



Help-seeking for Social Anxiety symptoms in Ghana: Looking through the lens of sexist attitudes

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Abstract

While health research has demonstrated the influence of cultural disparities on health outcomes, the impact of ambivalent sexism on mental health help-seeking has not been well understood. We investigated the links between sexist attitudes, Mental Health Literacy (MHL), and sociodemographic variables regarding symptoms of Social Anxiety among Ghanaians. In 2021, we recruited 601 Ghanaians to participate in an online vignette-based experimental study. Respondents were randomly assigned to two conditions (i.e., male, and female vignettes) depicting symptoms of Social Anxiety for a hypothetical person. Participants provided their impression of the hypothetical person and further completed self-report measures. Regarding help-seeking for the symptoms of Social Anxiety, results revealed that age positively predicted professional help-seeking among men assigned to the male condition, while age negatively predicted social support among women in the same condition. Education was found to relate positively to professional and social support help-seeking options but was negatively linked with spiritual help-seeking. Benevolent sexist attitudes towards women related to the endorsement of professional help-seeking, but participants with benevolent sexist attitudes towards men were less likely to recommend social support. Findings imply that optimal interventions for mental health could benefit from understanding help-seeking patterns, idioms of psychological distress and the cultural settings of individuals.

Keywords Social Anxiety · Mental Health Literacy (MHL) · Help-seeking · Ambivalent Sexism · Ghana

Introduction

Mental Health Literacy (MHL) encompasses knowledge about mental disorders, including recognition, causes, prevention, self-help interventions, and help-seeking options (Jorm et al., 1997). In this study, the focus is on the help-seeking options, which serves as the outcome variable. Limited research conducted within the African context necessitated a greater dependence on literature sourced from other regions for this study. MHL plays an essential role in promoting mental well-being and reducing stigma (Adu et al., 2021). For instance, recognising social anxiety disorder was associated with seeking help early for this disorder (Hadjimina & Furnham, 2017). In this study, recognition referred to accurately identifying the presence of symptoms of mental disorder from the Western perspective of nosology. Research indicated that individuals with higher levels of MHL, which involves recognising the symptoms of mental disorders such as anxiety disorders, are more likely to seek help for mental health concerns (Gorzynski et al., 2017). Goldney et al., (2005) also found

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that improved recognition of the symptoms of depression was linked to more positive attitudes towards professional help-seeking and the use of antidepressants (Goldney et al., 2005). A study conducted in Singapore reported similar findings (Picco et al., 2018). In Ghana, the context of the current study, individuals endorsed diverse preferences for seeking help, including spiritual help-seeking for depression and schizophrenia (Adu et al., 2023). These findings suggest a consistent influence of both the secular Western and sociocultural view of mental health help-seeking across different cultural contexts.

Additional influential factors of attitudes toward seeking help for mental disorders, including anxiety disorders encompasses demographic variables such as sex, age, and educational attainment (Blais & Renshaw, 2013). In this study, education refers to an individual's level of formal education attainment, measured in terms of completed years of schooling. Considerable evidence suggests a positive association between higher levels of education and improved mental health outcomes, including help-seeking for anxiety disorders (Ding et al., 2022). Education is found to enhance awareness of mental health services and resources, leading to more effective help-seeking preferences (Gulliver et al., 2012). Notwithstanding, Furnham and Swami (2018) also reported that lower levels of education related to poor MHL such as help-seeking, consistent with the findings of Galdas et al. (2005). Further, research indicates that the intentions to seek help for mental disorders tends to increase with age (Gonzalez et al., 2005). For example, Mackenzie et al. (2008) reported that older individuals were three times more likely to exhibit positive attitudes toward help-seeking for mental disorders such as anxiety disorders compared to their younger counterparts. However, contrary findings by Furnham and Swami (2018) revealed that older respondents exhibited poor MHL across different MHL components, including help-seeking. Adolescents in the US were found to endorse the biopsychosocial model of help-seeking for social anxiety disorders (Coles et al., 2016). Similar findings have been reported by Reavley and Jorm (2011a, b). Men, compared with women, have also consistently been reported to exhibit less favourable attitudes towards seeking help for mental disorders (Mackenzie et al., 2006).

The disparities in attitudes towards help-seeking for mental disorders, particularly between men and women, are closely intertwined with prevailing sex norms and gender stereotypes within societies (Addis & Mahalik, 2003; Mackenzie et al., 2006). For instance, in cultures such as Ghana where traditional notions of masculinity are deeply rooted and upheld, seeking help for mental health concerns may be misconstrued as a sign of weakness among men (Travis et al., 2012). In such settings, men are often expected to embrace traditional masculine qualities such as

power, courage, and self-reliance, while women are encouraged to adopt more submissive, dependent, and fearful roles (Stets & Burke, 2000). Therefore, help-seeking in general is considered acceptable for women (Addis & Mahalik, 2003; Travis et al., 2012). The theory of ambivalent sexism has been instrumental in describing the intricate web of sex-based expectations. This theory distinguishes between hostile sexism, characterized by negative attitudes and views towards a particular sex group, and benevolent sexism, which expresses positive attributes towards a particular sex (Glick & Fiske, 1999). Ambivalent sexism illustrates how both favourable and unfavourable beliefs, emotions, behaviours, and perceived roles coexist towards a specific sex. These attitudes can have detrimental effects, leading to misconceptions about appropriate behaviours. For instance, the notion that men are inherently the heads of their households reflects a benevolent sexism attitude toward men, positioning them as strong helpers rather than individuals who might need help themselves. Conversely, the belief that women are inferior to men epitomizes hostile sexist attitudes toward women, perpetuating negative sexist attitudes of women as inadequate and dependent in various situations (Glick & Fiske, 1999).

Literature gaps and current study

The above syntheses of literature showed that research on help-seeking for anxiety disorders is limited in the international literature, with a significant gap in the African literature, encompassing Ghana. In order words, the majority of the research are found in Western, Educated, Industrialized, Rich, and Democratic countries (WEIRD; Henrich et al., 2010). Additionally, there is an inadequate understanding of how demographic factors such as age and education influence help-seeking behaviours for specific mental disorders such as Social Anxiety in Ghana. Further, while studies have provided evidence for various help-seeking options for mental disorders, including faith-based approaches (Stahler et al., 2007), the literature has primarily focused on the secularized Western perspective on mental health and approaches to seeking-seeking, resulting in oversimplification of the complex and dynamic systems that influence health outcomes (Fonseca-Pedrero, 2018). Moreover, despite the implications of sexist attitudes in shaping individuals' societal perceptions of sex roles, it is noteworthy that studies exploring the influence of ambivalent sexism on MHL remain evidently absent in the existing literature. This represents a critical gap in our understanding of the relation between sexist attitudes, and attitudes towards mental health help-seeking, warranting further research.

As a results, the current study aimed to investigate the links between ambivalent sexism, recognition of Social

Anxiety, educational levels, age, and three types (i.e., social support, spiritual, and professional) of help-seeking preferences for Social Anxiety symptoms among the general populace of Ghana. Ambivalent sexism becomes particularly relevant for exploration in relation to help-seeking for anxiety disorders within the Ghanaian context, especially considering the prevalence of hegemonic sexist attitudes within this population. While recognition of mental disorders as a variable has been found to facilitate efforts towards mental well-being, the inclusion of demographics, age, and education, helps design tailored interventions to specific group's needs. By addressing the links between these variables, we seek to provide valuable insights into the complex interplay between sociocultural factors and help-seeking preferences for Social Anxiety symptoms in a Low- and Middle-income Country (LMIC; Ghana) setting, ultimately contributing to the development of more effective and culturally sensitive mental health interventions. In essence, exploring the interplay among these variables signifies a deeper understanding of how sexist attitudes, sociodemographic factors, and knowledge on Social Anxiety symptoms influence help-seeking preference for this disorder.

Researchers chose to focus on symptoms of Social Anxiety as existing studies on MHL have primarily concentrated on the symptoms of depression, schizophrenia, Post-Traumatic Stress Disorder, and generalized anxiety disorder. This leaves a significant gap in research regarding Social Anxiety. Anxiety disorders are found to be one of the most common mental disorders with about 33.7% of the population affected by this disorder in their lifetime (Bandelow & Michaelis, 2022). Social Anxiety, characterized by persistent anxiety in specific social situations due to fear of negative judgment and resulting in avoidance of these situations (American Psychiatric Association [APA], 2013), is also associated with significant economic costs, including poor educational outcomes, increased financial dependence, diminished work performance, social dysfunction, and other adverse life consequences (APA, 2013; Lipsitz & Schneier, 2000). A study conducted in sub-Saharan Africa, Nigeria, recorded concerning lifetime and 12-month prevalence rates of 9.4 and 8.5%, respectively (Bella & Omigbodun, 2009). However, despite the debilitating effects of Social Anxiety disorder, the necessary attention has not been given to this disorder in the MHL literature, especially in sub-Saharan Africa, including Ghana. Hence, further research on this disorder was needed to mitigate its negative effects on society.

Overall, the literature highlighted several key findings: (1) Recognising the symptoms of mental disorders positively linked to seeking professional help-seeking. (2) Higher education correlated with improved health outcomes. (3) There were mixed findings regarding the association between age and help-seeking preferences for mental disorders, resulting

in the formulation of non-directional hypothesis (H3). (4) The relation between ambivalent sexism and help-seeking preferences for mental disorders was not well-established in the existing literature, making our study distinctive. Considering these findings, we formulated the following hypotheses for our study in Ghana: H1: Correct recognition of the symptoms of Social Anxiety will be positively related to professional help-seeking for this disorder among the participants. H2: Higher levels of education will be positively associated with professional help-seeking for the symptoms of Social Anxiety among the participants. H3: There will be an association between age and help-seeking for Social Anxiety symptoms among participants. H4: Hostile and benevolent sexist attitudes toward men will be negatively related to help-seeking for Social Anxiety symptoms. H5: Hostile and benevolent sexist attitudes and Hostile sexism toward women will be positively related to help-seeking for Social Anxiety symptoms.

Method

Participants

During the year 2021, we surveyed 601 participants from the general population in Ghana aged 18 to 64 ($M_{age} = 28.5$; $SD = 5.4$) to participate in the current study. Of these, 49.4% ($n = 297$) were randomly assigned to Condition 1 (i.e., a vignette describing a hypothetical male with symptoms of Social Anxiety), and 50.6% ($n = 304$) were in Condition 2 (i.e., a vignette describing a hypothetical female with symptoms of Social Anxiety). In condition 1, 35.4% ($n = 213$) of the sample identified as men, while 15.1% ($n = 91$) identified as women. In condition 2, 19.6% ($n = 118$) were men, and 18.1% ($n = 109$) were women. We used online convenience sampling through snowballing to recruit our participants for the current study. Thus, the first author extended initial invitations to individuals and organizations, such as church members and colleagues, currently residing in Ghana to take part in this anonymous survey. Participants were encouraged to share the survey link with others, residing Ghana, in their social networks. While online data collection method provides researchers with less control over the environment in which participants complete the survey, it is known for its popularity in recent times (Adu et al., 2023), and offering cost-effective means of reaching diverse populations in various locations (Lefever et al., 2007). Moreover, this sampling procedure was the best alternative for our study due to the COVID-19 pandemic and its associated protocols, preventing human contacts. Respondents were not compensated for participating in this study; see Table 1 for detailed information on participant demographics. Please refer to

Table 1 Sociodemographic characteristics of participants ($N=601$)

Variable		Frequency	Percentage (%)
Sex	Man	401	66.7
	Woman	200	33.3
Education	Junior high school	2	0.3
	Senior high school	64	10.6
	Diploma (training schools)	133	22.1
	Bachelor	327	54.4
	Master	62	10.3
	PhD	8	1.3
	Not specified	5	0.8
Religious affiliation	Christianity	580	96.5
	Traditional	4	0.7
	Islamic	17	2.8
	Others	0	0
Condition	Man vignette	304	50.6
	Woman vignette	297	49.4

Supplementary S1 for mean comparison of the continuous variables.

Power analysis

An a priori power analysis using G*Power 3.1 was conducted to determine the required sample size: an effect size of .03 (f^2), an α error probability of .05, and an anticipated power of .80 yielded a required sample size of $N=531$ for these parameters (Faul et al., 2007). Hence, the current sample is greater, contributing to more statistical power.

Procedure

The authors' institutional ethics committee approved the conduct of the current study. The study was presented following the standardised checklist for reporting cross-sectional studies (Vandenbroucke et al., 2007). Individuals in the general population of Ghana aged 18 years and above were eligible to voluntarily participate in this study. As the authors intended to manipulate the gender of the vignette and its impact on help-seeking for the symptoms of Social Anxiety, an experimental study design using a survey approach for data gathering was employed in the current study. A single survey link automatically and randomly assigned participants to either gendered condition was generated and spread on different social media platforms (e.g., Facebook, WhatsApp, Email, and Twitter) using online data collection software (SelectSurvey.net). The Global Positioning System (GPS) coordinates and Internet Protocol

(IP) addresses functions were disabled to protect participants' identities and ensure compliance with ethical guidelines. The mean time for completing the survey was 15 min. All material were presented in English, as it is the official language of Ghana. Participants completed demographic questionnaire including age, biological sex, education, and previous experience of Social Anxiety, before proceeding to the main measures. We amalgamated all scales into a single questionnaire.

The data utilized for this paper constitutes a subset derived from a broader investigation into MHL within the context of Ghana. The dataset encompasses various components of MHL and their predictors, including sexist attitudes as a central independent variable. Within this dataset, specific sections were dedicated to the exploration of the independent variables and knowledge on mental health prevention strategies, help-seeking recommendation preferences for mental disorders, mental health prejudice, and recognition abilities. Through this comprehensive analysis, we aimed to gain deeper insights into the intricate interplay between sexist attitudes and other independent variables, and key aspects of MHL in the Ghanaian context (e.g., Adu et al., 2023).

Measures

We employed the Computer-Assisted-Telephone-Interview (CATI) scale based on vignettes, originally developed by Reavley and Jorm (2011a, b). This scale aimed to assess participants' ability to recognise, previous experience, and help-seeking behaviours related to the symptoms of Social Anxiety. The scale presented scenarios depicting symptoms of Social Anxiety, framed within the Western nosology model of mental disorders, featuring a hypothetical individual. To enhance cultural relevance, we utilized Ghanaian tribal neutral names, assigning "John" for the male vignette and 'Mary' for the female vignette. The complete vignette is available in the Appendix for reference.

Recognition ability

Participants were tasked to identify the specific type of mental disorder described in the vignette (i.e., recognition of Social Anxiety symptoms) using open ended response type.

Previous experience

Participants were then invited to share their prior experiences, encompassing both personal encounters and those of others, related to Social Anxiety symptoms using binary responded type of yes or no.

Help-seeking

Participants were further asked to choose from a range of individuals whom they think can be of help to the hypothetical person. Helpers were grouped into three categories: spiritual helpers (pastor, herbalist, traditional healer [e.g., Oduşini]), professional helpers (psychiatrist, counsellor, psychologist, general practitioner/family doctor, nurse)", and informal social support (lecturer/teacher, close friend, close family member). Responses were rated on a 5-point Likert scale (0=*strongly disagree* to 4=*strongly agree*). The internal consistency, using Cronbach's alpha (α), of the subscales was found to be relatively low for professional help-seeking ($M=2.99$, $SD=0.64$): $\alpha=.68$; and informal social support ($M=2.78$, $SD=0.76$): $\alpha=.72$; but acceptable for spiritual help-seeking ($M=1.76$, $SD=0.76$): $\alpha=.72$. Note, it is not uncommon to have such low reliability for scales with fewer items (Lee et al., 2016).

Sexist attitudes

Sexist attitudes was measured with the popular Ambivalent Sexism Inventory toward women (ASI; Glick & Fiske, 1996) and men (AMI; Glick & Fiske, 1999). A sample item on this scale is "Many women have a quality of purity that few men possess." This instrument is rated on a 6-point scale (0="strongly disagree" to 5="strongly agree"). The internal consistency of all the subscales was generally acceptable: $\alpha = .71$ for benevolent sexism towards women ($M=3.27$, $SD=1.06$), $\alpha = .74$ for benevolent sexism towards men ($M=3.25$, $SD=1.15$), $\alpha = .76$ for hostile sexism towards women ($M=2.58$, $SD=1.16$), and $\alpha = .68$ for hostile sexism towards men ($M=2.76$, $SD=1.09$).

Statistical analyses

Data analyses was conducted using Statistical Package for Social Sciences (SPSS) version 28. A minimum standard of 90% for completion of the questionnaires was implemented for the individual participants. The dataset was exported from the online survey software to the SPSS software, and the data were screened for missing values using Little's Missing Completely at Random (MCAR) test, which was not MCAR ($p>.05$) (Little, 1988). Consequently, data imputation was estimated with the Expectation Maximization (EM) algorithm, which is reported to be the best alternative for data imputation as it is used to obtain the maximum likelihood estimates of parameters for missing data (Dempster et al., 1977). Skewness and kurtosis ranged from -3 to 3, favouring the use of parametric statistics (Tabachnick & Fidell, 2018). Subsequently, descriptive statistics were computed for demographic variables and subscale scores.

This was followed by a reliability analysis for all non-binary scales/subscales. Pearson correlation coefficients were computed for all variables under study. Afterwards, all hypotheses were tested using linear regression analysis, resulting in 12 models in all. To ensure a clearer understanding of the results and to avoid the possible confounding a Ambivalent sexism with sex effect, we presented the findings separately by sex of the participants.

Results

Bivariate correlations between the sociodemographic variables, sexist attitudes, and MHL regarding Social Anxiety symptoms are available in Table 2.

Sociodemographic variables and help-seeking

Table 2 showed that education positively correlated with the endorsement of professional help and informal social support for Social Anxiety symptoms, while older age related to endorsing both spiritual, and professional help for the symptoms of Social Anxiety. Being a man or woman was not associated with any help-seeking preferences for the symptoms of Social Anxiety. Exposure to others with symptoms of Social Anxiety was positively associated with endorsing professional help for the symptoms of Social Anxiety. Being a woman related to less likelihood of either having personal or significant others' experience of Social Anxiety symptoms.

Sexist attitudes, recognition, and help-seeking

The results revealed that benevolent sexist attitudes towards men and women correlated with professional and informal social support help-seeking preferences for the symptoms of Social Anxiety, while recognition of the symptoms of Social Anxiety was positively associated with only professional help-seeking for Social Anxiety. Additionally, hostile sexism towards males related positively to informal social support for the symptoms of Social Anxiety. Being a woman linked positively with benevolent sexism attitudes towards men and less hostile sexism attitudes towards their fellow women.

Table 3 shows the linear regression model results, testing factors that predict help-seeking for the biomedical perspective of Social Anxiety. Factors included demographic variables, MHL, and sexist attitudes. Our analysis revealed R^2 values from .05 to .17 across various models. These values reflect the variance in the dependent variables predicted by our independent variables. In psychological research, such as ours, focusing on hypothesis testing rather

Table 2 Bivariate correlations matrix between help-seeking for Social Anxiety, ambivalent sexism, exposure to Social Anxiety, and sociodemographic factors (N=601)

	1	2	3	4	5	6	7	8	9	10	11	12	13
Help-seeking													
1. Professional helpers	-												
2. Social support	.42**	-											
3. Spiritual helpers	.39**	.33**	-										
Ambivalent Sexism													
4. Benevolence sexism toward women	.17**	.14**	-.03	-									
5. Hostility sexism toward women	.05	.05	-.03	.35**	-								
6. Benevolence sexism toward men	.15**	.13**	-.03	.62**	.54**	-							
7. Hostility sexism toward men	.08	.13**	-.01	.53**	.34**	.54**	-						
Exposure													
8. Recognition	.08*	-.03	-.03	.01	.01	.01	.05	-					
9. Self (1= yes)	.05	.05	-.05	.10*	.07	.13**	.15**	.03	-				
10. Others (1= yes)	.10*	.05	-.01	.07	.08*	.12**	.06	-.08	.39**	-			
Sociodemographic variables													
11. Age	.18**	.03	.11*	.03	-.01	-.01	.02	-.03	-.05	.09*	-		
12. Sex (1= women; 0= men)	-.03	.01	-.03	.20**	-.30**	-.06	.24**	.02	.01	-.09*	-.17**	-	
13. Education	.14**	.10*	.04	-.06	.03	-.06	-.10*	.02	-.04	.03	.36**	-.20**	-
14. Condition	-.01	-.01	-.02	.01	-.01	-.01	.01	-.02	.06	-.02	-.01	-.07	-.03

* $p < .05$, ** $p < .01$, *** $p < .001$. Recognition = ability to identify Social Anxiety, Self (1 = yes) = personal experience to Social Anxiety, Others (1 = yes) = experience with others with social anxiety (1 = yes)

Table 3 Linear regressions for the predictors of help-seeking for Social Anxiety (N=601)

Variables (missing)	Men						Women					
	Female vignette			Male vignette			Female vignette			Male vignette		
	Professional help-seeking	Social support	Spiritual help-seeking	Professional help-seeking	Social support	Spiritual help-seeking	Professional help-seeking	Social support	Spiritual help-seeking	Professional help-seeking	Social support	Spiritual help-seeking
Sociodemographic variables												
Age	.108	-.046	.063	.172*	.074	.132	.173	-.018	-.081	.073	-.286*	.322**
Education	.197*	.184*	.111	-.005	.003	-.162*	.039	.159	.083	.097	.223*	.111
Exposure												
Self (1 = yes)	.101	.168*	.071	-.056	-.075	-.090	.027	.007	-.102	.136	.020	.036
Others (1 = yes)	.098	.938	-.103	.029	.040	.055	-.017	.001	.127	.093	-.075	-.112
Recognition	-.086	-.058	-.109	.160*	-.010	.045	.143	-.126	-.161	.204	-.037	.118
Ambivalent Sexism												
Benevolence sexism toward women	.119	.118	.023				.346***	.152	-.071			
Hostility sexism toward women	.007	.119	-.119				.048	-.080	.002			
Benevolence sexism toward men												
Benevolence sexism toward men				.139	.133	-.052				-.061	-.316**	.012
Hostility sexism toward men				.004	.094	.099				.071	.183	.045
F	3.51***	3.26**	1.56	2.94**	1.54	1.36	2.78*	0.97	0.71	1.45	2.21*	2.04
R²	.12	.11	.06	.09	.05	.05	.17	.07	.05	.11	.16	.15
Missingness	0	0	0	2	2	2	4	4	4	0	0	0

Recognition=ability to identify Social Anxiety, Self (1 =yes)= personal experience with Social Anxiety, Others (1 =yes)=experience with other with Social Anxiety

p* < .05, *p* < .01, ****p* < .00

than prediction, these R^2 values are meaningful. Our study emphasizes theoretical understanding of relations between variables, and these R^2 values should be viewed in this context, highlighting our study's theoretical and empirical significance rather than predictive capacity. Please refer to Supplementary S1 for detailed statistics regarding R values, 95% CI for β and adjusted R^2 values, including results of a comparison of participants in the two conditions on the main variables.

Sociodemographic variables and help-seeking

Results from Table 3 show that age positively predicted the endorsement of professional help among men in the male condition ($\beta = .172$, $p < .020$) for the symptoms of Social Anxiety (H3). However, among women participants in the male condition, age negatively predicted the endorsement of informal social support ($\beta = -.286$, $p = .010$) and positively predicted the recommendation of spiritual help ($\beta = .322$, $p = .004$) for the symptoms of Social Anxiety (H3). Education positively predicted the endorsement of professional help ($\beta = .197$, $p = .010$) and informal social support ($\beta = .184$, $p = .016$) among men in the female condition (H2). Notwithstanding, education negatively predicted the endorsement of spiritual help ($\beta = -.162$, $p = .032$) among men in the male condition for the symptoms of Social Anxiety. Education also positively predicted the endorsement of informal social support ($\beta = .223$, $p = .040$) among women in the male condition. Moreover, men participants who had personal exposure to the symptoms of Social Anxiety were more likely to endorse informal social support for the hypothetical person in the female condition ($\beta = .168$, $p = .028$).

Sexist attitudes, recognition, and help-seeking

Men who correctly recognised the symptoms of Social Anxiety were more likely to endorse professional help ($\beta = .160$, $p = .020$) in the male condition (H1). Further, regarding sexist attitudes, results showed that women who held benevolent sexist attitudes toward females were more likely to recommend professional help ($\beta = .346$, $p < .001$) for the hypothetical person in the female condition (H5). Further, women who were benevolent toward men were less likely to recommend informal social support ($\beta = -.316$, $p = .009$) in the male condition (H4).

Discussion

We used a community sample from Ghana to explore the relation between sociodemographic variables, MHL, sexist attitudes, and the endorsement of different help-seeking

preferences relating to the symptoms of Social Anxiety. We employed an experimental approach to manipulate the sex of the vignette to investigate these factors. Our research was guided by five hypotheses. As anticipated, our findings partially supported hypothesis H1, as we observed correct recognition of the symptoms of Social Anxiety and the likelihood of endorsing professional help for this disorder among men assigned to the male condition, as shown in Table 3. This result aligns with research conducted in Germany, where greater MHL, including recognition ability regarding the Western concepts of depression was linked to an increased likelihood of recommending professional help-seeking for this disorder (Waldmann et al., 2019). Additionally, in Australia, heightened recognition of the Western concepts of depression correlated with a greater possibility of endorsing antidepressant use and professional help for this mental disorder (Jorm et al., 1997).

The finding further suggests that knowledge on the Western concepts of mental disorders might act as a protective factor against resistance towards treatment options for mental disorders, particularly among men. Such a finding offers a nuanced perspective, as men, in general, have been reported to be less inclined towards seeking mental health help compared to women (Travis et al., 2012). For instance, international studies in Australia, UK, USA, Ireland, Denmark, Sweden, Scotland, and Canada have consistently showed that conformity to traditional masculinity roles negatively impacted help-seeking behaviours for depression (Seidler et al., 2016). Our study indicates that this sex difference may be influenced by individuals' ability to recognize the Western concepts of mental health issues. This result provides valuable insights into the complex interplay between recognition, sex, and attitudes towards mental health professional help-seeking. It highlights the potential role of MHL in mitigating sex-based disparities in mental health help-seeking attitudes and emphasize the importance of tailored interventions aimed at improving knowledge on the Western concepts of mental disorders to promote positive help-seeking behaviours, particularly among men in Ghana, and possibly across other cultures.

As expected, education had a positive link with seeking professional help and informal social support for the symptoms of Social Anxiety. This partly aligns with hypothesis H2 because this relation was particularly significant among male participants assigned to the female condition (see Table 3), suggesting that biological sex may influence preferences for mental health help-seeking options. Individuals with formal education are more likely to be exposed to evidence-based approaches to mental health that emphasize the biopsychosocial interventions. In our study, educated men may have perceived the hypothetical woman as vulnerable, consistent with cultural norms in Ghana that often

depict women as needing assistance. This aligns with previous research, which indicated that a higher level of formal education is a key predictor of mental health help-seeking (Gulliver et al., 2012). Moreover, our findings showed that education had a negative impact on the endorsement of spiritual help among men assigned to the male condition (Table 3). This demonstrates that the commonly reported preference for spiritual help-seeking for various mental disorders in sub-Saharan Africa (Read & Doku, 2012), may not be prevalent among the educated population in Ghana. Higher education has consistently been associated with better health outcomes and has negative impact on traditional mental health help-seeking practices (Adu et al., 2023; Steele et al., 2007).

In our study, age had varying effects on help-seeking preferences depending on the sex of participants and condition. Among men in the male condition, age was positively associated with endorsing professional help-seeking (H3) (refer to Table 3), highlighting that accumulated life experiences may enhance their understanding of the benefits of seeking professional help. In contrast, older women in the same condition were more inclined to seek spiritual help, possibly reflecting historical preferences for spiritual treatments for mental disorders in Africa (Adu et al., 2023; Read & Doku, 2012). Women, in general, tend to endorse spiritual help more than men, contributing to this observed age-related spiritual help-seeking pattern (Oladipo, 2011). These findings highlight the intricate interplay of age, sex, and help-seeking preferences in mental health decision-making.

The observed trend of older women in the male condition being less inclined to recommend informal social support for the symptoms of Social Anxiety (as seen in Table 3) sheds light on the enduring impact of traditional cultural expectations regarding the 'typical Ghanaian man.' These expectations often dictate that men should embody qualities of self-reliance, strength, and stoicism. Such deeply ingrained traditional beliefs, particularly prevalent among the older generation (Bosak et al., 2018), tend to associate help-seeking with weakness and a perceived lack of masculinity (Lynch et al., 2018). Interestingly, our study also revealed that even women who held benevolent sexist attitudes towards men were less likely to suggest social support as an option. This finding provides partial support for hypothesis H4, which posited that both hostile and benevolent sexist towards men would be negatively linked to help-seeking for the symptoms of Social Anxiety (see Table 3). This result underscores the idea that sex disparities observed in MHL literature may be influenced not only by participants' sex but also by the gendered vignettes presented, which are entwined with cultural contextual factors.

Our findings partially supported the hypothesis (H5), that benevolent and hostile sexist attitudes towards women

would be positively associated with help-seeking for the symptoms of Social Anxiety. We observed a positive link between benevolent sexist attitudes towards women and professional help-seeking for the hypothetical female, particularly among women in the female condition (Table 3). This suggests that women, known for their benevolent behaviours and compassion (Clark et al., 2020), may be more inclined to seek help for their same-sex counterparts, perceiving mental health professionals as capable of providing the needed support. These results reinforce women's generally positive attitudes towards help-seeking for mental disorders, as noted in previous studies (Mackenzie et al., 2006). However, the relation with hostile sexist attitudes towards women and other help-seeking preferences was weaker.

Personal previous exposure to the biomedical concept of Social Anxiety was also linked to a greater endorsement of social support, particularly among male participants (Table 3). This finding aligns with previous evidence indicating that men tend to seek help from trusted individuals such as family members (Gough & Novikova, 2020) and that past help-seeking experiences for mental disorders are associated with future intentions to seek help from mental health professionals (Blais & Renshaw, 2013).

Strengths and limitations

The current study offers notable strengths. It is the first to investigate ambivalent sexism in relation to help-seeking for symptoms of Social Anxiety and represents the initial exploration of MHL concerning Social Anxiety within the Ghanaian context and potentially other countries in the region. Consequently, the findings contribute novel, practical, and contextually relevant insights to the MHL literature in Ghana and potentially other regional countries. It particularly sheds light on how participants' biological sex interacts with factors such as the gender of the mentally ill patient, benevolent, and hostile sexist attitudes towards men and women to influence help-seeking preferences for the symptoms for Social Anxiety.

Nonetheless, the study also has several limitations. First, the study used correlational design which prevents establishing causality among the investigated variables. In other words, this type of research design does not allow for a definitive statement that changes in one variable caused changes in another. For instance, is it the correct recognition of Social Anxiety symptoms that resulted in professional help-seeking preferences or vice versa? Convenience sampling, which was used in this study, may not accurately represent the diversity of the entire Ghanaian population. This method can introduce bias, as certain groups of people may be overrepresented or underrepresented, limiting the

generalizability of the findings to the broader Ghanaian population. Given the use of online data collection methods, which may introduce additional sample bias, such as excluding individuals without internet access or those less familiar with online surveys. There is also the risk that individuals from different countries may respond to the current survey as it was conducted online. The sex imbalance in the sample, with a majority of males, reflects a broader educational sex gap in Ghana. The reliance on self-report measures may introduce response bias, as participants may be inclined to give socially desirable responses (Grimm, 2010). Additionally, the use of vignettes, though common in research, may lack ecological validity, and real-life responses might differ from hypothetical scenarios (Adu et al., 2021). Diagnostic vignettes predominantly focus on capturing the aspects of MHL related to the Western concepts of recognition and help-seeking, while offering limited insight into other components such as initial self-help strategies and cultural conceptualisations of mental health issues.

Implications and future directions

The current findings underscore the importance of conducting thorough investigations into idioms of distress within diverse cultural contexts and considering how help-seeking preferences are shaped by culturally prescribed sex roles in societies. Mental disorders may be perceived differently in the Ghanaian context. For example, there's a gap in the literature regarding the impact of cultural conceptualizations of mental disorders, such as describing them as “*madness*” in various tribal communities in Ghana, on mental health help-seeking preference. In the Twi dialect, the most widely spoken language in Ghana, depression is often characterized as “*Bosaaye*,” which translates to “not happy,” potentially limiting the understanding and severity of depression to daily experiences of distress which can affect help-seeking choices. Recent evidence indicates that the majority of Ghanaians attribute mental disorders to spirituality. Additionally, a significant number of Ghanaians prefer spiritual and religious interventions for mental disorders (Kyei et al., 2014). Notably, women tend to seek these forms of helps for mental disorders more often than men. Therefore, a deeper understanding of the cultural framing of mental disorders and contextual factors such as sexist attitudes can inform more effective assessments and interventions (Berry, 2022).

The spirituality-religious-help-seeking evidence above, including the current findings suggest that individuals in Ghana may be more inclined to seek help from traditional healers, religious leaders, or spiritual practices rather than from mental health professionals or Western medical services. It is also possible that individuals may use these

services concurrently or alternatively, seeking both traditional/spiritual interventions and professional medical help (Kyei et al., 2014). This highlights the complex interplay between cultural beliefs, traditional practices, and contemporary healthcare in shaping help-seeking behaviours in Ghana. As a result, efforts to integrate indigenous healing into the biomedical healthcare system in Ghana could be beneficial to improve mental health (Kpobi & Swartz, 2019). However, since men outnumbered women in the present study, caution should be exercised when applying the results to women, as this could limit the generalizability of the findings. Gender balanced replication studies could have further implications for the development of interventions, policies, or programs that are intended to benefit both men and women.

Future research should consider investigating the constellation of variables longitudinally in naturalistic settings, using mixed method approaches such as interviews with individuals of both sexes who have sought professional or spiritual help for Social Anxiety, or who are knowledgeable about others who have done so to enhance the ecological validity of the present study. Studies could also explore these variables in specific microcultures within Ghana and within clinical samples to examine variations in help-seeking patterns influenced by benevolent and hostile sexist attitudes towards sexes. Researchers should consider incorporating supplementary methodologies, such as interviews or observational data, to triangulate the existing findings and enhance the comprehensive understanding of the phenomenon being studied. Moreover, they should implement focused recruitment strategies, such as representative sampling, to augment the participation of underrepresented groups, such as women. It is also crucial to explore the impact of interventions on these variables, such as psychoeducation on ambivalent sexism and help-seeking preferences, to better support individuals with Social Anxiety in Ghana. Notably, those with benevolent sexist attitudes towards both sexes tended to endorse professional help-seeking, suggesting that in the context of MHL in Ghana, such beliefs may contribute positively to pathways for recovery and wellness concerning Social Anxiety. Future research should focus on exploring the influence of cultural beliefs on help-seeking behaviours, as well as investigating the impact of different components of MHL longitudinally to establish causal links between these factors and help-seeking behaviours for mental disorders. Future qualitative and observational studies in Ghana could help us conceptualize to what extent a culturally grounded concept of this disorder maps onto or diverges from Western diagnostic criteria. It is possible that recognition rates of a culturally informed vignette would be more accurate.

Conclusion

Our study revealed that several factors influence help-seeking for the symptoms of Social Anxiety, including sociodemographic variables, ambivalent sexism, and the gender of the mentally ill patient (gendered vignette). Age was a positive predictor of professional help endorsement for the symptoms of Social Anxiety, particularly among men in the male condition. Conversely, age negatively predicted social support among women in the same condition. Education was positively associated with recommending professional help and informal social support but negatively linked to suggesting spiritual help for the symptoms of Social Anxiety. Women with benevolent sexist attitudes towards women were more likely to endorse professional help for their hypothetical female in the vignette, while women with benevolent sexist attitudes towards men were less inclined to recommend informal social support in the male condition. These findings emphasize the importance of tailoring mental health interventions to specific cultural contexts and considering how sex roles related beliefs can impact help-seeking attitudes for psychological distress. MHL campaigns should be sensitive to sex-related beliefs, including hostile and benevolent sexist attitudes, as well as contextual variables to enhance their effectiveness.

Appendix

Male vignette

John is a 25-year-old living at home with his parents. Since starting his new University last year, he has become even more shy than usual and has made only one friend. He would really like to make more friends but is scared that he'll do or say something embarrassing when 'he's around others. Although 'John's work is OK, he rarely says a word in class and becomes incredibly nervous, trembles, blushes and seems like he might vomit if he has to answer a question or speak in front of the class. At home, John is quite talkative with his family, but becomes quiet if anyone he 'doesn't know well comes over. He never answers the phone, and he refuses to attend social gatherings. He knows his fears are unreasonable, but he 'can't seem to control them, and this really upsets him.

Female vignette

Mary is a 25-year-old living at home with her parents. Since starting her new University last year, she has become even more shy than usual and has made only one friend. She would really like to make more friends but is scared that 'she'll do or say something embarrassing when 'she's around others. Although Mary's work is OK, she rarely says a word in class and becomes incredibly nervous, trembles, blushes, and seems like she might vomit if she has to answer a question or speak in front of the class. At home, Mary is quite talkative with her family, but becomes quiet if anyone she 'doesn't know well comes over. She never answers the phone, and she refuses to attend social gatherings. She knows her fears are unreasonable, but she 'can't seem to control them, and this really upsets her.

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Authors' contributions P. A., D.G. and T.J. involved in the conception of the study; P.A., A.S.B.P. and J.M. led the writing of the manuscript; D.G. oversaw the analysis of data; P.A. lead the data collection; D.G., and T.J. provided comments to improve the manuscript; D.G., and T.J. head of the team edited the final manuscript and supervised the work. All authors contributed to the study design. All authors contributed to drafting the paper and revised the manuscript for important intellectual content. All authors gave final approval for this version to be published.

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Data availability Study participants did not consent to having their data shared publicly. The deidentified participant dataset generated during the current study can be made available to researchers with relevant permissions upon a reasonable request to the corresponding author.

Declarations

Ethical approval and consent to participate This research was approved by the Human Research Ethics Committee board of Higher School of Economics-National Research University (№ 74). The study was in line with the Declaration of Helsinki, which outlines fundamental ethical principles for health research involving the use of human participants (World Medical Association, 2001). Participants aged 18 years and older were allowed to participate in the current study for ethical reasons. Participation in the current study was voluntary, and every participant provided an informed consent before completing the survey.

Consent for publication Participants freely gave consent for their results to be published or used for other academic purposes such as reports, presentations, and public documentation in aggregate form (i.e., a combined data analysed with those of others).

Competing interests Authors declare no competing interests.

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