70.2	1.4	68.6	2.1	12790
Northern Ireland	9.7	0.6	7.2	0.5	5.2	0.4	74.6	2.1	71.6	2.7	4340
Poland	3.4	0.2	2.5	0.2	1.7	0.1	72.8	2.9	67.6	3.0	10081
Portugal	10.6	0.6	8.6	0.5	7.0	0.5	81.3	1.8	81.1	2.0	3849
Spain	4.8	0.4	3.8	0.4	2.9	0.3	80.1	3.3	74.6	3.2	5473
Spain (Murcia)	5.4	0.5	4.7	0.4	3.7	0.3	86.9	2.5	78.4	3.5	2621

Country	Lifetime prevalence		12-month prevalence		30-day prevalence		12-month prevalance of specific phobia among lifetime cases		30-day prevalence of specific phobia among 12-month cases		Part 1 sample sizes
	%	SE	%	SE	%	SE	%	SE	%	SE	
The Netherlands	7.6	0.7	5.4	0.6	4.3	0.6	70.5	3.2	79.4	3.9	2372
The United States	12.5	0.4	9.1	0.4	6.3	0.4	73.0	2.2	68.8	1.9	9282
All countries combined	**7.4**	**0.1**	**5.5**	**0.1**	**3.9**	**0.1**	**74.2**	**0.6**	**70.2**	**0.7**	124902
All males	4.9	0.1	3.3	0.1	2.1	0.1	65.8	1.2	64.7	1.4	56526
All females	9.8	0.1	7.7	0.1	5.5	0.1	78.2	0.6	72.4	0.8	68376
Comparison between countries[a]	χ^2_{24}= 47.7*, P <.001		χ^2_{24}=39.4*, P < .001		χ^2_{24}=39.4*, P < .001		χ^2_{24}=7.8*, P < .001		χ^2_{24}=7.2*, P < .001		
Comparison between low, middle and high income country groups[a]	χ^2_2 = 51.1*, P < .001		χ^2_2 = 56.8*, P < .001		χ^2_2 = 103.8*, P < .001		χ^2_2 = 19.1*, P < .001		χ^2_2 = 26.4*, P <.001		
Comparison between genders[a]	χ^2_1 = 722.1*, P <.001		χ^2_1 = 855.3*, P <.001		χ^2_1 = 735.5*, P <.001		χ^2_1 = 84.2*, P <.001		χ^2_1 = 23.7*, P <.001		

[a]Chi-square test of homogeneity to determine if there is variation in prevalence estimates.

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Table 2

Lifetime prevalence of DSM-IV specific phobia subtypes and cases with different numbers of co-occurring subtypes in the World Mental Health surveys.

Country	Kinds of subtypes												Numbers of subtypes								Part 1 sample sizes
	Animal		Still water, weather events		Blood, injuries, medical experiences		Closed spaces		High places		Flying		1 subtype		2 subtypes		3 subtypes		≥ 4 subtypes		
	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	
Low-lower middle income	**3.4**	**0.1**	**2.1**	**0.1**	**2.2**	**0.1**	**1.6**	**0.1**	**2.0**	**0.1**	**0.6**	**0.1**	**2.7**	**0.1**	**1.3**	**0.1**	**0.8**	**0.1**	**0.9**	**0.1**	31773
Colombia	8.1	0.6	6.2	0.5	6.0	0.5	5.2	0.4	7.1	0.6	2.2	0.3	3.1	0.4	3.0	0.4	2.3	0.3	4.1	0.4	4426
Iraq	2.3	0.3	1.3	0.3	1.4	0.3	0.7	0.2	0.9	0.2	0.3	0.1	2.8	0.4	0.7	0.1	0.4	0.1	0.3	0.1	4332
Nigeria	3.7	0.3	2.2	0.3	1.6	0.2	1.4	0.3	1.0	0.1	0.4	0.1	3.4	0.3	1.4	0.2	0.6	0.1	0.5	0.1	6752
Peru	3.6	0.3	2.0	0.2	2.6	0.2	1.4	0.2	1.7	0.2	0.6	0.2	3.7	0.4	1.4	0.2	0.9	0.1	0.6	0.1	3930
PRC China	1.4	0.2	0.4	0.1	0.9	0.2	0.4	0.1	1.0	0.2	0.2	0.1	1.5	0.3	0.7	0.2	0.3	0.1	0.1	0.1	5201
PRC Shen Zhen	2.1	0.2	1.0	0.2	1.8	0.2	1.0	0.2	1.3	0.2	0.4	0.1	2.1	0.2	1.0	0.1	0.4	0.1	0.4	0.1	7132
Upper-middle income	**4.4**	**0.2**	**2.8**	**0.1**	**3.0**	**0.2**	**2.3**	**0.1**	**3.0**	**0.1**	**1.2**	**0.1**	**3.6**	**0.2**	**2.0**	**0.1**	**1.0**	**0.1**	**1.3**	**0.1**	24612
Brazil	7.0	0.4	3.7	0.3	4.4	0.5	3.4	0.3	4.8	0.4	1.8	0.2	5.9	0.3	3.1	0.3	1.7	0.2	1.8	0.2	5037
Bulgaria	3.0	0.3	2.2	0.3	2.4	0.2	1.0	0.1	1.7	0.2	0.4	0.1	2.6	0.3	2.0	0.2	0.6	0.1	0.6	0.1	5318
Colombia (Medellin)	6.5	0.6	4.4	0.5	4.5	0.5	4.6	0.5	5.7	0.6	2.5	0.3	2.9	0.4	2.1	0.4	1.8	0.3	3.3	0.4	3261
Lebanon	2.8	0.2	2.9	0.4	2.1	0.4	1.1	0.3	1.0	0.2	0.5	0.1	4.9	0.5	1.5	0.2	0.5	0.2	0.2	0.0	2857
Mexico	4.0	0.3	2.2	0.3	2.4	0.3	2.1	0.3	2.7	0.3	1.1	0.2	3.4	0.4	1.7	0.2	0.9	0.1	1.1	0.2	5782
Romania	1.7	0.4	2.0	0.4	2.0	0.4	1.1	0.3	1.8	0.3	0.4	0.2	1.3	0.3	1.2	0.2	0.6	0.2	0.7	0.2	2357
High income	**3.7**	**0.1**	**2.2**	**0.1**	**3.4**	**0.1**	**2.4**	**0.1**	**3.1**	**0.1**	**1.7**	**0.1**	**3.7**	**0.1**	**2.0**	**0.1**	**1.3**	**0.1**	**1.1**	**0.1**	68517
Belgium	2.5	0.5	1.7	0.4	2.2	0.4	1.3	0.5	2.3	0.6	0.8	0.2	4.4	0.6	1.3	0.3	0.9	0.3	0.3	0.2	2419
France	3.8	0.4	2.8	0.3	3.9	0.4	2.7	0.4	3.6	0.4	1.3	0.3	6.2	0.5	2.3	0.4	1.4	0.2	0.8	0.2	2894
Germany	3.5	0.4	1.7	0.4	3.9	0.4	2.0	0.3	2.5	0.2	1.7	0.2	6.0	0.5	2.7	0.3	0.9	0.2	0.3	0.1	3555
Italy	2.0	0.2	1.3	0.2	2.2	0.3	1.5	0.2	1.4	0.2	1.0	0.2	3.0	0.3	1.3	0.2	0.7	0.2	0.4	0.1	4712
Japan	2.0	0.2	1.5	0.2	1.4	0.2	1.1	0.2	1.2	0.2	0.7	0.1	1.3	0.2	0.9	0.1	0.5	0.1	0.7	0.2	4129
New Zealand	5.0	0.3	2.2	0.2	4.7	0.2	3.4	0.2	4.7	0.2	2.2	0.2	4.7	0.2	3.0	0.2	2.0	0.2	1.2	0.1	12790
Northern Ireland	4.6	0.4	3.9	0.4	4.8	0.4	3.5	0.4	4.6	0.4	2.3	0.3	3.3	0.4	2.3	0.2	1.7	0.2	2.4	0.3	4340
Poland	1.5	0.1	0.9	0.1	1.3	0.1	0.8	0.1	1.4	0.1	0.6	0.1	1.7	0.1	0.8	0.1	0.5	0.1	0.4	0.1	10081
Portugal	6.1	0.5	4.1	0.4	4.6	0.4	3.6	0.3	4.3	0.3	1.9	0.2	3.8	0.4	2.8	0.3	1.9	0.2	2.2	0.3	3849
Spain	2.1	0.2	1.1	0.2	1.4	0.2	1.3	0.2	1.1	0.2	0.7	0.1	3.0	0.4	1.0	0.2	0.4	0.1	0.3	0.1	5473

Country	Kinds of subtypes												Numbers of subtypes								Part 1 sample sizes
	Animal		Still water, weather events		Blood, injuries, medical experiences		Closed spaces		High places		Flying		1 subtype		2 subtypes		3 subtypes		≥ 4 subtypes		
	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	
Spain (Murcia)	2.6	0.3	0.9	0.2	0.7	0.2	1.7	0.4	1.5	0.3	0.7	0.2	3.5	0.3	1.1	0.3	0.6	0.2	0.1	0.1	2621
The Netherlands	2.4	0.4	1.5	0.3	2.9	0.5	1.4	0.3	1.7	0.3	1.0	0.3	5.4	0.6	1.4	0.3	0.7	0.2	0.1	0.1	2372
The United States	6.6	0.3	4.3	0.2	6.0	0.3	4.4	0.2	5.9	0.3	3.8	0.2	4.1	0.3	3.1	0.2	2.3	0.2	2.9	0.2	9282
All countries combined	**3.8**	**0.1**	**2.3**	**0.1**	**3.0**	**0.1**	**2.2**	**0.1**	**2.8**	**0.1**	**1.3**	**0.0**	**3.4**	**0.1**	**1.8**	**0.0**	**1.1**	**0.0**	**1.1**	**0.0**	124902
All males	2.0	0.1	1.3	0.1	2.2	0.1	1.2	0.1	2.0	0.1	0.8	0.0	2.5	0.1	1.2	0.1	0.6	0.0	0.6	0.0	56526
All females	5.4	0.1	3.3	0.1	3.7	0.1	3.1	0.1	3.6	0.1	1.8	0.1	4.3	0.1	2.4	0.1	1.5	0.1	1.6	0.1	68376
Country comparisons[a]	χ^2_{24} = 27.4*, P <.001		χ^2_{24} = 23.7*, P <.001		χ^2_{24} = 28.1*, P <.001		χ^2_{24} = 32.7*, P <.001		χ^2_{24} = 33.6*, P <.001		χ^2_{24} = 18.2*, P <.001		χ^2_{24} = 20.8*, P <.001		χ^2_{24} = 15.5*, P<.001		χ^2_{24} = 14.5*, P <.001		χ^2_{24} = 22.4*, P <.001		
Income-group comparisons[a]	χ^2_2 = 12.2*, P <.001		χ^2_2 = 11.4*, P <.001		χ^2_2 = 33.0*, P <.001		χ^2_2 = 25.2*, P <.001		χ^2_2 = 37.6*, P <.001		χ^2_2 = 63.6*, P <.001		χ^2_2 = 21.0*, P <.001		χ^2_2 = 20.3*, P <.001		χ^2_2 = 20.9*, P <.001		χ^2_2 = 5.4*, P = 0.005		
Gender comparison[a]	χ^2_1 = 658.1*, P <.001		χ^2_1 = 420.2*, P <.001		χ^2_1 = 153.6*, P <.001		χ^2_1 = 333.4*, P <.001		χ^2_1 = 187.2*, P <.001		χ^2_1 = 190.1*, P <.001		χ^2_1 = 188.0*, P <.001		χ^2_1 = 203.0*, P <.001		χ^2_1 = 167.5*, P <.001		χ^2_1 = 191.2*, P <.001		

[a] Chi-square test of homogeneity to determine if there is variation in prevalence estimates.

* Significant at the .05 level, 2 sided test.

Table 3

Sociodemographic characteristics, impairment, comorbidity and treatment use for each specific phobia subtype and for groups of patients with different numbers of phobias.

		Kinds of lifetime phobias												Number of lifetime phobias							
		Animal		Still water, weather		Blood, Injection, Medical experiences		Closed spaces		High places		Flying		1 phobia		2 phobias		3 phobias		≥4 phobias	
		%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE
Age	18–29	34.1	0.9	27.5	1.1	32.4	1.0	24.1	1.0	23.4	0.9	23.4	1.3	32.6	0.9	28.8	1.3	25.2	1.5	27.9	1.4
	30–44	33.1	0.8	30.0	1.0	32.7	0.9	33.6	1.1	34.6	1.0	33.0	1.4	31.3	0.9	33.0	1.2	35.5	1.5	32.1	1.5
	45–59	22.0	0.8	27.3	1.0	24.4	0.9	28.3	1.0	29.1	0.9	29.4	1.3	22.5	0.7	23.4	1.1	27.9	1.5	29.1	1.4
	60+	10.8	0.5	15.2	0.8	10.5	0.6	14.0	0.7	12.8	0.7	14.3	0.9	13.6	0.6	14.7	0.9	11.5	1.0	11.0	0.9
Gender	Male	25.3	0.8	26.5	1.0	35.7	1.0	27.7	1.1	34.8	1.0	29.6	1.3	36.0	0.9	31.0	1.2	28.3	1.5	26.5	1.4
	Female	74.7	0.8	73.5	1.0	64.3	1.0	72.3	1.1	65.2	1.0	70.4	1.3	64.0	0.9	69.0	1.2	71.7	1.5	73.5	1.4
Marital status	Married	58.6	0.9	61.7	1.1	58.4	1.0	60.3	1.2	61.4	1.0	63.9	1.4	59.6	0.9	59.6	1.3	61.8	1.5	60.4	1.6
	Never Married	28.1	0.9	22.0	1.1	28.4	0.9	22.9	1.0	23.3	1.0	20.1	1.3	28.1	0.9	26.1	1.2	23.9	1.4	22.9	1.5
	Separated/Widowed/ Divorced	13.2	0.6	16.2	0.8	13.2	0.6	16.7	0.8	15.2	0.6	16.0	0.9	12.3	0.6	14.3	0.8	14.2	1.1	16.7	1.0
Employment status	Student	5.3	0.6	3.9	0.6	4.9	0.6	3.7	0.5	3.0	0.4	3.6	0.6	6.5	0.7	5.1	0.7	3.6	0.8	2.4	0.6
	Working	57.2	1.1	53.9	1.3	59.6	1.2	55.1	1.3	58.1	1.1	55.4	1.7	57.7	1.4	58.4	1.5	60.8	1.7	53.1	1.8
	Retired	8.1	0.6	11.3	0.8	9.1	0.8	10.4	0.9	10.1	0.7	10.3	1.0	10.9	0.8	10.1	0.9	10.5	1.3	7.9	0.9
	Homemaker	16.9	0.8	18.1	1.0	13.9	0.8	17.3	1.0	15.4	0.7	17.2	1.3	13.7	0.9	14.2	1.0	13.9	1.2	20.9	1.4
	Other	12.5	0.8	12.8	0.9	12.6	0.8	13.6	1.0	13.4	0.8	13.4	1.2	11.1	0.9	12.2	1.0	11.1	0.9	15.7	1.4
Income	Low	30.1	1.1	31.4	1.2	31.1	1.1	32.5	1.3	30.7	1.1	33.2	1.8	27.0	1.2	29.0	1.5	32.7	1.6	34.6	1.7
	Low-Mid	25.4	1.0	26.2	1.2	25.1	1.1	24.9	1.1	25.9	1.1	23.7	1.5	23.8	1.1	23.8	1.4	25.3	1.6	27.8	1.6
	Mid-High	24.3	1.0	24.5	1.2	23.8	1.0	22.4	1.1	24.6	1.0	22.7	1.5	27.5	1.1	26.3	1.6	22.8	1.5	20.4	1.4
	High	20.2	0.9	17.9	1.0	20.0	1.0	20.2	1.1	18.8	0.9	20.4	1.4	21.7	1.2	20.9	1.3	19.2	1.3	17.2	1.4
Education level	None	2.6	0.3	3.1	0.3	1.8	0.3	2.0	0.3	1.8	0.2	1.1	0.2	2.6	0.3	2.4	0.3	2.0	0.4	1.8	0.3
	Some primary	10.1	0.5	11.7	0.7	9.4	0.6	10.8	0.7	10.6	0.6	9.6	0.9	8.0	0.5	10.0	0.9	9.4	0.9	12.8	1.0
	Complete primary	8.2	0.5	10.1	0.7	6.9	0.5	9.1	0.7	8.1	0.5	7.3	0.8	7.0	0.5	7.9	0.7	7.5	0.8	9.9	1.0
	Some secondary	21.0	0.7	22.2	1.0	22.1	0.8	23.4	0.9	22.3	0.8	23.3	1.4	19.0	0.8	21.4	1.1	22.5	1.4	24.4	1.4
	Complete secondary	27.8	0.8	29.4	1.0	31.5	1.0	27.6	1.0	29.5	0.9	29.1	1.4	31.1	0.9	29.0	1.1	31.9	1.5	26.3	1.4

		Kinds of lifetime phobias												Number of lifetime phobias							
		Animal		Still water, weather		Blood, Injection, Medical experiences		Closed spaces		High places		Flying		1 phobia		2 phobias		3 phobias		≥4 phobias	
		%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE
	Some college	16.9	0.7	13.7	0.8	16.2	0.8	15.2	0.8	14.3	0.7	16.1	1.2	16.6	0.7	15.1	1.0	13.6	1.1	16.4	1.2
	Complete college	11.8	0.6	8.8	0.6	11.0	0.6	10.8	0.7	12.1	0.7	12.3	0.9	13.8	0.6	13.0	0.8	12.1	1.1	7.6	0.9
Age of onset	Early	36.6	0.9	37.1	1.1	33.4	0.9	35.2	1.0	32.6	1.0	32.9	1.4	23.1	0.8	31.3	1.2	37.7	1.6	43.1	1.6
	Early-average	30.4	0.8	28.5	1.0	29.3	1.0	27.9	1.0	27.0	0.9	27.0	1.3	21.8	0.8	27.4	1.1	29.4	1.4	33.6	1.5
	Late-average	23.8	0.8	24.4	0.9	23.8	0.9	21.8	1.0	23.1	0.8	21.5	1.2	26.9	0.8	25.6	1.1	23.0	1.3	19.6	1.2
	Late	9.2	0.5	10.0	0.6	13.5	0.7	15.1	0.8	17.4	0.7	18.6	1.1	28.1	0.8	15.7	0.9	9.9	0.9	3.7	0.5
Comorbidity (lifetime)	Mood disorder	34.7	1.0	39.9	1.3	40.0	1.2	43.6	1.3	41.3	1.1	43.5	1.6	26.5	1.0	34.3	1.4	41.0	1.8	51.0	1.9
	Anxiety disorder	41.9	1.1	51.2	1.4	48.1	1.3	55.5	1.4	52.3	1.2	58.3	1.8	28.9	1.0	39.9	1.5	53.7	1.8	67.5	1.7
	Impulse control disorder	18.3	0.9	21.1	1.2	21.7	1.0	22.0	1.2	22.4	1.1	23.6	1.5	13.2	1.0	16.0	1.2	20.4	1.6	30.2	1.7
	Substance-use disorder	14.9	0.8	15.6	0.9	19.2	0.9	17.4	1.0	20.5	0.9	17.3	1.3	13.9	0.9	14.9	1.0	18.2	1.6	21.1	1.4
	Any mental disorder	60.6	1.1	69.4	1.4	67.2	1.3	71.0	1.4	71.7	1.2	73.0	1.6	49.7	1.3	59.9	1.7	72.5	1.9	82.1	1.4
Any impairment		55.3	0.9	57.3	1.1	52.1	1.0	54.8	1.1	53.6	1.0	56.4	1.4	46.4	1.0	48.8	1.3	56.1	1.6	63.0	1.5
Severe impairment (SDS: 7–10)		16.1	0.6	16.2	0.8	15.2	0.7	15.9	0.8	15.0	0.7	17.0	1.1	11.6	0.6	12.0	0.8	16.3	1.2	20.6	1.3
Moderate impairment (SDS: 4–6)		17.5	0.7	19.3	0.9	16.7	0.8	16.8	0.9	17.8	0.7	17.0	1.1	16.2	0.7	16.2	0.9	17.6	1.2	19.3	1.1
Mild impairment (SDS: 1–3)		21.6	0.8	21.7	0.9	20.2	0.8	22.2	0.9	20.7	0.8	22.4	1.2	18.7	0.8	20.6	1.0	22.2	1.3	23.1	1.3
Use of any treatment[b]		20.4	0.6	21.7	0.8	24.5	0.8	27.5	1.0	26.0	0.9	28.4	1.2	16.7	0.7	21.2	0.9	27.5	1.3	29.2	1.3

[a] Highest severity category across 4 SDS role domains

[b] Specialty mental health care, general medical care, human services or complementary/alternative medicine

Table 4

Comorbidity of specific phobia with other DSM-IV disorders.

	Specific phobia cases with comorbid disorders									
	Mood disorder[a]		Anxiety disorder[b]		Impulse-control disorder		Substance-use disorder[d]		Any mental disorder[e]	
	%	SE	%	SE	%	SE	%	SE	%	SE
Lifetime comorbidity[f]										
Lifetime specific phobia diagnosis	34.3	0.7	41.2	0.8	17.4	0.7	15.9	0.6	60.5	0.9
12-month specific phobia	35.9	0.9	42.9	0.9	18.1	0.7	15.6	0.6	62.0	1.0
12-month comorbidity[g]										
12-month specific phobia	21.0	0.7	29.6	0.8	10.1	0.6	5.3	0.4	42.2	1.0
Temporal priority of specific phobia[h]										
Lifetime specific phobia	89.3	0.7	71.6	0.9	72.5	1.7	92.2	0.9	72.6	0.8
12-month specific phobia	89.7	0.8	72.2	1.1	71.5	2.0	92.8	1.0	72.8	1.0

[a]Respondents with major depressive episode or bipolar disorder (broad).

[b]Respondents with panic disorder, generalized anxiety disorder, social phobia, agoraphobia, post-traumatic stress disorder or separation anxiety disorder.

[c]Respondents with intermittent explosive disorder, attention deficit disorder, conduct disorder, oppositional defiant disorder, binge-eating disorder or bulimia nervosa.

[d]Respondents with alcohol abuse with or without dependence or drug abuse with or without dependence.

[e]Respondents with any disorder listed above.

[f]Percentage of respondents with either lifetime or 12 month specific phobia who also meet lifetime criteria for at least one of the other DSM-IV disorders.

[g]Percentage of respondents with 12 month specific phobia who also meet 12 month criteria for at least one of the other disorders.

[h]Percentage of respondents with either lifetime or 12 month specific phobia and at least 1 of the other disorders, whose age of onset of specific phobia is reported to be younger than the age of onset of all comorbid disorders under consideration (ie, either mood, anxiety, substance use, impulse control or any disorder).

Table 5

Bivariate associations between socio-demographics correlates and DSM-IV specific phobia (all countries combined).

Correlates	30-day Specific Phobia[a]		Lifetime Specific Phobia[b]		12-month Specific Phobia among lifetime cases[c]		30-day Specific Phobia among 12-month cases[c]	
	OR	(95% CI)	OR	(95% CI)	OR	(95% CI)	OR	(95% CI)
Age-cohort								
18–29	1.5*	(1.3–1.6)	1.8*	(1.7–2.0)	–	–	–	–
30–44	1.4*	(1.3–1.6)	1.6*	(1.4–1.7)	–	–	–	–
45–59	1.4*	(1.2–1.6)	1.5*	(1.4–1.6)	–	–	–	–
60+	1.0		1.0		–	–	–	–
Age-cohort difference[d]	χ^2_3 = 54.5*, p<.001		χ^2_3 =208.2*, p<.001					
Age of onset								
Early	–	–	–	–	1.4*	(1.2–1.7)	0.9	(0.8–1.1)
Early-average	–	–	–	–	1.1	(0.9–1.3)	0.9	(0.7–1.0)
Late-average	–	–	–	–	1.1	(0.9–1.3)	0.8*	(0.7–1.0)
Late	–	–	–	–	1.0		1.0	
Age of onset difference[d]					χ^2_3 = 20.7*, p<.001		χ^2_3 = 7.4, p=.061	
Time since onset (Continuous)	–	–	–	–	1.00*	(0.99–1.00)	1.01*	(1.01–1.01)
					χ^2_1 = 6.4*, p<.012		χ^2_1 = 19.6*, p<.001	
Gender								
Female	2.7*	(2.5–3.0)	2.0*	(1.9–2.2)	1.8*	(1.6–2.1)	1.3*	(1.2–1.5)
Male	1.0		1.0		1.0		1.0	
Gender difference[d]	χ^2_1 = 617.2*, p<.001		χ^2_1 = 635.9*, p<.001		χ^2_1 = 88.1*, p<.001		χ^2_1 = 15.7*, p<.001	
Employment status								
Student	1.0	(0.8–1.2)	1.1	(1.0–1.3)	1.2	(0.9–1.7)	0.9	(0.7–1.2)
Homemaker	1.3*	(1.2–1.5)	1.2*	(1.1–1.3)	1.2	(1.0–1.5)	1.3*	(1.1–1.6)
Retired	1.1	(0.9–1.2)	1.1	(1.0–1.3)	1.3*	(1.0–1.6)	0.9	(0.7–1.2)
Other[f]	1.6*	(1.5–1.8)	1.4*	(1.3–1.5)	1.5*	(1.2–1.8)	1.3*	(1.1–1.6)
Employed	1.0		1.0		1.0		1.0	

Correlates	30-day Specific Phobia[a]		Lifetime Specific Phobia[b]		12-month Specific Phobia among lifetime cases[c]		30-day Specific Phobia among 12-month cases[c]	
	OR	(95% CI)	OR	(95% CI)	OR	(95% CI)	OR	(95% CI)
Employment status difference[d]	$\chi^2_4 = 90.4^*$, p<.001		$\chi^2_4 = 69.9^*$, p<.001		$\chi^2_4 = 21.0^*$, p<.001		$\chi^2_4 = 15.5^*$, p=.004	
Marital status								
Never married	1.0	(0.9–1.1)	1.1	(1.0–1.1)	1.1	(0.9–1.2)	1.0	(0.9–1.2)
Divorced/separated/widowed	1.2*	(1.1–1.3)	1.2*	(1.1–1.3)	1.1	(0.9–1.3)	1.1	(0.9–1.3)
Currently married	1.0		1.0		1.0		1.0	
Marital status difference[d]	$\chi^2_2 = 16.1^*$, p<.001		$\chi^2_2 = 23.0^*$, p<.001		$\chi^2_2 = 1.0$, p=.614		$\chi^2_2 = 1.0$, p=.619	
Education level								
No education	1.7*	(1.3–2.2)	1.4*	(1.1–1.6)	1.7*	(1.1–2.6)	1.7*	(1.1–2.6)
Some primary	2.2*	(1.9–2.5)	1.7*	(1.6–1.9)	1.7*	(1.2–2.2)	1.4*	(1.0–1.8)
Finished primary	1.9*	(1.6–2.3)	1.5*	(1.4–1.7)	1.5*	(1.1–2.0)	1.4	(1.0–1.8)
Some secondary	1.7*	(1.5–1.9)	1.5*	(1.4–1.6)	1.3*	(1.1–1.7)	1.2	(0.9–1.5)
Finished secondary	1.5*	(1.3–1.7)	1.3*	(1.2–1.4)	1.3*	(1.1–1.6)	1.3*	(1.0–1.6)
Some college	1.4*	(1.2–1.6)	1.3*	(1.2–1.4)	1.3*	(1.0–1.6)	1.1	(0.8–1.4)
Finished college	1.0		1.0		1.0		1.0	
Education level difference[d]	$\chi^2_6 = 117.8^*$, p<.001		$\chi^2_6 = 131.6^*$, p<.001		$\chi^2_6 = 16.7^*$, p=.010		$\chi^2_6 = 11.1$, p=.086	
Household income								
Low	1.4*	(1.2–1.6)	1.2*	(1.1–1.3)	1.4*	(1.1–1.6)	1.3*	(1.1–1.6)
Low-average	1.2*	(1.1–1.4)	1.1*	(1.0–1.2)	1.2	(1.0–1.4)	1.2	(1.0–1.5)
High-average	1.1	(1.0–1.2)	1.0	(1.0–1.1)	1.1	(0.9–1.2)	1.1	(0.9–1.4)
High	1.0		1.0		1.0		1.0	
Household income difference[d]	$\chi^2_3 = 38.7^*$, p<.001		$\chi^2_3 = 28.1^*$, p<.001		$\chi^2_3 = 14.4^*$, p=.003		$\chi^2_3 = 7.7$, p=.053	
N[e]	124902		5130258		9583		7140	

*Significant at the .05 level, 2 sided test.

[a]These estimates are based on logistic regression adjusted for age, gender and country.

[b]These estimates are based on survival models adjusted for age-cohorts, gender, person-years and country.

[c]These estimates are based on logistic regression adjusted for time since specific phobia onset, age of onset, gender and country.

[d] Chi square test of significant differences between blocks of sociodemographic variables.

[e] Denominator N: 124,902 = total sample; 5,130,258 = number of person-years in the survival models; 9,583 = number of lifetime cases of specific phobia; 7,140 = number of 12-month cases of specific phobia.

[f] includes e.g. looking for work or being disabled.