Shyness and social phobia in Israeli Jewish vs Arab students

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Abstract

Background: Social anxiety disorder (SAD) has been repeatedly shown to be very prevalent in the Western society with prevalence rates of 10% or above. However, very few studies have been performed in the Middle East and in Arab countries.

Methods: A total of 300 Israeli students participated in our study and were administered the Liebowitz Social Anxiety Scale (LSAS), the Cheek and Buss Shyness Questionnaire (CBSQ), and a sociodemographic questionnaire.

Results: A total of 153 Jewish and 147 Arab students participated in the survey. Social anxiety disorder was found in 12.33% of the sample, according to the LSAS cutoff score of more than 60. The 2 subsamples had similar LSAS and CBSQ scores and similar SAD-positive rates (LSAS >60). Females had higher scores on the LSAS, as were those without a spouse and those who had been in psychological treatment. Based on a regression analysis, the significant predictors of the LSAS score were the CBSQ score and female sex. A very high correlation was found between the LSAS and the CBSQ scores.

Conclusions: Although our sample is not representative of the whole Israeli population, we conclude that SAD and shyness were similarly prevalent in Jewish and Arab students in Israel. Social anxiety disorder scores were higher among females, those without a spouse, and those who received psychological treatment. Further studies on the clinical and cultural characteristics of SAD in Israeli subcultures would add to the growing body of knowledge on SAD in various cultures.

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1. Introduction

Social anxiety disorder (SAD) is a highly prevalent disorder in Western countries, reaching lifetime prevalence rates of up to 13% in the general population [1,2]. Over time, increased disability and a reduced quality of life, as well as increasing rates of comorbidity with secondary mental disorders (ie, depression, substance abuse), can be expected in such individuals [3-8]. Social anxiety disorder was a relatively late addition to official psychiatric nomenclature and first emerged as a diagnostic category in the third edition of the Diagnostic and Statistical Manual of Mental Disorders III [3]. Arguably, one reason for this late addition to the psychiatric nomenclature is the dispute on whether SAD is sufficiently disabling to be considered a psychiatric diagnosis or simply the confluence of extreme personality traits, namely, very high introversion and neuroticism [9]. This dispute may also account for the continued under-diagnosis and undertreatment of this condition [2].

Epidemiologic and clinical studies on SAD have become increasingly common in industrialized countries in the last 2 decades [2], in response to the recognition of SAD as a common disorder accompanied by significant comorbidity and burden. However, such studies are scant in the Middle East and in Arab communities. In a sporadic report from Saudi Arabia, SAD was reported to be a notably common disorder among Saudis and constituted approximately 13% of all neurotic disorders seen at a large clinic in Riyadh [10]. The plausible explanation for this high rate was the strict discipline in the Saudi culture with rigid moral codes and rituals. Even small deviations from the rules are unacceptable, and individuals who do not conform are quickly ostracized. Adherence to all social demands could be stressful and requires discipline and self-control that is exercised at the expense of personal autonomy. Furthermore, one who has made a bad impression in public is likely to retain a poor
reputation permanently, although the impression is subse-
quently shown to have been a false one. Taken together, 
these factors may affect those with unique personality traits 
or with a strong sense of individuality, thus increasing the 
incidence of SAD. Indeed, SAD has been reported to be 
more prevalent in young and well-educated Saudis who are 
more likely to have developed their own ideas and values 
and, therefore, are less willing to conform to a ritualistic 
social milieu. In addition, the low incidence of SAD in Saudi 
women might result from the situation that women are 
confined, not exposed to a variety of social situations, and 
their social gatherings are mostly recreational with minimal 
routines [10].

Recent methodologically well-designed studies show, 
however, low SAD rates in Arab societies. Karam et al 
[11,12] interviewed a representative sample of the Lebanese 
population (n = 2857 adults) with the World Health 
Organization Composite International Diagnostic Interview 
(CIDI) 3.0 [13] and investigated the lifetime prevalence 
treatment, age of onset of mental disorders, and their 
relationship to the war in Lebanon. Karam et al [11,12] 
reported a 12-month prevalence of SAD of 1.1% and a 
lifetime prevalence of 1.9% (2.1% in females and 1.7% in 
males). The lifetime prevalence was 2.8% among subjects 
aged 18 to 34 years, 1.5% among those aged 35 to 49 years, 
1% among those aged 50 to 64 years, and 0.4% among those 
aged 65 years and above. Karam et al [12] also found a very 
long delay for treatment of anxiety disorders in general, with 
a median duration of delay of 28 years. The authors claimed 
that this was not because of shortage of health care 
professionals in Lebanon but perhaps because of stigma, 
financial difficulties, and lack of awareness. In addition, a 
recent study from Iraq [14] with a large sample of household 
residents (n = 4332) reported a low lifetime prevalence of 
only 0.8%.

Very few studies examined the prevalence of SAD in 
Israel. Levav et al [15] examined the prevalence of mental 
disorders in a 10-year cohort of young adults in Israel. This 
study also examined the 1-year prevalence of phobic 
disorders (including SAD) and reported that the point 
prevalence of phobic disorders was 2.8%, less frequent 
than in American, European, and Australian samples [16- 
18]. Specific data on SAD prevalence were not provided 
[15]. However, in a previous study by the first author [19], 
we reported in a large group of Israeli soldiers that SAD was 
present in 4.5% of the sample, corroborating the high 
prevalence of SAD in Western countries. Overall, SAD 
symptoms were reported by a great percentage of subjects, as 
displayed by the rather high mean Liebowitz Social Anxiety 
Scale (LSAS) scores (mean ± SD, 29 ± 23.79) in this 
nonclinical sample. The following variables were accompa-
nied by higher LSAS scores: inability to perform command 
activities, receiving psychotropic medication before army 
service, having less than 2 friends, shy family members, and 
treatment during military service. Sex did not influence the 
LSAS scores. Based on this primordial study in Israel, we 
were surprised that the recent Israeli National Health Survey 
[20] did not include SAD in the list of disorders assessed. 
Having said that, few studies have assessed the rates of 
shyness in Israel [21], and this issue warrants investigation.

Reports on the prevalence of SAD vary widely between 
different countries and cultures, and as such, research in 
Israel, a multicultural society, may provide important data. 
Arabs in Israel are a relatively collectivistic-communal, 
homogenous cultural group [22,23], meaning that the Arab 
social structure in Israel emphasizes the collective over the 
individual. The Arab society is a nonassimilating minority, 
differing from the Jewish majority in language, religion, 
and nationality. Nevertheless, this minority also perceives 
high school education as an opportunity for employment 
and a higher economic status [24]. An early study published 
in 1989 evaluated the degree of social anxiety with 
Sarason’s tool of Reaction to Social Situations in Jewish 
and Arab students in Israel [25] and reported that Jewish 
and Arab students did not differ on social anxiety scores. 
Males had higher scores, and the author proposed that this 
derived from the traditional role of the male as initiator of 
heterosexual relationships.

The current study is the first to examine SAD among 
Jewish and Arab students in Israel with modern SAD tools. 
The present study’s objectives were as follows: (1) to assess 
the prevalence of SAD in an Israeli sample of Jewish and 
Arab students; (2) to characterize the sociodemographic 
characteristics (sex, education, and relationships) of those 
having SAD; (3) to examine possible risk factors for the 
development of SAD; and finally, (4) to examine the 
correlation between shyness (a feature disregarded in Israeli 
studies) and social anxiety in the Jewish and Arab students.

We hypothesized that

1. SAD symptoms will be frequent in the sample, also 
less frequent in the Arab students who live in 
collectivistic communities.

2. Based on the article by Chaleby [10], we hypothesized 
that the Arab students will include more male subjects 
with SAD than the Jewish sample.

3. Shyness and SAD will be highly correlated.

2. Methods

2.1. Subjects

A convenience sample of 300 students from colleges in 
Northern Israel participated in the study. This sample of 
young adults was chosen because SAD often begins during 
childhood or adolescence and, if left untreated, may be 
masked and complicated by subsequent disorders [26]. The 
subjects were approached during an introductory psychology 
course open for all students, thus, our sample being a mixture 
of students. The subjects were requested to fill a survey on 
social behavior, shyness, and social anxiety. No exclusion 
criteria were used.
2.2. Procedure

The study was approved by the institutional review board of the Beer Yaakov Hospital. After explaining the survey to the subjects, we received written informed consent and administered the questionnaires.

The participants filled a battery of self-report questionnaires, including a sociodemographic questionnaire, the LSAS, and the Cheek and Buss Shyness Questionnaire (CBSQ). The subjects also responded to the SAD part of the Mini-International Neuropsychiatric Interview (MINI) [27]. A subject was considered MINI-positive if all criteria for SAD were met on the MINI. Because we believe that the MINI is problematic in a self-report format, we did not use it in the present study as the primary diagnostic tool for SAD.

2.2.1. Liebowitz Social Anxiety Scale [28]

The questionnaire is a 24-item, clinician-rated scale designed to measure both social interaction and performance-related anxiety. It assesses the degree of fear and avoidance on a Likert scale of 0 (no fear/avoidance) to 3 (high fear/avoidance) in 24 different social situations. The Hebrew version of the LSAS was validated in Israel [29] and was found to be effective in assessing SAD symptoms, with good psychometric properties. Recently, Rytwinski et al [30] reported that the self-report format of the questionnaire has good psychometric abilities and suggested a reliable cutoff score of 60 for generalized SAD. In our study, we used the self-report LSAS score as both categorical and continuous variables. The use of the LSAS was done after receiving authorization from Dr Michael Liebowitz.

2.2.2. The Cheek and Buss Shyness Questionnaire

The CBSQ consists of 20 items with a Likert scale (1 to 5; 1, very uncharacteristic or untrue, strongly disagree; 2, uncharacteristic; 3, neutral; 4, characteristic; and 5, very characteristic or true, strongly agree) [31,32]. The CBSQ has good reliability and correlates with aggregated ratings of shyness by friends and family [33]. The CBSQ score was used as a continuous variable. In the scale construction sample of 326 college students, the α coefficient of internal consistency reliability for the 20-item shyness scale was .94 (mean ± SD, 51.8 ± 13.6), and it correlated .96 with the original CBSQ 9-item shyness scale. In this study, we used the 20-item CBSQ. This tool was translated into Hebrew and been validated (Reif M, personal communication). Examples of items on the CBSQ are, “I feel tense when I am with people I don’t know well” and “When in a group of people, I have trouble thinking of the right things to talk about.”

2.2.3. Data analysis

The descriptive statistics in the whole sample and in the 2 subsamples were calculated. We compared the samples on the various dependent and independent variables. We used t test analysis for age and education and χ² and Fisher exact test analyses for the other variables. A stepwise regression analysis was used to predict SAD scores.

3. Results

Three hundred subjects participated in the survey. The mean (SD) age of our sample was 24.5 (5.83) years, the median age was 23 years, and the age range was 19 to 54 years.

The students’ mean (SD) years of education was 13.83 (1.56). The sample was composed of 74 males and 226 females. More than half had a spouse (53%), and 95% had at least 2 friends. Sixteen percent had received psychological treatment.

3.1. Arab and Jewish subjects

The sample included 153 Jewish and 147 Arab students. The Jewish students were older than the Arab students (mean ± SD age, 25.51 ± 4.89 vs 23.46 ± 6.52 years) (t270 = 3.0673, P < .01). The Arab students had significantly more years of education (mean ± SD, 14.12 ± 1.87 vs 13.55 ± 1.15) (t241 = −3.184, P < .01); however, they were less frequently involved in a romantic relationship (χ²1 = 5.26, P < .05) and were more religious (P < .001), more were married (P < .01), and they had worse perceived economic situation (P < .006). They also received less psychological treatment (P < .001).

3.2. Shyness and social anxiety

The scores of the subjects on the LSAS subscales (fear and avoidance), the total LSAS score, and the CBSQ score were similar among the Jewish and Arab students (Table 1).

3.3. Liebowitz Social Anxiety Scale scores

Based on a cutoff score of 60 on the total LSAS score, 12.3% of our subjects scored above the cutoff score. Eighteen Jewish and 19 Arab students scored above the cutoff score, 11.8% and 12.9%, respectively. There was no difference between the rates of SAD in the 2 populations (χ²1 = 0.09, P = .76). The Jewish SAD-positive group included 2 males and 16 females (11% males), whereas the Arab SAD-positive group included 3 males and 16 females (15% males, not significant).

3.4. Liebowitz Social Anxiety Scale scores and MINI diagnosis

Seven students (2.33%) had a positive MINI diagnosis of SAD (3 Jewish and 4 Arab students). Three of them had an

<table>
<thead>
<tr>
<th>Social anxiety disorder and shyness in Jewish and Arab students</th>
<th>Jews</th>
<th>Arabs</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>LSAS fear subscale</td>
<td>18.04 (11.6)</td>
<td>17.37 (11.8)</td>
<td>NS</td>
</tr>
<tr>
<td>LSAS avoidance subscale</td>
<td>17.32 (10.8)</td>
<td>18.32 (11.8)</td>
<td>NS</td>
</tr>
<tr>
<td>LSAS total score</td>
<td>35.36 (21.1)</td>
<td>35.69 (22.0)</td>
<td>NS</td>
</tr>
<tr>
<td>CBSQ score</td>
<td>47.9 (12.7)</td>
<td>47.72 (10.4)</td>
<td>NS</td>
</tr>
</tbody>
</table>

Values are presented as mean (SD). NS indicates not significant.
LSAS score below the cutoff score of the LSAS, and 4, above (57%). As expected, the MINI-positives had higher rates of LSAS-positive SAD (above cutoff score) ($\chi^2_1 = 13.3, P < .001$).

3.5. Correlations

The Pearson correlation between the CBSQ score and the total LSAS score was 0.64 in the total sample ($P < .001$). In the Jewish subsample, the correlation was 0.67 ($P < .001$), and in the Arab subsample, 0.61 ($P < .001$).

3.6. Childhood experiences

Subjects were asked 4 direct questions about their perceived parental experiences during childhood. A total of 102 subjects reported subjectively that their parents were overdefending, 129 subjects reported that they perceived their parents as overexpecting, 139 perceived their parents as overcritical, and 40 reported that their parents had separated. There were no differences as regards LSAS scores between subjects with and without the abovementioned aversive negative experiences.

3.7. Regression analysis

A stepwise regression with backward selection was performed, and we introduced in the analysis the shyness score, sex, education, religiosity, family status, economic status, ethnicity (Jew-Arab), and having a spouse. We found that the total LSAS score was predicted by the CBSQ score ($P < .001$) and female sex ($P < .001$). The total $R^2$ was 0.44 ($F_2 = 117.9, P < 2.2 \times 10^{-16}$).

3.8. Additional results

Table 2 demonstrates that females had higher LSAS scores, as did those without a spouse, those in psychological treatment, and those who found the Internet as enabling social contacts.

<table>
<thead>
<tr>
<th></th>
<th>LSAS total score</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>30.7 (19.4)</td>
<td>$F = 6.03, P &lt; .02$</td>
</tr>
<tr>
<td>Females</td>
<td>37.1 (21.9)</td>
<td>$F = 1.95, P = .14$</td>
</tr>
<tr>
<td>Religious</td>
<td>33.9 (20.3)</td>
<td>$F = 0.01, P = .912$</td>
</tr>
<tr>
<td>Secular</td>
<td>35.6 (21.6)</td>
<td>$F = 5.43, P &lt; .02$</td>
</tr>
<tr>
<td>Very religious</td>
<td>44.8 (26.3)</td>
<td>$F = 5.23, P = .002$</td>
</tr>
<tr>
<td>Married</td>
<td>34.9 (24.2)</td>
<td>$F = 35.7 (21.7)$</td>
</tr>
<tr>
<td>Bachelor</td>
<td>35.6 (20.9)</td>
<td>$F = 44.09 (22.8)$</td>
</tr>
<tr>
<td>Divorced</td>
<td>38.2 (21.5)</td>
<td>$F = 64.42 (33.2)$</td>
</tr>
</tbody>
</table>

Values are presented as mean (SD).

4. Discussion

The aim of the present study was to assess the prevalence of SAD, a highly prevalent disorder in the West, among Arab and Jewish students in Israel. Our study is the first to use modern SAD measures in the Israeli society as regards cross-cultural aspects of SAD. Our main findings are as follows: first, in a large sample of Jewish and Arab young students in Israel, we found that more than 95% of the subjects had at least 2 friends, a very optimistic rate. Second, notwithstanding this finding, our sample was also characterized by high SAD and shyness scores. Overall, 12.3% of the sample had above cutoff scores on the LSAS, indicating a very high rate of social anxiety. Third, 2 variables predicted the LSAS score: the CBSQ score and female sex. Fourth, although similar in SAD and shyness scores, the Arab students were less likely to receive psychological treatment, corroborating findings that Arab subjects seek treatment rarely [12,34]. Fifth, the SAD and shyness questionnaires correlated significantly.

The high correlation between shyness and SAD is in accordance with the view that these are not separate phenomena but rather overlapping conditions. There is an overlap concerning some of the reactions experienced by shy individuals and those experienced by individuals with SAD, such as heightened autonomic arousal experienced in various social situations [35], as well as a lack in social skills, for instance difficulties expressing themselves [36], and fear of negative evaluation [37,38]. Social anxiety disorder is an extreme form of shyness, such that when the symptoms of shyness become more extreme, the condition should be termed generalized SAD rather than shyness [39].

The similarity of social anxiety in Jewish and Arab youngsters in our study requires elaboration, as does the
lower treatment rate in the Arab sample. In a recent psychiatric epidemiologic study in Israel [34], Arab Israelis had higher mean General Health Questionnaire-12 scores and lower self-appraisal of mental health as compared with Jewish Israelis, although having similar anxiety disorders (excluding SAD, which was not assessed). Israeli Arab adolescents have also been found to have higher levels of test and trait anxieties than Jewish adolescents [40,41]. This finding has been explained by the collectivistic approach of the Arab culture, whereby the self is part of the group rather than an independent entity; thus, the success or failure of an individual becomes that of the family as a whole. As a result, Arab students may feel shame, guilt, and fear that they might lose their parents’ support, which may trigger test anxiety. Altogether, despite major health gains, the social and political stresses impacting the Arab Israeli minority may explain both the higher emotional distress (possibly raising the social anxiety level that are low in homogenous collectivistic Arab societies) and the lower self-appraisal of mental health. Cultural factors, including the definition of disorders and stigma and a lesser availability of culturally tailored services, could account for the marked treatment gap.

Our finding that SAD is more prevalent among females is in accordance with reports from the United States [42], Europe [43], and also from the Middle East [11]. Although Chaley [10] reported that women present less often with SAD, it is possible that the Israeli and Arab samples are nowadays in transition toward Western standards and comprise heavy expectation on females.

The similarity of shyness rates in the Jewish and Arab samples in our study deserves scrutiny. Differences among ethnocultural groups may reflect cultural styles of relating with others and social practices. The connotation of “shyness” and the experience of it may be very different depending on the cultural context. For instance, parents and teachers in Thailand rate shyness in 9-year-old children as less serious and less worrisome compared with parents and teachers in the United States [44]. Furthermore, shyness was found to correlate positively with peer acceptance in a sample of Chinese children of the ages 8 through 10 years, whereas in a sample of Canadian children of the same ages, shyness correlated negatively with peer acceptance [45]. Adolescents in Thailand exhibit a higher degree of shyness and fearfulness compared with adolescents in the United States [46]. It is possible that in a Western society, shyness is regarded negatively because the Western culture values social competence, the ability to express feelings and opinions to friends, and others, to stand up for opinions even in the company of people with a higher level of expertise and of higher social rank, and, in some situations, the ability to act and speak in front of an audience. Furthermore, in Western societies, it may be a common practice for both males and females to find their own partner, and thus, the ability to ask someone out on a date, to carry on a conversation on that date, to attract the interest of the other person, and to either continue long-term dating or end a date are highly valued. In Southeast Asian countries, however, shyness is considered as a virtue, an ability to control oneself in front of others and to respect the social rank of others.

The issue of shyness in the Israeli culture has been scarcely addressed. When comparing American individuals with people in the Middle Eastern countries, such as Israel, the latter tend to be less self-conscious and spend less time in introspection. About 30% of the Israelis, compared with 79% of the Americans, mention self-consciousness and being evaluated by other people as part of the experience of shyness [21]. Our findings are surprising in that the Arab students showed shyness similarly as their Jewish counterparts. It is plausible that the Jewish adolescent has to deal with maturation, separation and individuation, enlistment into the army, and romantic relationships. Some of these endeavors are less frequent in the young Arab society. It is only the stronger Jewish youngsters who succeed, and the others may withdraw, thus creating large numbers of shy persons and explaining the similarity of shyness scores in Jews and Arabs.

Shyness and SAD are barriers to mental treatment as the referral is perceived as related to inadequate functioning. In addition, shame is related to issues of psychological malfunctioning and issues related to inner factors as contrast to external factors that are not under one’s control [47]. When a shy person thinks whether to go to treatment, he usually refrains from seeking treatment [48]. The shy person feels inhibited in the presence of others and attempts more attempts of self-help and tries to control his problems. He attempts to disguise his weaknesses and also feels unease to reach for help from others because this is connected with social contact. Alternatively, he has no problem to reach for impersonal assistance through the Internet, for example. It is, therefore, very important that mental health officials should continue to improve the distribution of treatment for shy and socially anxious persons.

How can one explain the high rate of SAD in our sample? The Israeli society is characterized by numerous immigration waves, unstable political environment, and frequent security threats, which may affect social interactions and possibly the rate of SAD [49-54]. Harel et al [50] reported in a large Israeli sample of adolescents (age, 11-17 years; n = 8394) that a quarter of the respondents reported feeling socially rejected and one fifth reported a subjective feeling of loneliness. Relative to European youth, Israeli adolescents displayed low problems of social rejection, whereas the rate of lonely students was among the highest. This study reported that although positive social interactions do exist among Israeli youth, there appears to be a relatively large group (new immigrants, low socioeconomic class) of lonely individuals. Ginter et al [49] speculated that the potential attack from others coupled with the strong group identity and sense of group cohesiveness found in Israel may contribute to a form of social concern or anxiety.

Our study had, nevertheless, several limitations. The rate of SAD was assessed with the LSAS alone (and not with the
CIDI), based on a recently reported cutoff score. Our sample was moderate in size, and in addition, it is not an epidemiologic survey, disregarding persons with severe disorders who cannot or would not attend colleges and universities. In addition, our stepwise regression analysis on a sample with disproportionate number of females is an additional limitation. Despite these limitations, our findings support those from many other studies.

Finally, our findings help in the interpretation of cultural variations in social anxiety and shyness across the world and corroborate findings from other studies in the Western world, regarding the high prevalence of SAD symptoms. In addition, in an Arab subsample, although in a Western country, we found a large rate of SAD-positive students.

Further research is needed with standardized methods such as the CIDI to confirm our impression that SAD is frequent in these populations. Because of the condition’s prevalence and comorbidity, further attention for this disorder is truly warranted.

References
