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The experience of stuttering among Ultra-Orthodox and Secular/Traditional Jews
ABSTRACT:

Purpose: This research compares, for the first time, the experience of stuttering among adult male People Who Stutter (PWS) from the ultra-Orthodox (UO) Jewish community in Israel to those from Secular/Traditional (ST) backgrounds.

Methods: Sixty-three Jewish males were included: 32 UO and 31 ST, aged 18-67 years. Self-report questionnaires were utilized: Perceived Stuttering Severity (PSS); Overall Assessment of the Speaker’s Experience of Stuttering (OASES-A); Students’ Life Satisfaction Scale (SLSS); Situation Avoidance Behavior Checklist (SABC). Demographic, religious, and stuttering information was collected. The groups were compared on the scales’ scores, and correlation between each scale and the PSS was performed for each group.

Results: Subjective severity of stuttering was significantly higher among the UO compared to the ST. A significant group effect was found for the OASES-A quality of life subscale, but not other subscales. Significant positive correlations were found between the PSS and OASES-A Total Impact score, as well as three OASES subscale scores, and between the PSS and SABC scores (indicating increased avoidance as stuttering was rated more severely). A significant negative correlation was found between the PSS and SLSS, indicating lower life satisfaction with higher rates of stuttering severity among the ST. Interestingly, when tested by group, significant correlations between the PSS and all other study measures were observed only for the ST group.

Conclusion: Findings showed higher subjective stuttering severity ratings, yet less impact on quality of life, among UO participants, and no correlation between subjective stuttering ratings and other measures of stuttering experience. We suggest these novel findings may result from the combined
effect of heightened concern about social consequences of stuttering within UO society and the protective effects of UO religiosity and socio-cultural characteristics on UO PWS well-being.

KEYWORDS:

Culture; Experience of Stuttering; Quality of Life; Ultra-Orthodox Jews; Secular/Traditional Jews
1 Introduction

Stuttering is a speech-fluency disorder that is characterized by repetitions, prolongations, blocks of speech segments, and physical concomitants, as well as feelings and beliefs of the speaker and his/her environment, thus affecting social dynamics (Sheehan, 1958; Yairi & Seery, 2011). Therefore, it is considered an experiential disorder (Yaruss & Quesal, 2006). Indeed, the experience of stuttering has usually been studied in the context of measuring its overt characteristics (Riley, 2009; Yairi & Ambrose, 1999; 2005), and covert characteristics such as self-evaluation (e.g., Adriaensens et al., 2015; Koedoot et al., 2011; O’Brian et al., 2004; Perkins, 1983; 1984), attitudes and feelings of and toward people-who-stutter (PWS) (e.g., Andrews & Cutler, 1974; Brutten & Shoemaker, 1974; Craig, Tran & Craig, 2003; Silverman & Paynter, 1990; Vanryckegehem & Brutten, 2011; Yairi & Carrico, 1992 and the extensive work of St. Louis in the POSHA-S studies), and avoidance (e.g., Crichton-Smith, 2002, Jensen, Markel & Beverung, 1986; Mahr & Torosian, 1999; Plexico, Manning & Levitt, 2009; Vanryckegehem, Brutten & Van Borsel, 2004). In addition, over the last decade, studies have also focused on PWS quality of life (Craig, Blumgart & Tran, 2009; Koedoot et al., 2011; Yaruss, 2010; Yaruss & Quesal, 2006). These studies demonstrate that objective severity of stuttering (and/or negative perception of stuttering severity) has a negative effect on the experience of stuttering, especially among those with moderate to severe stuttering (Craig et al., 2009; Koedoot et al., 2011).

Common social responses to stuttering are stereotypical. Not only do PWS have elevated social and trait anxiety (e.g., Craig & Tran, 2014), reports demonstrate that they are also perceived as being nervous, anxious, hesitant, timid, and cautious (Craig, Hancock, Tran & Craig, 2003; Doody, Kalinowski, Armson & Stuart, 1993; Hughes, Gabel, Irani & Schlagheck, 2010; Klassen, 2002; Woods & Williams, 1976; Yairi & Williams, 1970). Consequently, since childhood and adolescence, they bear the burden of being bullied, teased, and socially excluded (Blood & Blood, 2004; Blood, Blood, Tellis & Gabel, 2003;
As adults, PWS experience difficulties in finding employment (e.g., Bloodstein & Bernstein-Ratner, 2008; Craig & Calver, 1991; Klein & Hood, 2004) and may have a harder time finding a partner (Zhang, Saltuklaroglu, Hough & Kalinowski, 2008). Evidently, experiences within personal, academic and professional environments play a significant role in the experience of stuttering and coping with it.

Moreover, some reports demonstrate that cultural or social belonging may also shape the experience of the PWS (Abdalla & Al-Saddah, 2009; Irani, Abdalla & Gabel, 2012; Lemert, 1952; Özdemir, St. Louis & Topbas, 2011; Platzky & Girson, 1993; Simon, 2011; Zhang & Kalinowski, 2012). According to the Ecological Systems theory (Bronfenbrenner, 1979), culture is one of the outer environmental circles of the individual that includes values, customs, and laws (Berk, 2000). To start with, it has been shown that public attitudes towards stuttering may vary according to country or culture. In the recent years, the POSHA-S (Public Opinion Survey of Human Attributes-Stuttering) studies demonstrated some differences in attitudes towards PWS between countries. For example, attitudes in Turkey (Özdemir, St. Louis & Topbas, 2011) and Kuwait (Irani, Abdalla & Gabel, 2012) were significantly more negative than the global averages.

1.1 Stuttering-Culture Interaction

Cultural norms impact the manner in which specific circumstances are perceived and interpreted by the individual, his peers, and his family (Magnusson, 1982). These norms may have a supportive role for the individual (Lazarus & Folkman, 1984), by providing a context for emotional support and informational guidance (Hobfoll, 1998; Holahan & Moos, 1991) in cases of problems. In contrast, they may limit the individual’s personal freedom, especially in cases of closed cultures.
There are a limited number of reports about stuttering-culture interaction. Existing studies have reported on negative behaviors and attitudes towards PWS among North Pacific Indians (Lemert, 1952), Sub-Saharan Africans (Simon, 2011), and Kuwaiti school students (Abdalla & Al-Saddah, 2009). Even nonverbal behaviors, such as gaze towards the PWS’s mouth, have been studied and found to differ between African-Chinese and European Americans (Zhang & Kalinowski, 2012). The stuttering-culture interaction is also manifested in the treatments offered to PWS in different cultures. For example, in South Africa, Indigenous Healers report using prayer, parental guidance, rubbing medication produced from animals’ dried tongues into cuts made on the throat, herbal medication, inhaling smoke from the ashes of remedial products, and communing with ancestors, as curing methods (Platzky & Girson, 1993). Similarly, in Sub-Saharan Africa, treatments include liquids and plants, rituals and magic, and even cruel practices, such as starvation and even killing a child if stuttering persists beyond the age of seven (Simon, 2011).

1.2 Ultra-Orthodox Jews

Among Jews, the ultra-Orthodox (UO) community, also known as the “Haredi Society,” occupies the most religious end of the Israeli Jewish continuum (Feinson & Meir, 2014). The highest values in UO society are the strict obedience to Jewish law (Halacha), and, particularly for men, all-day study of Jewish texts, predominantly the Torah (Bible) and Babylonian Talmud (Shaked, 2005). These special values reinforce UO solidarity within the community (Friedman, 1991). The UO community primarily differs from the general population in four specific respects that can be particularly challenging to UO PWS:

1. Segregation and social control are practiced in order to zealously preserve their cultural principles and patterns (Ayalon, Ben-Rafael & Sharot, 1989; Lee & Tse, 1994; Orbe, 1998), using various strategies such as uniform appearance, geography (i.e., designated ultra-Orthodox
neighborhoods), communal religious standards regarding food, and education (i.e., independent education system).

2. Education system and values are focused around the commitment to observe the Commandments and Jewish Law. Success for boys in OU society begins in adolescence, when they are expected to begin to learn and endorse the cultural codes expected of them as UO men. A young man's social status is related to their knowledge of the Torah (Goodman, 2001). Their success serves as a "ticket" to society, and will influence their family's position in the UO hierarchy (Heilman & Witztum, 2000; Marx, 1993).

3. Arranged marriage occurs with no more than four or five meetings (Greenberg, Stravynski & Bilu, 2004), involving thorough enquiries to collect information about the potential match (Lehmann & Siebzehner, 2009). This creates great social pressure to achieve positive public perception (Heilman & Witztum, 2000).

4. Speech-related religious practices are an essential and frequently-used tool in the everyday learning routine, including oral reciting, discussing, and debating. Additionally, public "performance" plays a significant role in the life of UO men (Greenberg et al., 2004), particularly through teaching and prayer. This kind of public speaking accords the highest level of social approbation (Greenberg et al., 2004).

In conclusion, UO society is characterized by unique social features. Given the elevated value of scholarly speaking in UO society, frequency of opportunities for public speech, and demand for uniformity among its members, UO PWS may be subjected to increased social pressure regarding their speech, possibly causing more acute suffering from stuttering. Inherent social pressure may exert an adverse effect on such individuals, and have implications for social status and marriage options.
Notwithstanding, the inherently high levels of religiosity of UO PWS may afford some protection or remediation from this suffering, which will be discussed below.

1.3 Ultra-Orthodox Jews Who Stutter.

UO society does not easily permit any intrusion or inspection from the outside, and, as such, it poses challenges for conducting research on its members (Coleman, 2007; Gurovich & Cohen-Kastro, 2004; Neria-Ben Shachar, 2008; Rier, Schwartzbaum, & Heller, 2008). To date, only one report dealing specifically with the field of stuttering in the UO community has been published, possibly because individuals in this community who stutter have hitherto kept their stuttering to themselves, or consulted with their rabbis instead of a speech-language therapist (Ezrati-Vinacour & Weinstein, 2011). To the best of our knowledge, no reports have been conducted on the experience of stuttering among the ultra-Orthodox (UO) Jewish community.

Since the daily routine of UO Jews is unique and emphasizes speech, the aim of this research is to investigate the experience of stuttering among adults from the UO Jewish community. They will be compared to PWS from Secular/Traditional (ST) backgrounds. ST Jews comprise the largest Jewish subculture in Israel (Arian & Keissar-Sugarman, 2011). ST society is a relatively open-minded culture that is exposed to the ever-changing realities of global culture. ST Jews believe in universal human democratic values, social justice, and in their freedom to self-govern rather than be governed by Jewish religious laws (Malchin, 2000). According to Arian and Keissar-Sugarman (2011), the vast majority of Israeli Jews define themselves as secular but not anti-religious, while a minority define themselves as anti-religious. Above all, most secular Jews view themselves as Israelis who are fundamentally seeking to be part of the traditional Jewish heritage, not necessarily in a religious manner, but rather in the national sense of belonging (Cohen & Zisser, 2003).
Therefore, the main question of the present study was whether UO and ST PWS differ in their perceived stuttering severity, experience of stuttering, life satisfaction, and level of avoidance. Additionally, we also wondered whether perceived stuttering severity is related to experience of stuttering, life satisfaction, and level of avoidance. Since speech is a key feature in different aspects of the UO culture (especially, education and arranged marriage), and reflects self-evaluation and social evaluation among the UO, we hypothesized that perceived stuttering severity and avoidance ratings would be higher among UO PWS than ST, and that the experience of stuttering and life satisfaction would be lower among UO PWS than ST. We also expected correlations between perceived stuttering severity and the experience of stuttering, life satisfaction, and avoidance levels.

2 Materials and Methods

2.1 Participants

The study included 63 male participants: 32 ultra-Orthodox (UO) and 31 Secular/Traditionalist (ST) Jews, aged 18-67 years. As there is a significant difference in daily routine between UO men and women (UO men have all-day study and communal religious obligations, while women work in or outside of the home), their experience of stuttering may be very different and problematic to include in the same grouping. In addition, there is higher prevalence of men among the PWS (e.g., Yairi & Seery, 2011). Consequently, we chose to recruit only participants who were UO and ST men.

Recruitment was done by convenience sampling, through speech and language therapists (contacted either by phone or advertisement on the Speech Language Therapists forum on the Internet), advertisements in a Facebook forum for people who stutter, and the Israeli Stuttering Association
The inclusion criteria consisted of: (1) Being a person who stutters at present (as defined by the participant in response to questions such as "Are you a person who stutters?" and "When did you start stuttering?") with a severity of at least 2 (mild stuttering) on a subjective self-rating of stuttering severity. The purpose of using self-report diagnosis of stuttering was due to the UO special need for anonymity and privacy (Ezrati-Vinacour & Weinstein, 2011). Therefore, conducting direct assessment session was avoided; (2) Having developmental stuttering, with age onset under 7 years old; (3) Current age of at least 18 years; (4) Answering “Male” in the personal information questionnaire; (5) Being either ultra-Orthodox or Secular/Traditionalist Jew. Participants were excluded from the study in the case of: (1) The presence of any other speech disorders (e.g., articulation or language disorder); and (2) The presence of other physical, neurological or psychiatric (other than anxiety) disorders.

2.2 Questionnaires

2.2.1 Personal Information Questionnaire. This questionnaire included questions about demographics, religious affiliation (either UO or ST) and level (from 1 to 10; 1 represents "not religious at all," and 10 "extremely religious"), medical and psychological background, and information about the stuttering onset, duration, and family history.

2.2.2 Perceived Stuttering Severity (PSS). This tool was used to assess the individual's self-assessment of stuttering severity (similar to the approach of Adriaensens, Beyers & Struyf, 2015; Koedoot, Bouwmans, Franken & Stolk, 2011; O’Brian, Packman & Onslow, 2004; Perkins, 1983; 1984). Each participant was asked to rate his stuttering severity on a scale between 1 and 10, in which 1 represents no stuttering and 10 represents very severe stuttering. This measure is in accordance with Perkin's definition of stuttering being the internal sensation of the person who stutters (Perkins, 1983, 1984). The use of stuttering self-evaluation measures has been reported previously, both for research...
(e.g., Koedoot et al., 2011; O’Brian, Packman & Onslow, 2004; Adriaensens, Beyers & Struyf, 2015) and for clinical practice (e.g., Blomgren, Roy, Callister & Merril, 2005; Iverach, O’Brian, Jones et al., 2009). O’Brian et al. (2004) reported a high level of agreement (over 78% of cases) between the stuttering ratings of speech-language pathologists and those of PWS themselves.

2.2.3 Overall Assessment of the Speaker’s Experience of Stuttering (OASES-A; Yaruss & Quesal, 2006; 2010). This questionnaire aims to describe the experience and impact of stuttering from the perspective of the adult who stutters. The measure consists of 100 items in four separate sections, each examining a different aspect of the stuttering condition:

1. General Information- a 20-item subscale which measures general perspectives about stuttering such as (a) perceived fluency, (b) speech naturalness and (c) knowledge about stuttering;
2. Reactions to Stuttering- a 30-item subscale pertaining to the speaker’s emotional reaction to stuttering, by rating items on (a) feelings, (b) associated secondary stuttering symptoms and (c) attitudes;
3. Communication in Daily situations- a 25-item subscale that measures the degree of difficulty speakers have when communicating (a) in general situations, (b) at work, (c) in social situations and (d) at home; and
4. Quality of Life- a 25-item subscale that measures how much stuttering interferes with PWS satisfaction with their (a) general quality of life, (b) ability to communicate, (c) relationships, (d) work and (e) overall sense of well-being.

The responses are rated from 1 to 5, with higher scores indicating higher levels of impact. Scores are obtained for each of the four sections and the total. The OASES-A and its Hebrew translation were
found to have Cronbach’s alpha of 0.89-0.97 (Freud, Kichin, Ezrati-Vinacour, Roziner & Amir, 2017; Yaruss & Quesal, 2006).

2.2.4 The Students’ Life Satisfaction Scale (SLSS; Huebner, 1991). This questionnaire was used in order to assess the degree of general life satisfaction. It includes 7 items which are rated on a scale ranging from 1 to 4, with a high number reflecting high life satisfaction. The total score reflects the sum of all answers (negatively-keyed items were reverse-scored). This questionnaire was previously translated to Hebrew and its Cronbach’s alpha was found to be 0.766 (Sagi, Ezer, Gilat & Reuveni, 2009). Although this instrument was initially designed to measure life satisfaction among students, in a previous study it was also found to have good validity among participants within the same age group as in the current study (significant correlation with the OASES-A 1-4 sections of: -.56, -.63, -.54, -.67, respectively; Freud et al., 2017).

2.2.5 Situation Avoidance Behavior Checklist (SABC; Cooper, 1976). The purpose of this questionnaire was to assess the level of avoidance of different speech situations. It includes 50 items related to interpersonal communication situations (e.g., ordering food at a restaurant, speaking on the telephone). Each item is rated on a 1-5 Likert scale, with a high score reflecting high avoidance behavior. Answers are summed in order to reach a final score that reflects the level of avoidance behavior of the participant. This questionnaire was translated to Hebrew and validated in a previous study by Madnick (2006). Cronbach’s alpha for the present study reached 0.98.

2.3 Procedure

The study was approved by our institutional ethics committee. The data in the study was based on self-report questionnaires. Once participants gave their consent to participate in the study,
questionnaires were provided either online or via printed copies (for participants that were not comfortable with online usage) which were returned by postal mail.

2.4 Data Analysis

Sample size was based on a statistical power analysis, based on data from Freud et al. (2017). With an alpha = .05 and power = 0.80, the projected sample size needed was 30. Background and religious characteristics were compared using: (1) Chi-square tests for the nominal variables: country of birth, marital status, education, and attendance to speech therapy; (2) t-tests for the interval variables: age and person/room ratio; and (3) Mann-Whitney U tests for the ordinal variables: subjective rating of religiosity and Perceived Stuttering Severity (PSS) scale. Stuttering-related scales were ordinal and therefore were analyzed using Mann-Whitney U analysis, with the group (ST/UO) as an independent variable and the scales’ total scores as the dependent variable. In order to test differences between UO and STs in relation to the PSS and other study measures, Spearman rho was also performed between the PSS and other study measures for each group separately.

3 RESULTS

3.1 Background and Religious Characteristics

Participants’ background and religious characteristics are presented in Table 1. Significant differences in the self-rating of level of religiosity were found between groups, with the UO rating religiosity higher than the ST group. This result validates the division of participants into the religious-social groups described above. No differences were found between groups in country of birth, education level, and history of speech therapy. However, the subjective severity of stuttering, as measured by the PSS scale, was higher among the UO than the ST group. In addition, the marital status “single” among
the UO was slightly more frequent than the ST, and they had a higher person-to-room ratio, indicating that the UO group had a lower socioeconomic level than the ST group.

3.2 Stuttering I: Group Comparisons

Experience of stuttering, as measured by the OASES-A scale, is presented in Table 2. Mann-Whitney U analysis revealed a significant group difference for the OASES-A quality of life score (section IV), but not for the other sections or for the total score. No group differences were found for the SABC and the SLSS scores (Table 2).

3.3 Stuttering II: Correlation with Severity

The relationship between the PSS and other study measures (OASES-A total score and subscales, SABC and SLSS) were measured using Spearman’s Rho (Table 3). Significant positive correlations were found between the PSS and OASES Total Impact score, and the Reactions to Stuttering (section II), Communication in Daily Situations (section III), and Quality of Life (section IV) scores. No correlation was found between the PSS and OASES-A General Information score (section I). Significant positive correlations were found between the PSS and SABC, indicating increased avoidance as stuttering was rated more severely. Finally, a significant negative correlation was found between the PSS and SLSS, with lower life satisfaction correlating with higher rates of stuttering severity.

Figures 1 to 6 present the significant correlations between the PSS and other study measures. In light of significant group differences in PSS, we also measured the Spearman’s Rho correlation for each group separately. Indeed, visual inspections of these figures reveal a difference in the correlation pattern between UO and ST groups. Indeed, significant correlations between the PSS and all other study measures were observed for the ST group, but not for the UO group.
4 Discussion

The current study is the first to compare covert characteristics of the stuttering disorder among UO and ST men. The findings showed higher subjective stuttering severity ratings, yet less impact of stuttering on quality of life, among the UO participants, compared with the ST. Moreover, ST participants showed positive associations between stuttering severity and the experience of stuttering (OASES-A scale) and avoidance (SABC scale), and a negative association with life satisfaction (SLSS). Contrary to our expectations, no such association was observed among the UO, despite the UO higher stuttering severity.

4.1 Self-Assessment of Stuttering Severity

The first novel finding of our study was that, in line with our hypothesis, UO men rated themselves higher in stuttering severity than ST. This might be due to several reasons. Firstly, it seems that the use of verbal expression is a particularly essential part of the UO life: the UO man is presented with multiple daily opportunities for public activities involving speech while performing Jewish rituals, studying, or teaching. Frequent encounters with those activities, often in public settings (e.g., reciting blessings in the synagogue), may make the PWS even more aware of his speech problems and cause them to be perceived more severely.

Additionally, because successful performance in such activities is highly valued, it is subject to social pressure. For example, teaching Torah confers the highest status in the UO world, and the talmid haham (religious scholar), respected for his high level of religious knowledge, is a symbol of the uppermost social achievement for men; such an individual is expected to give religious-themed speeches in various social functions, ceremonies, and holiday meals, thereby teaching others
(Greenberg et al., 2004). Obviously, such public speaking presents challenges to an UO PWS, and may limit his ability to achieve the highest level of social achievement. Furthermore, this demand of social achievement may exert a detrimental effect on the quality of his own, and his siblings’, potential marriage partners (Weil, 1990). Thus, the anxiety about speech performance may be even greater in UO culture than in ST culture.

It should be noted that the difference on the PSS scale between groups needs to be considered in context. Although statistically significant, the difference between the UO and ST groups was one-point; however, this reflects a 10% percent difference on the 10-point rating scale.

4.2 Quality of Life

Particularly noteworthy was our study’s finding that, contrary to our expectations, UO participants reported less impact of stuttering on quality of life than STs. This is also a novel finding, since the literature lacks both data on UO PWS in general and with respect to quality of life in particular. These results should be considered within the context of our knowledge of the particular characteristics of UO society, and despite the possibly increased difficulties for the UO PWS discussed earlier. Therefore, we suggest that UO participants were possibly less vulnerable to the negative impact of stuttering due to their religiosity and socio-cultural background.

Ellison, Gay, and Glass (1989) have proposed that religious practice and faith may provide a thorough scheme in which the person can reach an understanding of human existence in the world, and enjoy relief associated with spirituality. It also leads to communal interaction at the religious institute (church, synagogue, etc.) and meeting other community members who share common perspectives. Thus, religiosity may promote general well-being (Abdel-Khalek, 2010; Kortt, Dollery & Grant, 2015;
Levin, 2012, 2013; Rule, 2007) and coping with difficulties (Aukst-Margetić, Jakovljević, Margetić, Bišćan & Šamija, 2005; Cummings, Neff & Husaini, 2003). All the same, some research has indicated that religion-based coping may have deleterious effects such as anxiety, elevated distress, and reduced emotional well-being (Stefanek, McDonald & Hess, 2005; Thuné-Boyle, Stygall, Keshtgar & Newman, 2006).

With respect to the contribution of religiosity to quality of life in the UO community when facing illness or other problems, a few studies conducted previously among this society show that being religious promotes coping (Hasson-Ohayon, Braun, Galinsky, & Baider, 2009; Ivry, Teman & Frumkin, 2011; Manor-Binyamini, 2012; Shaked, 2005). Although these studies were conducted among women, their findings are in line with the results of other studies that included both genders showing the positive effect of religiosity on coping.

Further, the meaning of quality of life may also differ between the UO and the ST communities. Although both groups consist of Jews, the UO community emphasizes values of purpose, gratitude, and acceptance derived from traditional texts that are regularly studied ("Who is rich? He who is happy with his portion," Pirkei Avot 4:1). Going further, even though the daily routine of study can be a source of demands and pressure due to the speech activity it involves for the UO male, it can also serve as a refuge by excluding more mainstream occupational demands and life tasks (Bilu & Witztum, 1993).

With respect to the relationship between the perceived stuttering severity and the measures of the experience of stuttering used in the current study (OASES-A, SLSS, SABC), two different consistent patterns were found in each group. One of our hypotheses was confirmed, but only among ST participants: correlations were present for all measures, indicating that the more severe the self-assessed stuttering rating, the greater the negative feelings and attitudes, perception of communication
difficulty, avoidance, life dissatisfaction, and negative impact on quality of life. Similar findings were also reported by others (e.g., Bricker-Katz, Lincoln & Cumming, 2013; Ezrati-Vinacour & Levin, 2004; Koedoot et al., 2011; Miller & Watson, 1992). In contrast, among the UO participants, no correlations were found between the measures of stuttering severity and the experience of stuttering. This finding might be explained by the paradoxical effect of the combination of the UO’s higher daily speech demands and pressures, along with their more supportive social and spiritual characteristics.

4.3 Limitations and Future Research

Methodological issues in the current study should be considered. First, only those who self-reported as “male” were included in this study. Assessments of gender and sexuality, as well as possible gender-based diversity, were not included in the current study. It should be recognized that the UO community is particularly sensitive to these issues, and, especially given this was one of a few studies among this community, we considered its inclusion a potential cause of discomfort. It will be interesting to see the effect of sexuality on the experience of stuttering in future studies. Second, due to the UO participants’ special need for anonymity and privacy, the questionnaires were delivered either online or via post mail, without direct contact with the experimenters. Therefore, convenience sampling was applied, reducing its representativeness, but enabling reach of such a unique community as the UO. Future studies should aim to directly assess stuttering among UO PWS and include in-depth interviews. Third, the samples were different in their background characteristics: the UO were younger, less married, and had a higher person-to-room ratio, indicating a lower socioeconomic level. Matching participants according to their background characteristics can overcome this disadvantage in future studies, Fourth, questionnaires used in the study were developed in the context of a Western lifestyle, which corresponds to the ST lifestyle, but might not necessarily reflect UO life habits, circumstances, and terminology. The purpose in using these measures was to have the same tools to compare the UO
with the ST community. However, they may not fully reflect the UO experience of stuttering. Measures adapted to the UO community should be created in future studies. Fifth, it might be that because the UO live in a closed society, they are not as used to answering questionnaires as STs; a lack of familiarity with questionnaires such as those used in the study may cast some doubt on the reliability and/or validity of their responses.

4.4. Conclusions

This is the first study that attempted to address a very specific subgroup whose special characteristics may impact the individual’s experience of stuttering. Two possible implications might be drawn from the current study’s findings. The first is specific to treating UO versus ST clients: therapy with UO clients should probably address the overt stuttering characteristics more than the covert ones, since their stuttering severity was rated high, along with less impacted quality of life. In contrast, therapy with ST clients should involve augmenting resources for coping in order to improve quality of life, which was found to be low and related to stuttering severity. The finding that, among the UO, quality of life did not correlate with stuttering severity may imply that faith, cognitive resources and social support may enhance quality of life, even when stuttering is perceived as severe. This conclusion is in line with clinical recommendations that stuttering intervention should include cognitive elements from cognitive-behavioral therapy (e.g., Menzies, O’Brian, Onslow et al., 2008), solution-focused brief therapy (Nicholas, 2015), acceptance and commitment therapy (e.g., Beilby & Byrnes, 2012) and self-help group attendance (e.g., Boyle, 2013).
Table 1. Participants’ background and religious characteristics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Categories</th>
<th>UO (n=32)</th>
<th>ST (n=31)</th>
<th>p-value</th>
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<tbody>
<tr>
<td>Mean (SD) Age (years)</td>
<td></td>
<td>30.4 (5.75)</td>
<td>39.24 (13.49)</td>
<td>-4.99***</td>
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<tr>
<td>Country of birth</td>
<td>Israel</td>
<td>86.7%</td>
<td>83.9%</td>
<td>0.810^2</td>
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<tr>
<td></td>
<td>Other</td>
<td>13.3%</td>
<td>16.1%</td>
<td></td>
</tr>
<tr>
<td>Marital status</td>
<td>Single</td>
<td>73.3%</td>
<td>41.9%</td>
<td>9.46^*</td>
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<td></td>
<td>Married</td>
<td>20%</td>
<td>51.6%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Divorced</td>
<td>6.7%</td>
<td>6.5%</td>
<td></td>
</tr>
<tr>
<td>Median (interquartile range) rate of religiosity^3</td>
<td>10.0 (1.0)</td>
<td>2.0 (3.0)</td>
<td>11.00^***</td>
<td></td>
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<tr>
<td>Education (years)</td>
<td>Up to 12</td>
<td>12.5%</td>
<td>32.3%</td>
<td>5.352^2</td>
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<td></td>
<td>Beyond 12</td>
<td>87.5%</td>
<td>67.7%</td>
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<td>Mean (SD) person/room</td>
<td></td>
<td>1.61 (1.01)</td>
<td>0.87 (0.37)</td>
<td>3.82^***</td>
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<tr>
<td>Attendance to speech therapy</td>
<td>Yes</td>
<td>93.5%</td>
<td>80.6%</td>
<td>2.35²</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
</tr>
<tr>
<td>Median (interquartile range) of Perceived Stuttering Severity (PSS)</td>
<td>5.0 (3.0)</td>
<td>4.0 (2.0)</td>
<td>307.5⁴*</td>
<td></td>
</tr>
</tbody>
</table>

*Note. UO= ultra-Orthodox; ST=Secular/Traditional; PSS= Perceived Stuttering Severity score

1 t-test; ² χ²; ³ subjective rating of religiosity from 1-10 (1 represents "not religious at all" and 10 "extremely religious"); ⁴ Mann-Whitney U

*p<.05; **p<.001
Table 2. Median (interquartile range) and Mann Whitney U results for Overall Assessment of the Speaker’s Experience of Stuttering for Adults (OASES-A), Situation Avoidance Behavior Checklist (SABC), and Student’s Life Satisfaction Scale (SLSS), controlling for Perceived Stuttering Severity (PSS) score

<table>
<thead>
<tr>
<th>Section</th>
<th>UO</th>
<th>ST</th>
<th>U</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OASES-A</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Section I: General Information</td>
<td>2.90 (.60)</td>
<td>2.94 (1.00)</td>
<td>369.50</td>
</tr>
<tr>
<td>Section II: Reactions to Stuttering</td>
<td>2.62 (.77)</td>
<td>2.77 (1.27)</td>
<td>400.00</td>
</tr>
<tr>
<td>Section III: Communication in Daily Situations</td>
<td>2.27 (.86)</td>
<td>2.25 (1.36)</td>
<td>373.50</td>
</tr>
<tr>
<td>Section IV: Quality of Life</td>
<td>1.75 (1.12)</td>
<td>2.04 (1.96)</td>
<td>215.00*</td>
</tr>
<tr>
<td>Total Impact Score</td>
<td>2.34 (.63)</td>
<td>2.60 (1.16)</td>
<td>378.00</td>
</tr>
<tr>
<td><strong>SABC</strong></td>
<td>2.17 (.80)</td>
<td>2.12 (1.06)</td>
<td>287.0</td>
</tr>
<tr>
<td><strong>SLSS</strong></td>
<td>3.29 (.86)</td>
<td>3.00 (1.00)</td>
<td>407.5</td>
</tr>
</tbody>
</table>

*Note.* UO= ultra-Orthodox; ST=Secular/Traditional; *p<.05
Table 3. Spearman’s rho correlation between Perceived Stuttering Severity (PSS) score and Overall Assessment of the Speaker’s Experience of Stuttering for Adults (OASES-A), Situation Avoidance Behavior Checklist (SABC), and Student’s Life Satisfaction Scale (SLSS), for all participants and for each study group separately.

<table>
<thead>
<tr>
<th></th>
<th>All</th>
<th>UO</th>
<th>ST</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OASES-A</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Section I: General Information</td>
<td>.10</td>
<td>.15</td>
<td>.18</td>
</tr>
<tr>
<td>Section II: Reactions to Stuttering</td>
<td>.36**</td>
<td>.09</td>
<td>.59***</td>
</tr>
<tr>
<td>Section III: Communication in Daily Situations</td>
<td>.45***</td>
<td>.01</td>
<td>.79***</td>
</tr>
<tr>
<td>Section IV: Quality of Life</td>
<td>.45***</td>
<td>.11</td>
<td>.74***</td>
</tr>
<tr>
<td>Total Impact Score</td>
<td>.377**</td>
<td>.09</td>
<td>.64***</td>
</tr>
<tr>
<td><strong>SABC</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>.45*</td>
<td>.07</td>
<td>.75***</td>
</tr>
<tr>
<td><strong>SLSS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-.22*</td>
<td>-.05</td>
<td>-.49**</td>
</tr>
</tbody>
</table>

*p<0.05; **p<0.01; ***p<0.001
FIGURES

Figure 1. Spearman’s rho correlation between Perceived Stuttering Severity (PSS) and Overall Assessment of the Speaker’s Experience of Stuttering (OASES-A) total scores. Continuous line represents correlation for the Ultra-Orthodox (UO) groups and broken line represents correlation for the Secular/Traditional (ST) group.

Figure 2. Spearman’s rho correlation between Perceived Stuttering Severity (PSS) and Overall Assessment of the Speaker’s Experience of Stuttering (OASES-A) subscale II scores. Continuous line represents correlation for the Ultra-Orthodox (UO) groups and broken line represents correlation for the Secular/Traditional (ST) group.

Figure 3. Spearman’s rho correlation between Perceived Stuttering Severity (PSS) and Overall Assessment of the Speaker’s Experience of Stuttering (OASES-A) subscale III scores. Continuous line represents correlation for the Ultra-Orthodox (UO) groups and broken line represents correlation for the Secular/Traditional (ST) group.

Figure 4. Spearman’s rho correlation between Perceived Stuttering Severity (PSS) and Overall Assessment of the Speaker’s Experience of Stuttering (OASES-A) subscale IV scores. Continuous line represents correlation for the Ultra-Orthodox (UO) groups and broken line represents correlation for the Secular/Traditional (ST) group.

Figure 5. Spearman’s rho correlation between Perceived Stuttering Severity (PSS) and Situation Avoidance Behavior Checklist (SABC) scores. Continuous line represents correlation for the Ultra-Orthodox (UO) groups and broken line represents correlation for the Secular/Traditional (ST) group.
Figure 6. Spearman’s rho correlation between Perceived Stuttering Severity (PSS) and Students’ Life Satisfaction Scale (SLSS) scores. Continuous line represents correlation for the Ultra-Orthodox (UO) groups and broken line represents correlation for the Secular/Traditional (ST) group.
Figure captions

Figure 1. Group correlations of OASES-A Total Impact scores and PSS ratings. UO= ultra-Orthodox; ST=Secular/Traditional.

Figure 2. Group correlations of OASES-A-II scores (emotional reaction to stuttering) and PSS ratings. UO= ultra-Orthodox; ST=Secular/Traditional.

Figure 3. Group correlations of OASES-A-III (difficulty of stuttering in daily situations) scores and PSS ratings. UO= Ultra-Orthodox; ST=Secular/Traditional.

Figure 4. Group correlations of the impact of stuttering on quality of life (OASES-A-IV) and the PSS rates. UO= ultra-Orthodox; ST=Secular/Traditional.

Figure 5. Group correlations between Life Satisfaction scores and PSS ratings. UO= ultra-Orthodox; ST=Secular/Traditional.

Figure 6. Group correlations of avoidance scores and PSS ratings. UO= ultra-Orthodox; ST=Secular/Traditional.
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5 References


Abdel-Khalek, A. M. (2010). Quality of life, subjective well-being, and religiosity in Muslim college students. Quality of Life Research, 19(8), 1133-1143.


