

**THE EXPERIENCE OF STUTTERING  
AMONG ULTRA-ORTHODOX AND SECULAR JEWS  
IN ISRAEL**

by Debora Freud

Dissertation submitted

for the degree of

“Doctor of Philosophy”

in the Department of Speech and Communication

Faculty of Rehabilitation Sciences

TU Dortmund University

Dortmund, Germany

January, 2015

This dissertation was carried out under the supervision of

Prof. Dr. Nitza Katz-Bernstein

Prof. Dr. Ute Ritterfeld

## **Abstract**

The main question of this study was whether the socio-cultural background of PWS is associated with the experience of stuttering. A combined-approach methodology was obtained, including both a quantitative research (QUAN) and a qualitative research (QUAL). In the former, 32 ultra-Orthodox (UO) and 31 secular-traditional (ST) men who stutter filled self-report questionnaires, in order to assess levels of the experience of stuttering in various scales (e.g. perceived stuttering severity, impact on quality of life, cognitive and emotional responses). In the latter, four UO and four ST men who stutter were interviewed. QUAN results showed that the impact of stuttering on quality of life was smaller among the UO, but stuttering was reported as more severe among the UO participants. Stuttering severity did not correlate to any of the above measures among the UO group, but did so among the ST. QUAL results yielded three main dimensions: the experience of stuttering across the life span, coping strategies and the experience of therapy. Analysis demonstrated a greater emotional content, different anxious experiences and special speech roles among UO interviewees in comparison to the ST interviewees. Generally, similar coping strategies and therapy experiences were identified, with some differences. Overall, the study findings demonstrate similarities in the experience of stuttering among groups, which point out the universality of the stuttering phenomenon. In contrast, the differences between groups may suggest the possible role of society and religion on the experience of stuttering. Results will be discussed in the context of the socio-religious background, the implications for therapy and suggestions for future research.

## Table of Contents

<b>Introduction</b> .....	1
<b>Chapter A: Literature Review</b> .....	4
1. Stuttering .....	4
1.1 Definition of stuttering .....	4
1.2 Epidemiology of developmental stuttering .....	5
1.3 Etiology and treatment .....	6
2. The Experience of Stuttering .....	9
2.1 Integrative view of the experience of stuttering .....	10
2.2 The self-perception of stuttering .....	13
2.3 Feelings and attitudes toward stuttering .....	15
2.4 Functional communication and stuttering .....	18
2.5 Quality of life and well-being of PWS .....	21
3. Coping with Stuttering .....	23
3.1 The mechanism of coping .....	23
3.2 Coping with stuttering .....	25
4. Factors that Influence the Stuttering Experience .....	28
4.1 The concept of the environment .....	30
4.2 Stuttering and the environment .....	32
5. Socio-Cultural Environment and Stuttering .....	34
5.1 Stuttering and global socio-cultural environments .....	34
5.2 Stuttering in Israeli society .....	40
6. Research Purpose .....	57
7. Research Design .....	59
<b>Chapter B: Method</b> .....	60

1. Study I: The Experience of Stuttering among UO and ST PWS .....	60
1.1 Research questions .....	60
1.2 Participants .....	61
1.3 Research tools .....	68
1.4 Research procedure .....	74
2. Study II: Stuttering across the lifespan, coping and therapy .....	75
2.1 Research questions .....	75
2.2 Participants .....	76
2.3 Research design .....	76
2.4 Research procedure .....	76
2.5 Data analysis .....	77
<b>Chapter C: Results</b> .....	<b>79</b>
1. Study I .....	79
1.1 Overall experience of stuttering .....	79
1.2 Self-perception of stuttering .....	80
1.3 The cognitive and emotional reaction to stuttering .....	82
1.4 Avoidance .....	83
1.5 The burden of stuttering .....	83
1.6 The impact of stuttering on quality of life .....	86
1.7 General life satisfaction .....	87
1.8 The perception of the role of speech for personal success .....	88
1.9 Perceived stuttering severity and the experience of stuttering .....	89
1.10 Other results- the experience of stuttering and gender .....	100
1.11 Summary of Study I findings .....	107
2. Study II .....	109

2.1 Dimension 1: The Experience of Stuttering across the Life Span	112
2.2 Dimension 2: Coping .....	138
2.3 Dimension 3: Therapy .....	158
<b>Chapter D: Discussion</b> .....	171
1. Study I .....	171
1.1 The experience of stuttering .....	172
1.2 Perception of stuttering severity .....	174
1.3 Cognitive, emotional, and behavioral responses .....	181
1.4 The burden of stuttering .....	183
1.5 Life satisfaction and quality of life .....	185
1.6 The link between the experience of stuttering and gender.....	193
2. Study II .....	196
2.1 The experience of stuttering throughout the life span .....	196
2.2 Coping strategies .....	203
2.3 Therapy .....	209
3. General Discussion .....	218
4. Clinical Implications .....	225
5. Research Limitations and Suggestions for Future Study .....	226
<b>References</b> .....	231
<b>Appendices</b> .....	279
1. Personal Information Questionnaire .....	280
2. The Students Life Satisfaction Scale (SLSS; Huebner, 1991) .....	285
3. Situation Avoidance Behavior Checklist (SABC; Cooper, 1976) .....	286

4. The Perception of Speech Significance in the Social Environment	
Questionnaire (PSSQ) .....	290
5. Semi-Structured Questionnaire (interview) .....	294

## **Dedication**

This dissertation is dedicated with love and enormous gratitude to my mother, Stella Szpira, and my father Naftali Freud, who have given me life and are the rock that I lean on.

In honor of my dear grandmother, Susi Sternberg de Freud, and in loving memory of my late grandparents, Oscar Szpira, Alina Loffelholz de Szpira, and Moshe Freud. My four heroes.

## **Acknowledgements**

Prof. Dr. Nitza Katz-Bernstein. I am thankful for the opportunity to have met you, and for giving me the privilege of working under your supervision. Your patience, kindness and encouragement will be always remembered. Thank you for introducing me to the beauty of the qualitative research, and for the insightful discussions that followed it, accompanied with a wide psychological perspective.

Prof. Dr. Ute Ritterfeld. Thank you for welcoming me and being open to the topic of stuttering. Thank you for your patience while answering all my e-mails, for your advice and the push forward.

Dr. Ruth Ezrati, senior lecturer at the department of Communication Disorders at Tel Aviv University in Israel. My ultimate role model, my mentor, teacher and dear friend. Words are not enough to describe your help. Your faith in this work and in me, were the incentives that finally made me start this journey and kept me going. Thank you for your irreplaceable support, your patience, containment, advice and dialogue. Thank you for your time and effort, and always with a welcoming spirit. I will forever be thankful .

To my statistics advisor, Prof. D. Itzik Gilat, head of Research, Development and Evaluation Authority of the Levinsky College of Education. Our meetings were far beyond statistics. Thanks for the good advice and brain storming. Special thanks for guiding me step by step into the world of qualitative research .

To Prof. Dr. Esther Ben Yitzhak, Head of the department of Communication Disorders at Ariel University of Samaria, I am grateful for the encouragement and support.

To Dr. Ofer Amir, Head of the department of Communication Disorders at Tel Aviv University for his support and good advice.

I am thankful to Marion Duman, my language editor, for editing the literature review and the discussion chapters.

Special thanks to Michal Malin for the collaboration in referring her ultra-orthodox clients to this study and their general support. I am also thankful to my colleagues abroad, in the USA and Canada, for the good will of trying to spread questionnaires among their clients too.

To AMBI, the Israeli Stuttering Association, chaired by Benny Ravid and Omri Lipzin, for their support for this study, distributing again and again my call for participants, and understanding how important is their involvement in this project.

To David Harris and his team, who welcomed me into their groups and understood my special need for ultra-Orthodox people who stutter.

To all the study participants, who took time to respond to my questions, open up about such a delicate subject and share their experiences. I do not take any of this for granted.

To my family, and mostly my parents, for their direct and indirect support, for believing in me and for understanding.

## List of Tables

Table 1:	Gender proportions (%) and chi-square result among the religious-social groups .....	66
Table 2:	Means, SD and ANOVA of self-rated level of religiosity among groups .....	66
Table 3:	Means and standard deviation of the stuttering severity self-rating among groups .....	67
Table 4:	Percentage of participants who had attended speech therapy.....	68
Table 5:	Distribution of demographic data in percentages and chi-square results for each group individually.....	69
Table 6:	Means and standard deviations of the parametric variables, followed by ANOVA and post-hoc analysis .....	70
Table 7:	Means and Standard Deviations for Section I subscales of the OASES in the UO and ST groups .....	83
Table 8:	Means and Standard Deviations for Section II subscales of the OASES in the UO and ST groups .....	84
Table 9:	Means and Standard Deviations for Section III subscales of the OASES in the UO and ST groups .....	86
Table 10:	Means and Standard Deviations for Section B subscales of the PSSQ in the UO and ST groups .....	87
Table 11:	Means and Standard Deviations for Section IV subscales of the OASES in the UO and ST groups .....	89
Table 12:	Summary of regression analyses for variables predicting the experience of stuttering of the UO participants .....	101

Table 13:	Summary of regression analyses for variables predicting the experience of stuttering of the ST participants .....	102
Table 14:	Means and Standard Deviations for Section B subscales of the PSSQ in the male and female groups .....	105
Table 15:	Correlations between Perceived Stuttering Severity and the Experience of Stuttering Variables, for Males and Females.....	107
Table 16:	Categories and Sub-Categories of the Experience of Stuttering Dimension, among UO and ST Interviewees.....	112
Table 17:	Categories and Sub-Categories of the Coping Dimension, as Identified among UO and ST Interviewees .....	142
Table 18:	Categories and Sub-Categories of the Therapy Dimension, as Identified among UO and ST Interviewees .....	164

## List of Figures

Figure 1.	Group comparison of mean scores of the Overall Assessment of Speaker's Experience of Stuttering (OASES; Yaruss & Quesal, 2006). UO= Ultra-Orthodox; ST=Secular-traditional .....	82
Figure 2.	Group comparison of mean scores of the level of disturbance of stuttering, at the present and in the past (PSSQ-B). UO= Ultra-Orthodox; ST=Secular- traditional .....	87
Figure 3.	Groups correlations of OASES-II scores (The emotional reaction to stuttering) and the perceived stuttering severity. UO= Ultra-Orthodox; ST=Secular- traditional .....	91
Figure 4.	Group correlations of OASES-III (The difficulty of stuttering in daily situations) scores and the perceived stuttering severity rates. UO= Ultra-Orthodox; ST=Secular- traditional .....	92
Figure 5.	Group correlations of present burden of stuttering scores (QPSS-B) and the perceived stuttering severity rates. UO= Ultra-Orthodox; ST=Secular- traditional .....	93
Figure 6.	Group correlations of the impact of stuttering on quality of life (OASES-IV) and the perceived stuttering severity rates. UO= Ultra-Orthodox; ST=Secular-traditional .....	95
Figure 7.	Group correlations between Life satisfaction scores and the perceived stuttering severity rates. UO=Ultra-Orthodox; ST= Secular-traditional .....	96
Figure 8.	Group correlations of avoidance scores and the perceived stuttering severity. UO=Ultra-Orthodox; ST= Secular-traditional	97

## **List of Abbreviations**

CWNS- Children who do not stutter; a child who does not stutter.

CWS- Children who stutter; a child who stutters.

OASES- The Overall Assessment of the Speaker's Experience of Stuttering (Yaruss & Quesal, 2006).

PSSQ -The Perception of Speech Significance in the Social Environment  
Questionnaire.

PWS- People who stutter; a person who stutters.

QUAL- Qualitative study

QUAN- Quantitative study

SABC- Situation Avoidance Behavior Checklist (Cooper, 1976).

SLSS- the Students Life Satisfaction scale (Huebner, 1991).

SLT- Speech and language therapist.

ST- Secular- traditional.

UO- Ultra- orthodox.

## Glossary

**Amud-** the lectern where the leader of prayer stands

**Bar Mitzvah-** the ceremony that involves reciting blessings and reading from the Torah at the synagogue for 13 year old Jewish boys, usually accompanied by a party.

**Birkat hamazon-** the benediction after the meal has ended.

**Brit mila-** the circumcision ceremony

**Chavruta-** joint study of Holy texts.

**Chazan-** leader the public player

**Cheider-** the UO kindergarten for boys

**Chupah-** the Jewish marriage ceremony.

**Davening-** praying.

**Halacha-** the Jewish law.

**Hamotzi-** the benediction over bread

**Gabay-** The community member incharge of calling people to lein the Torah or to lead the prayer.

**Kaddish-** an ancient prayer for the dead recited daily by the mourner in a public prayer during the year of mourning.

**Kiddush-** the benediction over wine in the Sabbath and Holidays.

**Parasha-** a section of the Torah

**Rebbe-** the rabbi

**Shabbos-** the Sabbath, Saturday.

**Shiduch-** matchmaking for marriage.

**Smicha-** the ordination of a rabbi within Judaism.

**Talmid haham-** a wise student, with high religious level.

**Talmud torah**- elementary school for ultra-orthodox boys.

Torah- the Bible.

**Vort**- short speech.

**Yeshiva**- An institution for adolescents and men, dedicated mostly to Jewish studies.

**Yeshiva Gdola**- Yeshiva for over 17 year old boys.

**Yeshiva Ktana**- Yeshiva for 14-17 year old boys

**Zimmun**- a loud, formal invitation issued to the men at the meal to commence reciting birkat hamazon.

## **Introduction**

Stuttering is a speech fluency disorder that far exceeds speech itself. Its overt symptoms are manifested in a communicational setting and vary greatly from one situation to the next as well as among conversational partners. As a result, the communicational context usually has a major impact on the person who stutters (PWS) and on the stuttering symptoms themselves.

The world of stuttering has opened to me right from the first day of my Fluency Disorders Course at Tel Aviv University. Stuttering's complexity, instability, and what remains unknown about it after years of research, has kept me intrigued to learn more. In the clinical setting, as I had become a formal speech and language therapist (SLT), I discovered a world of pain and frustration in the PWS I had started seeing, a journey that was forced unexpectedly on young children and their families, as well as teenagers and adults with persistent stuttering. The empathy and respect to such journey, as well the realization that similar feelings are evoked in me in similar speech circumstances, despite not being a PWS, pushed me to choose stuttering as my major clinical interest.

In my capacity as an Israeli SLT in Israel's heterogeneous society, I meet with clients of diverse origins, customs, and religious beliefs. Each client presents a different story with regard to the evolution of his stuttering and its putative meaning as far as the client and his surroundings are concerned. Ultra-Orthodox (UO) clients are of particular interest to me since their everyday reality differs radically from that of my other clients, who are mostly traditional, secular or modern-orthodox.

UO clients present stories and circumstances that are unusual to the modern secular world, in which a very particular, even exotic life style, is revealed. Usually, the setting of therapy also differs when such clients arrive, as their habits imply

adaptations such as being careful about my dress code, maintaining modest eye contact, and sticking to non-slang language, especially with the UO men. The UO Israelis, who belong to the most extreme Jewish religious sector, constitute a closed community with independent leaders, rules, and customs. Their principal values consist of strict observance of Jewish law and daily study of the Torah (the Bible).

Studying, arguing, and debating are central acts of involvement in Jewish life and its attendant commandments. The value of studying, discussing, and memorizing Jewish philosophy, heritage, and law is advocated in the Jewish texts – for example, in the well-known prayer, the *Shema* ("Hear O Israel"): "And these words, which I command thee this day, shall be in thine heart: And thou shalt teach them diligently unto thy children, and shalt talk of them when thou sittest in thine house, and when thou walkest by the way, and when thou liest down, and when thou risest up."

(Deuteronomy 6:6-7), as well as in other biblical texts, for instance: "And thou shalt shew thy son in that day, saying, this is done because of that which the LORD did unto me when I came forth out of Egypt" (Exodus 13:8). While this concept of Jewish values and practical implementation is widespread among observant Jews in general, it is far more so among the UO. Hence, since the daily activities of the UO are based primarily on speech (including other communal roles such as praying aloud), it may well be the case that UO PWS are faced with different speech circumstances and demands. The fact that the UO sector constitutes a closed society may lead either to greater support of PWS or to the opposite, namely, increased social pressure.

In contrast to the UO, most Israelis are either traditional or secular, that is, they live a modern lifestyle, work, build their careers, and support themselves and their families. The circumstances of PWS who belong to the above-mentioned categories are different and pose other speech challenges when, for example, they

participate in class, give academic or professional presentations, demonstrate competence and knowledge at school, at work, or in social situations, order tickets or a meal in a restaurant, and so on.

Clearly, every individual is surrounded both by his immediate environment—family, friends, and the workplace, and a broader one— socio-cultural affiliation. From a personal point of view, I could feel the manifestation of interactions between myself and my socio- cultural background when I immigrated from my country of birth to Israel, where I currently live, when I relocated from a town in southern Israel to a town in the central region, and when I espoused a non-Orthodox lifestyle after being Orthodox most of my life. These changes all made different implicit or perceived demands on myself as an individual and on various aspects of my life. The case of UO PWS raises the question of how socio-cultural circumstances may impact his experience of stuttering.

Thus, given both the historical and Jewish perspective of the significance and role of speech in the acts of learning and performing publically as well as the impact of the socio-cultural environment on the individual, the experience of stuttering in the socio-cultural context has begun to attract a great deal of attention on the part of researchers.

The aim of this study is to explore the experience of stuttering in a variety of socio-cultural contexts. Israel's socio-cultural diversity enables us to address this aim by exploring the cases of PWS from two contrasting socio-cultural groups in Israel, namely, the UO and secular sectors.

## Chapter A: Literature Review

### 1. Stuttering

#### 1.1 Definition of stuttering.

The term *stuttering* refers to both acquired and developmental stuttering. The former typically emerges as a result of a neurological or sudden psychological condition, mostly in adulthood, whereas the latter refers to the emergence of stuttering in early childhood that is unrelated to an organic or psychological trauma (Guitar, 2006). Since this dissertation focuses on people with developmental stuttering, the following review will address only this type of stuttering.

Stuttering may be viewed as either a particular event of disfluent speech or as a disorder. When describing the stuttering event (Yairi & Seery, 2011) or the "moment of stuttering" (Johnson, 1955), it refers to the instances of the observable speech disruption. Over the years, numerous definitions of stuttering have been proposed, ranging from early definitions such as "a disturbance in the rhythm of speech; an intermittent blocking; a convulsive repetition of a sound" (Travis, 1931, p. 33), which focus on the speech difficulties, to broader ones, as suggested by the Special Interest Division for Fluency of the American Speech-Language-Hearing Association (ASHA) (1999):

Stuttering refers to speech events that contain monosyllabic whole-word repetitions, part word repetitions, audible sound prolongations or silent fixations or blockages. These may or may not be accompanied by accessory (secondary) behaviors (i.e. behaviors used to escape and/or avoid these speech events).

Other definitions have attempted to describe stuttering as a disorder that is far more complex than the disruption of speech flow. One of the earliest descriptions of

stuttering as complex was offered by Sheehan (1958), who compared stuttering to an iceberg, suggesting that the overt stuttering events constitute merely the tip of the iceberg, when in fact the major problem of stuttering is covert. More recently, Yairi and Seery (2011) have elaborated on the idea of complexity by listing six dimensions of the stuttering disorder: (1) observed symptoms of disfluent speech (as discussed above); (2) body movements, e.g. tense head, neck or limb movements at the moment of stuttering, also known as "secondary characteristics". These movements are not essential in order to diagnose stuttering, but they are frequently observed when the person (PWS) or child who stutters (CWS) struggles with his stuttering in order to ultimately pronounce the blocked word); (3) underlying physiological characteristics (e.g. galvanic skin responses, changes in blood flow, pupil responses); (4) emotional symptoms (significantly negative emotions in response to stuttering, fear or anxiety of various speech situations, resulting in speech and social avoidance); (5) underlying cognitive features (cognitive overload of language; the speaker's awareness and perception of stuttering, the negative reaction expected of the conversational partner, the PWS's perception of the disorder and the manner in which it is internally described); and (6) social interactions (the impact of stuttering on communication due to the anxiety and its related coping responses).

### **1.2 Epidemiology of developmental stuttering.**

Developmental stuttering usually begins in the preschool years of childhood, predominantly between the ages of two and five (Andrews et al., 1983). Among 30-60 percent of PWS, stuttering runs in the family (Yairi, Ambrose, & Cox, 1996). In epidemiological studies, five percent of the population in the western world report to have ever been a PWS (incidence), whereas at a given moment, only circa one percent

of the population match this diagnosis. The number decrease the result of natural, which occurs in 70-80% of cases, three to five years after onset (Yairi & Ambrose, 2005) or by older age, but at significantly lower rates (Wingate, 1964). The prevalence of stuttering differs significantly across genders, with with males who stutter far outnumbering females who stutter.. The gender ratio ranges from 2:1 (male:female) in kindergarten years (Yairi & Ambrose, 1992) to 4:1 in young adults (Craig, Hancock, Tran, Craig, & Peters, 2002). In other words, over 80 percent of adults who stutter are men.

### **1.3 Etiology and treatment.**

The numerous theories that seek to explain the etiology, or cause, of stuttering can be divided into five main categories: (1) stuttering as a learned behavior (Brutten & Shoemaker, 1967; Johnson, 1955; Ryan, 1979; Shames, 1969); (2) stuttering as a result of psycho-emotional factors (Fenichel, 1945; Glauber, 1958; Sheehan, 1953); (3) stuttering as a result of psycho-developmental reasons (Katz-Bernstein, 1994); (4) stuttering as a result of neurolinguistic deficiencies (Perkins, Kent, & Curlee, 1991; Postma & Kolk, 1993), and (5) stuttering as originating from constitutional organic factors (Kent, 1984; Travis, 1931). The variety of theories regarding stuttering prompted the suggestion that there may be subtypes of stuttering (Yairi, 2007) – for instance, there could be multiple causes for stuttering, affecting each individual differently; alternatively, it could be multifactorial (Smith & Kelly, 1997).

Currently, much of the research on causality stresses the organic component, with special emphasis on brain structure and activity (e.g., Alm, 2005; Connally, Ward, Howell, & Watkins, 2014; De Nil, Kroll, Kapur, & Houle, 2000; Lu et al., 2010) and genetics (e.g., Kang et al., 2010; Kraft & Yairi, 2011; Wittke-Thompson et

al., 2007), as well as personal factors, mainly temperament (e.g., Alm, 2014; Anderson, Pellowski, Conture, & Kelly, 2003; Eggers, De Nil, & Van den Bergh, 2010). The exact underlying processes of etiology, however, still remain uncertain.

Thus, the treatment of stuttering does not derive directly from its etiology; rather, it draws on the factors that perpetuate or exacerbate stuttering as well as on the accumulated clinical experience with regard to what facilitates it (Guitar, 2006; Yairi & Seery, 2011).

For children, approaches vary from therapy that focuses directly on the child's speech (e.g., Meyers & Woodford, 1992; Onslow, Packman, & Harrison, 2003) and indirect modes of intervention that target the interaction between parents and their child–family interaction (e.g., Kelman & Nicholas, 2008; Millard, Edwards, & Cook, 2008), to therapeutic approaches which include both communicational skills as well as psychodynamic and behavioral intervention (Katz-Bernstein, 2000).

For adults, the treatment of stuttering is located on a continuum ranging from dealing with the believed cause for stuttering by means of psychological treatments (Barbara, 1965; Glauber, 1958) on the one hand, to treating its symptoms only (Boberg, 1976; Webster, 1980) on the other. Between the two ends of the continuum is an integrated approach according to which stuttering is treated by the use of techniques that encourage the PWS not to attempt to avoid stuttering, but rather to stutter more fluently (Bloodstein, 1995; Conture, 1982; Gregory, 1991), speak more fluently (Gregory, 1991), or enhance fluency by means of fluency shaping techniques (Boberg, 1976), as well as by employing technological devices (e.g., Kalinowski, Guntupalli, Stuart, & Saltuklaroglu, 2004). Additionally, the integrated approach addresses another important facet of stuttering that is modifying the negative thoughts concerning stuttering and diminishing his anxiety by focusing on his acceptance of his

stuttering as part of his self-image. This is achieved by facing, confronting and reducing the avoidance and the fear that triggers it (Barbara, 1965; Menzies, Onslow, Packman, & O'Brian, 2009; Sheehan, 1975).

Part of that approach resides in the PWS's frequent worry concerning the manner in which his conversational partners and the general environment will perceive and react to him and his stuttering. A great deal of that worry is based on actual experiences and on listeners' reactions (Bloodstein, 1975; Sheehan, 1975). For that reason, educating the environment about stuttering and about the manner in which a CWS or a PWS should be addressed is of top priority. In order to achieve this, the combined efforts of speech-language therapists – from the point when the child begins to stutter and faces the immediate reactions of his family (Kelman & Nicholas, 2008; Guitar, 2006) – and self-help organizations' (e.g., The Stuttering Foundation of America, The British Stammering Association) propaganda about stuttering, are required.

Moreover, the client's cultural background is extremely relevant to the treatment. According to Yairi & Seery (2011), clinicians should be aware about the following aspects: the possible impact of the cultural background on the stuttering symptoms, the manner in which the etiology of stuttering is perceived in a specific culture, the perceptions and stereotypes regarding PWS in the specific culture, the general approach to therapy, the position of the culture about particular treatments, and attitudes and acceptance of unique methods. They should also be responsible for selecting the adequate treatment provider (for example, the gender of the therapist).

This dissertation focuses on the role of the environment in the experience of stuttering. First and foremost, therefore, the various components of this experience will be described in the next section.

## 2. The Experience of Stuttering

The narrow definitions of stuttering relate to speech fluency problems, whereas broader perspectives view stuttering as multi-dimensional (e.g., Perkins, 1990; Smith & Kelly, 1997; Yairi & Seery, 2011). However, exceeding its definition by far, stuttering is a disorder with an experiential nature (Sheehan, 1970; Van Riper, 1982). In his book, *Because I Stutter*, Johnson (1930) describes his personal experience and ambitions:

I am a stutterer. An awkward tongue has molded my life – and I have only one life to live [ . . . ] I shall try therefore, to tell what it means to stutter [ . . . ] to describe the influence that stuttering has had on the development of my personality, my ambitions, my fundamental attitudes towards life (ibid., pp. 1-2).

It has long been accepted that the experiential nature of stuttering plays a major role in the pathology (Sheehan, 1970; Van Riper, 1982). For example, researchers such as Bloodstein (1958), Johnson (1942), Sheehan (1958), and Van Riper (1963) considered the reaction to or perception of stuttering as the source or etiology of the problem. However, whatever the etiology may be, it is suggested that previous speech and communication breakdowns and the expectancy of future failures impact the PWS with respect to his use of covert coping strategies (e.g., use of avoidances, word replacements, circumlocution, etc.) so as to minimize the risk of future failure (Guntupalli, Kalinowski, & Saltuklaroglu, 2006). It has been documented that such experiences also affect the PWS's sense of well-being and quality of life (Craig, Blumgart, & Tran, 2009; Yaruss & Quesal, 2006).

## **2.1 Integrative view of the experience of stuttering.**

As much as the experience of stuttering has been noted and emphasized, only a few studies have dealt with it in an integrative manner. These studies consist of quantitative and qualitative designs.

Yaruss and Quesal (2006) introduced the International Classification of Functioning, Disability, and Health (ICF) (WHO, 2001) for the purpose of defining the overall experience of stuttering. The ICF depicts health-related conditions according to the following aspects: (1) body function and structure; (2) activities in which the individual participates commonly; and (3) personal and environmental factors describe the personal and general settings in which the person is involved, that may impact his capacity to function effectively. According to Yaruss and Quesal (2006), this scheme provides the possibility to view the various dimensions of the person's experience with respect to his specific difficulty

Consequently, the above-mentioned authors adapted the ICF framework (WHO, 2001) to their study of stuttering. Their scheme demonstrates how the stuttering disorder can be considered to include the following characteristics: (1) the cause of the disorder as perceived by the individual; (2) the precise impairment, manifested by the explicit speech disfluencies; (3) the individual's emotions, behaviors and attitudes regarding his stuttering; (4) the impact of the environment on stuttering, manifested differently in different speaking situations and also depending on the behavioral feedback of others; and (5) the general influence of stuttering on the individual's life, as manifested in communicative activities and being able to engage in daily life tasks.

Following their scheme (but excluding the first characteristic), Yaruss and Quesal (2006) developed the Overall Assessment of the Speaker's Experience of

Stuttering (OASES) (Yaruss & Quesal, 2006). The OASES is a self-administered questionnaire comprising four sections, namely, the perception of impairment, the emotional, cognitive, and behavioral reactions of the PWS, participation restriction, and general satisfaction with life. In a pioneer study of 173 adult participants who stutter, using this questionnaire, results demonstrated the impact of stuttering on the various aspects of life. Of the respondents, 88 percent reported that stuttering impacted their life quality unfavorably, and 91 percent indicated that stuttering impacted negatively their comfort with communication in general, at work, or in social situations. In contrast, 62 percent answered that stuttering interfered with such feelings at home, signifying that home interactions were less affected by stuttering. Sixty-four percent responded that stuttering has a negative effect on relationships, and 65 percent answered that stuttering influenced negatively on their probability to being accepted for a job (Yaruss, 2010).

To the best of our knowledge, the OASES is the first and only questionnaire that attempts to measure the whole stuttering experience. However, considering the depth of this disorder, one might consider alternative methods that could describe it extensively, beyond the statistical measures, which may not have the capacity to encompass the personal experiences and consider the relevance of the authentic context at which it occurs (Tetnowski & Damico, 2001). As a result, in recent years, qualitative approaches, aiming to explore the stuttering experience, have become an alternative. In this perspective, Corcoran and Stewart (1998) argued:

By listening to the narratives of people who stutter, speech-language pathologists can gain a far richer understanding of the client's experience of stuttering than could be obtained from the structured interviews and standardized questionnaires that are typically used in the assessment of people

who stutter. Most importantly, the therapist can acquire a deeper comprehension of the meaning that stuttering has for the client (pp. 248).

In accordance with the above-mentioned perspective, only few qualitative studies were conducted. Corcoran and Stewart (1998) interviewed eight adults who stutter, and discovered that the most prominent experience is of suffering. The latter emotion was entrenched in the participants' basic experiences of being stuck and unable to speak despite their efforts. The theme of suffering included four components: helplessness, shame, fear, and avoidance.

Klompas and Ross (2004) conducted interviews on 16 South African adults who stutter. Most interviewees depicted their stuttering as detrimental to success at school, not only academically but also with respect to their interaction with teachers and classmates. They reported on negative reactions by others to their stuttering, despite their report of being able to establish friendships even with their stuttering. They also perceived stuttering as a factor that influenced their work achievements and probability of being promoted, despite feeling that stuttering did not have such an influence on their vocational choices and interactions with work colleagues and managers. Over a half of interviewees reported that speech therapy generally contributed to their life quality, although most also reflected negatively on their speech therapy memories. In general terms, interviewees did not view stuttering as a factor that impacted negatively on their marriage or family life, but felt that it affected negatively on their self-esteem and self-image.

In a Korean study, Hwang and Lee (2013) explored the meaning of stuttering by interviewing six young adults who stutter. The following main themes were identified: conflicting perceptions regarding stuttering, self-defensiveness vis-à-vis negative responses, and inactive coping responses.

Finally, in another study about the experience of stuttering (Whaley & Parker, 2000), 329 individuals who stutter (ranging in age from 10 to 88 years) were asked to furnish metaphors depicting their experience with stuttering. The authors reported that the participants' metaphors were all negative, reflecting the stutterers' constant, fluctuating, and tiresome difficulty with speaking, and the social stigma and stereotypes that is associated with stuttering.

To sum up, both quantitative and qualitative studies have demonstrated stuttering to be an experiential disorder that encompasses a range of challenges, emotions, and cognitive changes that are not only associated with the speech fluency disorder but extend far beyond it.

The present study espouses a similar perspective by viewing the experience of stuttering holistically and, specifically, as consisting of the following dimensions: (1) the self-perception of stuttering; (2) the cognitive and emotional reaction to stuttering; (3) the burden of stuttering; (4) the behavioral reaction, namely, coping strategies – mainly avoidance; (5) the effect of stuttering on life quality; and (6) general well-being. The following review offers further elaboration and findings for each of these aspects.

## **2.2 The self-perception of stuttering.**

The term "stuttering severity" refers to "the level of disruption in the delivery of continuous speech" (Yairi & Seery, 2011, p. 220). Measures of stuttering severity by clinicians consist of subjective 3-, 5-, or 10-point scales (Onslow et al., 2003; Wingate, 1976; Yairi & Ambrose, 2005), and the well-known instruments, Iowa Scale of Severity of Stuttering (ISSS) (Sherman, 1952) and Stuttering Severity Instrument (SSI-4) (Riley, 2009). While these measures rate the overt stuttering severity, they do

not always represent the impact of the total stuttering disorder on the individual who stutters (Yairi & Seery, 2011).

The judgments of PWS may be influenced by unobservable factors. Some PWS exhibit mild stuttering and yet live a profound or harsh experience, resulting in self-ratings that are enlarged by the underlying word avoidance or by the feelings of losing control, anxiety and effort (Ingham & Cordes, 1997; Riley, Riley, & Maguire, 2004; Yairi & Seery, 2011). Other PWS may exhibit severe stuttering, but rate their stuttering as mild owing to mild emotional responses or social difficulties (Yairi & Seery, 2011) or scant awareness to or apprehension about stuttering severity (O'Brian, Packman, & Onslow, 2004). The possible discrepancy between the observed stuttering symptoms and the self-rating are represented in Perkin's (1990) definition of stuttering, which included the "feeling of loss of control" as an irreplaceable element. This component was evident in Moore and Perkin's (1990) study which demonstrated that the manner in which the persons feel at the moment of disfluency affects significantly their perception of their speech disfluencies, so that it is classified as stuttering by them. Yaruss and Quesal (2004) supported this idea and stressed that self-rating of stuttering can yield further understanding about the speaker's approach regarding his speech.

Only a few studies have actually compared measures of stuttering severity and the PWS's self-rating of stuttering severity (Aron, 1967; Ezrati-Vinacour & Levin, 2004; Naylor, 1953; O'Brian, Jones, Packman, Menzies, & Onslow, 2011). In these studies, self-rating of stuttering severity, rated on a scale of 1 to 9, was found to correlate with other non-dependent raters, hence suggesting that self-rating of stuttering severity may be a reliable measure. Nevertheless, it was noted that in some cases, disagreement between the PWS's and the speech-language

therapist ratings may be present. Such inconsistency is also valuable since it provides inner information about the PWS's true perception of the disorder (O'Brian et al., 2004). Our interest is to explore how the PWS perceives his own stuttering.

### **2.3 Feelings and attitudes toward stuttering.**

Anxiety has been repeatedly reported and thoroughly investigated in relation to stuttering since it is known to be highly associated with the disorder and the PWS (Ingham, 1984; Peters & Hulstijn, 1984). It is an entangled psychological feature which includes various components, as physiological, verbal-cognitive and behavioral ones (Ezrati-Vinacour & Levin, 2004; Menzies, Onslow, & Packman, 1999). It may consist of both trait anxiety (stable personality characteristics) and state anxiety (fleeting, in specific conditions) (Menzies et al., 1999; Spielberger, Gorsuch, Lushene, Vagg, & Jacobs, 1983). The experience of anxiety may account for negative thoughts and expectancies about a future situation, which may result in avoidance or escape behaviors, in addition to physiological reactions such as increased muscle tension and heart palpitations (Kraaimaat, Vanryckeghem, & Van Dam-Baggen, 2002; Menzies et al., 1999).

There are several justifications for associating stuttering with anxiety. Above all, there are negative consequences that are linked to stuttering, which include the impact on the social and emotional world of the PWS, negative affect on relationships, life quality, and mental health (Craig et al., 2009). Such negative consequences can appear soon after the onset during kindergarten years, once the CWS and his peers begin to notice the disorder (Ezrati-Vinacour, Platzky, & Yairi, 2001; Langevin, Packman, & Onslow, 2009), and can persist throughout life. PWS

frequently experience negative responses from their conversational partners as a result of stigma, and face bullying and teasing; this leads to feeling social exclusion and isolation, troubled relationships, academic and professional underachievement, and consequently negative attitudes with respect to speaking in social circumstances (Blood & Blood, 2007; Cream, Onslow, Packman, & Llewellyn, 2003; O'Brian et al., 2011).

Indeed, negative attitudes regarding speech (Guitar, 1976; Watson, 1995), anticipatory anxiety, or the anticipation of stuttering (Barbara, 1965; Johnson, 1942; Sheehan, 1970; Wischner, 1969) are most common among individuals who stutter. Adolescents and adults who stutter usually formulate negative attitudes about themselves that result from years of negative stuttering experiences (Blood, Blood, Tellis, & Gabel, 2001). Such attitudes relate to stuttering itself, but also the act of speaking, whether to oneself or other people (Yairi & Seery, 2011). Consequently, they are addressed in therapy, with variability regarding the extent and type of the needed intervention (ibid.)

Studies exploring the attitudes of adults who stutter mainly employed self-report questionnaires – for example, the Speech Situation Checklist-Emotional Reaction (SSC) (Brutten, 1973; Brutten, 1975), the Communication Attitude Test (BigCAT) (Vanryckeghem & Brutten, 2011), the Modified Erickson Scale (S-24) (Andrews & Cutler, 1974), and a subscale of the Overall Assessment of the Speaker's Experience of Stuttering (OASES) (Yaruss & Quesal, 2006). These tools repeatedly demonstrated speech-associated attitudes of PWS to be significantly more negative than those of people who do not stutter (PWNS) (e.g., Ezrati-Vinacour & Levin, 2004; Vanryckeghem & Brutten, 2011), and showed that attitudes can be managed and modified into a more positive direction by attending therapy (Guitar, 1976;

Langevin & Boberg, 1993). Additionally, the Unhelpful Thoughts and Beliefs about Stuttering (UTBAS) (Iverach, Menzies, O'Brian, Packman, & Onslow, 2011; Iverach et al., 2011) has been developed in order to track unhelpful thoughts and beliefs concerning speech-related social anxiety among PWS and address them in Cognitive Behavioral Therapy.

Thus, as a consequence of life experiences and solid negative attitudes toward stuttering and speech situations, the presence of anxiety among PWS is expected (Blood & Blood, 2007; Miller & Watson, 1992; Ollendick & Hirshfeld-Becker, 2002).

Over the years, there has been an accumulated body of evidence suggesting high levels of anxiety among PWS, but even more so that this anxiety is specific to communicational circumstances (Menzies et al., 1999). Such evidence is a result of research efforts in the field of social anxiety, which is commonly characterized with anticipation of social harm, negative attitudes, fear of being evaluated negatively, attentional biases, safety behaviors including avoidance (Clark & Wells, 1995; Rapee & Spence, 2004). Indeed, it has been found that adults who stutter demonstrate increased levels of fear of being evaluated negatively and increased anxiety in communicative and social conditions (Blumgart, Tran, & Craig, 2010; Iverach, O'Brian, et al., 2009; Messenger, Onslow, Packman, & Menzies, 2004), as well as fear of social harm (Cream et al., 2003; Plexico, Manning, & Levitt, 2009a; Plexico, Manning, & Levitt, 2009b).

Such results have also been documented for adolescents and older PWS, suggesting that the fear of being evaluated negatively by others may commence at young age and remain so until old age (Bricker-Katz, Lincoln, & McCabe, 2009; Mulcahy, Hennessey, Beilby, & Byrnes, 2008).

In a study exploring social anxiety among PWS, Iverach, Jones, et al. (2009) compared adults who were looking for stuttering treatment and matched controls. The stuttering group revealed increased likelihood for social phobia. In addition, 18.5 percent of the stuttering group reached the diagnosis criteria of social phobia, versus merely 1.0 percent of matched controls. The authors noted that this study recruited adults who were searching for stuttering therapy, and it is conceivable that social anxiety levels may be higher among such adults, compared to PWS who do not look for treatment. Blumgart et al. (2010) also studied the existence of social anxiety among adult PWS and PWNS, with similar results suggesting that compared to the PWNS, the PWS group had significantly higher odds of meeting the screening criteria for social anxiety disorder. Specifically, 46 percent of the PWS met screening criteria for social anxiety disorder, versus merely four percent of controls.

Last, the presence of trait anxiety was also explored among PWS. In a recent meta-analysis of eleven studies on trait anxiety (for example, Blumgart et al., 2010; Ezrati-Vinacour & Levin, 2004; Miller & Watson, 1992), authors concluded that PWS were over one-half of a standard deviation above the PWNS for their trait anxiety levels (Craig & Tran, 2014).

#### **2.4 Functional communication and stuttering.**

The momentary inability to keep the speech flow going due to the involuntary repetition of syllables or parts of syllables and/or the arrest of the speech mechanism (Teesson, Packman, & Onslow, 2003) is the most evident stuttering symptom. The abnormal speech symptoms decrease the communication rate and commonly debilitate the effectiveness of communication. It has been documented that severe stuttering can result in speech rate of less than 50 syllables per minute, which may

lead to the reduction of information transfer rate by approximately 75%. Moreover, the moment of stuttering may include facial grimaces and other excessive bodily behaviors, which can drive the listener's attention and cause distraction (Meredith, Packman, & Marks, 2012). The cognitive and emotional load can be added to the total stuttering "package", resulting in a negative performance in communicational situations.

Bloodstein (1995) posited that the PWS's attitudes toward stuttering form the basis of a range of adaptations they develop – including linguistic adaptations – in order to accommodate the disorder. Such behaviors included avoidance of specific words, the replacement of words with synonyms and circumlocutions, avoidance of specific situations, restriction of verbal output, and range of social relationships, as well as manifesting an aggressive or different persona. In his words, he suggested that some behaviors "stem from a desire to alleviate what stutterers see as the social penalty of stuttering" (ibid., p. 37).

Following Bloodstein's description, various studies have attempted to explore the precise effect of stuttering on communicational functionality. For example, Spencer, Packman, Onslow, and Ferguson (2009) utilized a sociolinguistic approach and analyzed speech samples of adults who stutter and controls. Authors reported that the utterances of the adults who stutter were less complex linguistically than matched controls (n=10) and were liable to harm the communicative effectiveness, verbal expression, and, ultimately, social interactions.

Other studies investigated the nonverbal communicational characteristics of PWS. For example, Krause (1982) found that within a conversation, in comparison to adult fluent speakers, adults who stutter produced less head nods and smaller, simpler hand gestures, and were shown to have longer conversational turns, perhaps reflecting

poorer listening skills. Other studies explored the behavior of PWS's conversational partners, mainly in conversations between CWS and an adult partner. Meyers and Freeman (1985a) found that mothers of CWS interrupt their children more frequently than mothers of children who do not stutter (CWNS). They also tended to interrupt more frequently their CWS during moments of stuttering than during moments of fluency. In another study, Meyers and Freeman (1985b) noted that parents of both CWS and CWNS elevated their speech rate when talking to CWS. Comparable findings were documented by Kelly and Conture (1992) and Logan and Conture (1995).

It should be recalled that these studies are based on an external inspection of the PWS in a conversational setting. As suggested earlier, the PWS's personal point of view is extremely important, since it is precisely the one that shapes the personal experience of stuttering. Only a very small number of studies have explored the PWS's point of view regarding his functional difficulties in communication by using the OASES (Yaruss & Quesal, 2006), particularly subscale III (*Communication in daily situations*). This subscale aims to examine the difficulty of communication in diverse speaking situations (e.g., home, work) and the reactions of others.

In a study about adolescents who stutter, Mulcahy et al. (2008) found a significant association between trait and state anxiety on the one hand and daily communication difficulties on the other. This, however, was not true for the controls. No significant associations were found between the degree of communication difficulty and the overt stuttering symptoms. Once again, this finding demonstrates the importance of understanding the PWS's difficulties regardless of his speech symptoms.

In another study on adults who stutter, employing the same questionnaire, age and scores in the OASES subscale found to negatively correlate, indicating that participants of younger age were slightly more prone to experience challenges in functional communication than the older age ones (Bleek et al., 2012).

## **2.5 Quality of life and well-being of PWS.**

Although the term "quality of life" has existed for many years, it has developed dramatically in the last two decades in the fields of psychology, sociology, marketing, and medicine. The definition of "quality of life" varies across disciplines and has changed over the years according to the manner in which it was measured. According to objective measures, for example, economic welfare was considered to be an indicator of a high quality of life (Campbell, Coverse, & Rodgers, 1976), although this measure was eventually ruled out. In the field of medicine, repeated studies focused on assessing the health-related quality of life of populations with particular illnesses in order to plan the therapeutic methods, classify patients for specific treatments, and decide on funding of specific procedures (Chibnall & Tait, 1990; Faden & Leplège, 1992; King, Porter, Norsen, & Reis, 1992).

In the field of stuttering, only a few studies deal with the impact of stuttering on the PWS's quality of life. Craig et al. (2009) measured the impact of stuttering on quality of life by means of a general tool called the Medical Outcomes Study Short Form-36. This tool was administered to 200 adult PWS and fluent speakers. Findings indicated that stuttering negatively affects quality of life with regard to the domains of social activity, vitality, mental health condition, and emotional performance (ibid.).

In another study, the OASES was administered as a tool to 44 adults who stutter. This tool was custom built for the stuttering population and consists of four

sections (which will be described in greater detail later on) of which the fourth section aims to evaluate the impact of stuttering on quality of life. Results showed that PWS do in fact account for a negatively affected quality of life as a result of stuttering, and that quality of life can ameliorate as a result of stuttering therapy (Yaruss, 2010).

Recently, Koedoot, Bouwmans, Franken, and Stolk (2011) studied 91 adults who stutter, by administering the following instruments: the Health Utility Index 3 (HUI3) and the EQ-5D (instruments whose goal is detailing a health profile of a person's basic performance in society), and EQ-VAS (a visual analogue scale intended to self-rate the persons current health status). The results revealed that stuttering with moderate to severe severity, influences negatively on the overall life quality. The most affected domains were the person's speech, emotion, cognition, and pain, as demonstrated by the HUI3, and anxiety/depression and routine activities, as indicated by the EQ-5D.

### **3. Coping with Stuttering**

The multiple dimensions of stuttering and its resulting perceived, cognitive, emotional, and functional challenges have led to the development of coping strategies in an attempt to facilitate the experience of stuttering. As a first step, the mechanism of coping will be discussed in general terms. PWS's coping strategies of will follow.

#### **3.1 The mechanism of coping.**

Lazarus and Folkman's (1984) study and Lazarus's (1991) subsequent study proposed a model depicting the process of coping, namely, the Transactional Model of Stress and Coping (TMSC). This model forms a concept of stress in terms of an interaction between the person and his environment by evaluating the nature of the stressful event (Parkes, 1986). The TMSC proposes a bi-directional relation between the person and the environment which, when joined together, provides new interpretations through the process of appraisal. Cognitive appraisal is the interpretation of the of the current event significance in the person–environment relationship. It pertains to mediating processes and is divided into primary appraisal (whether what is happening is personally relevant), secondary appraisal (one's available coping options for dealing with the demands at hand), and reappraisal.

Due to primary appraisal, an new event can be appraised as unimportant, neutral-positive, or stressful, while in terms of the stake a person has in a stressful encounter, the situation can be evaluated as difficult, dangerous, or as alarming. In secondary appraisal, the person evaluates whether he has the competencies, social support, or any other type of resource to deal with stressors and to re-establish the equilibrium between the person and the environment (Schwarzer, 2001).

Coping consists of attempts, either cognitive or behavioral, to manage external or one self's demands (and the conflicts between them) that are appraised as demanding or surpassing the person's abilities (Lazarus & Folkman, 1984). Problem-focused coping is the direct management of the source of the stress. It includes not only processes that focus on changing the environment, but also internal strategies aimed at reducing the problem through mental changes, such as altering the self-level of ambition, fostering new norms of behavior, reducing the degree of involvement in the given situation, and so on.

Emotion-focused coping is directed at regulating the emotional distress. Some people aim to *decrease* the distress through avoiding it, reducing its magnitude, getting detached or distant from the stressor, paying attention selectively, reframing it into being more positive, and so on. Others tend to *increase* emotional distress, because "some individuals need to feel worse before they can feel better" (ibid., p. 150). Consequently, they engage in self-recrimination and self-punishment.

Other emotion-focused strategies involve *reappraisal*, a cognitive process that usually seeks to diminish the meaning of the threat by altering the meaning of the situation without changing the objective situation (ibid.).

The *outcome* of the coping strategies is manifested in the immediate and/or the long-term effects. The immediate effects are physiological changes, positive or negative feelings, and the quality of the outcome of the encounter. The long-term effects include effects on somatic health or illness, moral well-being, and social functioning (Lazarus, 1991).

According to Plexico et al. (2009b), the coping response can be classified into functional or dysfunctional. Functional responses operate to the person's advantage and generally include confronting the problem, starting a problem solving process,

and launching active solutions (Plexico et al., 2009b). In contrast, dysfunctional responses typically operate to the person's disadvantage. These may include escapism, blaming oneself, obvious attempts to negate the stressor's presence, a cognitive disconnection, and giving up on objectives that seem prevented by the stressor (ibid.). In that sense, avoidance can produce to a negative result for constant or permanent stressors given that the problem is not untangled or minimized (Davey, Burgess, & Rashes, 1995).

### **3.2 Coping with stuttering.**

With regard to adults who stutter, it transpires that stuttering is actually a persistent (although not constant) stressor that gives rise to the emergence of coping responses.

The most common coping responses are escape and avoidance. According to Guitar (2006), the CWS – most commonly between the ages of 6-13 years – develops escape and avoidance behaviors (i.e., secondary behaviors). The aim of escape behaviors is to halt the stuttering at once and keep the conversation going. Common escape behaviors include interjecting extra sounds, nodding, blinking, and muscle tension. Avoidance behavior refers to the avoidance of words, which can be achieved in a various manners, including substitutions (i.e., replacing a word or phrase in case of anticipating stuttering), circumlocutions (i.e., talking around a word or phrase instead of actually saying it), postponements (i.e., waiting or inserting filler words prior to starting to enunciate a word that usually triggers stuttering), and anti-expectancy devices (i.e., using an odd manner or "funny" voice to avoid stuttering when anticipated (Van Riper, 1982). Situational avoidance is also common as a result of the anxiety experienced by PWS in communicational situations (Brutten, 1975;

Brutten & Shoemaker, 1967; Craig, 1990; Davis, Shisca, & Howell, 2007; Janssen & Kraaimaat, 1980; Kraaimaat, Janssen, & Brutten, 1988; Peters & Hulstijn, 1984; Van Riper, 1982).

In an in-depth qualitative study on PWS's coping process, Plexico et al. (2009a) identified similar strategies framed in two clusters. The first cluster demonstrated how PWS spend a great deal of time considering how to avoid or prevent stressful communicational situations in an attempt to keep themselves safe from stuttering and its assumed consequences. The second cluster describes escape behaviors frequently employed by PWS in attempt to reduce anxiety and gain control –despite the possible negative consequences of solitude, frustration, and pain. The escape and avoidance behaviors include word substitution, non-participation in conversations, situational avoidance, social disengagement, suppression of unfavorable feelings, engaging in activities in which speech is not required, secondary behaviors and drug use (ibid.).

Lazarov and Folkman's (1984) model of coping explains the coping strategies described above. Once a threat – emotional, social or physiological – is identified ("primary appraisal"), it is managed by a "secondary appraisal". For PWS, years of threat and stuttering related anxiety, that is, a feeling of helplessness, feeling loss of control, and a need to overcome the difficulties when the environment speaks fluently, resulted in consistent strategies of escape and avoidance among participants (Plexico et al., 2009a). Using the language of Plexico et al. (2009b), these coping behaviors can be interpreted as dysfunctional since it has been shown that they impact negatively on stuttering severity and functional communication (Guitar, 2006; Krause, 1982; Plexico et al., 2009a; Starkweather 1987; Van Riper, 1973).

Although functional coping strategies of PWS are less reported, they were identified in two in-depth qualitative studies. In one study, in which 14 adults who stutter were interviewed, Crichton-Smith (2002) identified the following coping strategies: (1) 'No change', which refers to speaking without prior planning and was adopted when the risk of stuttering was lower, but was less common in working situations; (2) 'Taught change', which refers to learned therapeutic strategies, acquired or practiced in speech therapy; and (3) 'highlighting', which refers to being open about stuttering (e.g., informing conversational partners about the stutter and making light of any communication breakdown).

Similarly, Plexico et al. (2009a) identified two cognitive-based coping patterns which relate to self-focused and problem-focused coping strategies. Self-focused coping strategies included an expanded perspective about themselves as PWS and how they view stuttering, which resulted in enhanced self-esteem. Problem-focused coping strategies included directing attention to their own life ambitions, resulting in a sense of empowerment and elevated self-confidence.

Further results of this study presented descriptions of the process of building up more functional coping strategies. This process involved a shift from behaviors that aimed to protect the PWS himself and his conversational partner from the stuttering related discomfort (mainly by avoidance), to concentrating on the needs of the PWS himself. This change in the coping pattern resulted in experiencing a positive outcome in the social, cognitive, physical and emotional aspects.

In short, PWS's process of coping with the associated threats of stuttering results in the development of coping strategies that not only shape the experience of stuttering, but also become a part of it. One of the goals of the present study is to explore PWS's coping strategies according to the TMSC (Lazarus & Folkman, 1984).

#### **4. Factors that Influence the Stuttering Experience**

Models of human functioning as the one suggested by the World Health Organization (WHO, 2001) maintain the interaction of the following: persons' bodily functions, their capacity to enroll in activities, and the context in which these activities are carried out. This model is partly comparable with the TMSC (Lazarus & Folkman, 1984), which contends that the coping efforts are shaped by personal and situational factors and the interaction between the two.

Personal factors are commitments and beliefs. Commitments refer to the sense of determination and engagement, whereas beliefs relate to the sense of personal control in a given situation (*ibid.*) and self-efficacy (Bandura, 1982). In the field of stuttering, it was also argued that personal characteristics such as temperament and personality may shape the experience of stuttering. For example, in cases of troubled regulation of emotion and attention, CWS may focus their attention on the stuttering symptoms, which in turn may contribute to elevated levels of negative reactivity (Karrass et al., 2006). Similarly, Guitar (2006) suggested that a sensitive (*i.e.*, reactive) temperament may provoke increased physical tension when a child stutters, thereby creating a learned cycle that is liable to lead to stuttering persistency. Another possible example is neuroticism, which was reported to have a negative effect on the experience of stuttering (Bleek et al., 2012). The latter researchers posited that personality may be a possible moderating or mediating factor in the experience of stuttering.

On the other hand, the environmental factors that affect the coping process depend on how new a situation is, the time it takes, and the possible social support an individual has (Lazarus & Folkman, 1984). Social resources may strengthen coping efforts by providing emotional support and informational guidance that are likely to

reinforce feelings of self-confidence or self-esteem or function as an information source that serves as a guide in planning more effective coping strategies (Hobfoll, 1998; Holahan & Moos, 1991).

In another model of stress, namely, the Conservation of Resources (COR) theory (Hobfoll, 2001), the role of the environment is further emphasized by viewing the self as originating from the most basic social group of family and close friends. The manner in which the individual reacts and acts relies on cognitive assessments and planning, that are the result of cultural processes, schemes and concepts. Additionally, facing a stressful situation usually occurs in social circumstances or in a context that involves social consequences (ibid.; Lyons, Mickelson, Sullivan, & Coyne, 1998). Clearly, cultural norms, laws, principles, and attitudes impact the manner in which situational circumstances are perceived and interpreted by the individual (Magnusson, 1982).

In summary, both the TMSC and COR theories exemplify how meaningful the environment is for the individual, whose experiences and challenges are lived within context.

The role of the environment is also highly significant with regard to stuttering since the latter occurs mostly in the presence of one or more conversational partners. This dissertation seeks to focus on the role of the environment in the context of the experience of stuttering and coping with its challenges. Thus, a definition of the term *environment* will be provided first, followed by what is known about the environment and stuttering.

#### **4.1 The concept of the environment.**

The concept of the environment can be described by means of the Ecological Systems theory (Bronfenbrenner, 1979). This theory maintains that children's development is influenced by the quality of the relationships between their personal characteristics (e.g., genetic makeup, developmental rate, needs, and abilities) and the environments in which they are brought up (Bronfenbrenner, 1979). The ecological environment is conceived as a set of nested structures, one inside the other, with the individual located at the core of these structures.

The first level surrounding the individual is the *microsystem*, which is the closest circle around the individual, containing people or places within the direct surroundings.

The second level is the *mesosystem*, which consists of the connection among the people or institutions of the child's microsystem such as the relations among home, school, and neighborhood peer group. For an adult, the mesosystem consists of the relations among family, work, and social life. In other words, a mesosystem is a system of microsystems.

The third level, the *exosystem*, refers to the larger social system that affects the individual indirectly even though he does not function in it directly. Examples of the exosystem are changes at parent's work, or other activities or decision at community or town. It has been proposed that although the child is aware or immediately impacted at this level, its consequences may do so.

The fourth level, the *macrosystem*, is the most external circle of the individuals' environment. It refers to consistencies within the inner circles (microsystem, mesosystem and exosystem) that are part of the subculture or the general culture, to which the individual belongs, along with any belief system or

philosophy that is part of such frame (Bronfenbrenner, 1979). While not constituting a specific framework, this circle consists of cultural principles, habits, and rules (Berk, 2000).

The fifth and final level, the *chronosystem*, reflects the passage of time, not only in relation to the person, but also in relation to the environment in which that person lives. An example of this is the increase in opportunities for women to pursue a career over the last thirty years (Santrock, 2007). While much of Bronfenbrenner's work focused on child development, it is widely claimed to be relevant throughout the human lifespan since the model layers remain relatively consistent over time (Fingerman & Bermann, 2000).

In addition to Bronfenbrenner's model, the concept of environment has been described extensively by Tomasello (2009) regarding language acquisition. In his social-pragmatic theory, he states that language is acquired through "(1) the structured social world into which children are born- full of scripts, routines, social games, and other patterned social interactions; and (2) children's social-cognitive capacities for tuning into and participating in that structured social world" (p. 87). Moreover, the language is acquired spontaneously by children as a by-product of being involved in social situations, which provide them the opportunity to understand the communicative acts and intentions of others (Nelson, 1985). Strictly speaking, the environment provides the child with opportunities and circumstances to understand and learn language and communication, based on the notion that the spoken language is related to the ongoing social interaction (Bruner, 1983).

The environment, as depicted in Bronfenbrenner's model and its significance to speech and language development (Bruner, 1983; Nelson, 1985; Tomasello, 2009), also plays a significant role in the case of stuttering.

## 4.2 Stuttering and the environment.

In the literature, many aspects of the association between stuttering and the environment have been discussed repeatedly. The *microsystem* layer of Bronfenbrenner's (1979) model – namely, the structures with which the individual has direct contact, including relationships and interactions within the immediate surroundings – is where stuttering is manifested.

Above all, the association between stuttering and the environment is manifested in the verbal interactions of PWS and their conversational partners. Clinical reports state that some conversational partners offer advice during the stuttering event, suggesting, for instance, that the PWS talk slower or 'take all the time [he] need[s]' (Sheehan, 1975), while others exhibit nodding and smiling in an exaggerated fashion (Bloodstein, 1995). Sheehan (1975) believed the PWS's conversational partner to be conflicted about the correct way to behave when conversing with a PWS. For example, should he look him straight in the eye or avoid eye contact? Should he acknowledge the stuttering or ignore it? There are several studies dealing with the conversational style adopted by parents or other adults when conversing with CWS that present empirical evidence for these claims (Kelly & Conture, 1992; Meyers & Freeman, 1985a; Meyers & Freeman, 1985b). A few other studies discuss similar situations involving adult PWS (Krause, 1982; Rosenberg & Curtiss, 1954).

Other common social responses are stereotypical ones. PWS are 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; Davis, Howell & Cooke, 2002; Hugh-Jones & Smith, 1999; Langevin, Bortnick, Hammer, & Wiebe, 1998).

In adulthood, other challenges arise. PWS experience difficulties finding employment due to their stuttering (Bloodstein & Bernstein-Ratner, 2008; Craig & Calver, 1991; Klein & Hood, 2004). Hurst and Cooper (1983) found that 85 percent of employers perceived stuttering as a factor that reduced a person's chances to be employed or being promoted. In fact, the results of one survey showed that PWS reported higher percentage of unemployment, the negation of a promotion and difficulties in being accepted for a job due to stuttering (Opp, Hayden, & Cottrell, 1997). It was also perceived by the PWS that their stuttering leads to feelings of estrangement at work (Rice & Kroll, 1997).

PWS are also believed to have fewer chances of finding a partner (Zhang, Saltuklaroglu, Hough, & Kalinowski, 2008) and are viewed by fluent speakers as less attractive, and consequently the fluent speakers would be less likely to start a relationship with PWS (Van Borsel, Brepoels, & De Coene, 2011).

In short, stuttering is manifested in most communicational environments and can result in negative reactions in childhood and adulthood. Given the importance of situational factors with regard to the coping process (Lazarus & Folkman, 1984), it is evident that the environment plays a significant role in the experience of stuttering and coping with it. We have depicted stuttering in the context of the individual's direct environment, namely, the *microsystem* in Bronfenbrenner's (1979) model. However, we believe that the more external layer, the *macrosystem*, namely, culture, also plays an important role in the experience of stuttering. Thus, the following chapter will focus on the association between stuttering and society and culture.

## **5. Socio-Cultural Environment and Stuttering**

### **5.1 Stuttering and global socio-cultural environments.**

The following section addresses the interaction between socio-cultural settings and stuttering.

Stuttering is found in all parts of the world and in all cultures and races (Guitar, 2006). It is a speech disorder that comprises not only the individual who stutters but also his conversational partners. The manner in which it is defined, perceived and addressed are the result of the society and culture to which the PWS belongs. The disorder is not restricted merely to those who stutter, but also includes the PWS's cultural and linguistic background, with idiosyncratic stresses and influences that are diverse across cultures. Specifically, variations within and among countries with respect to child-raising concepts, family structure, general and specific attitudes of society and family, rules of communication, identification, diagnosis and management of impairments, could all have an impact on the individuals who exhibit stuttering (Shames, 1989).

In a series of studies concerning attitudes toward PWS around the globe, such attitudes were measured using the POSHA-S (Public Opinion Survey of Human Attributes-Stuttering) instrument. The latter was also administered in Turkey – a country consisting of over 95 percent Muslims (Miller, 2009) (Özdemir, St. Louis, & Topbas, 2011). The Turkish respondents' attitudes toward stuttering were significantly less positive than the average attitudes in the database, with most participants being in the lowest quartile (albeit one-fifth to one-sixth of the means were in the highest quartile). Specifically, the attitudes obtained in the Turkish study were more negative with respect to beliefs about stuttering than with respect to self-reactions to stuttering. The Turkish participants upheld the stuttering stereotype of being shy or nervous or

excitable or fearful. Furthermore, they were more likely to consider the medical physician as the suitable professional to treat the problem, rather than the speech-language therapist. They were also more pessimistic as regards the ability of PWS to work at any job they wish to.

In Kuwait, teachers' attitudes toward stuttering were also studied using the POSHA-S (Abdalla & Al-Saddah, 2009; Abdalla & St. Louis, 2012). In a pioneer study in Kuwait, Abdalla and Al-Saddah (2009) explored Kuwaiti school teachers' attitudes and their understanding about stuttering. Results demonstrated misconceptions about stuttering among teachers but also few positive tendencies. In a larger study (Abdalla & St. Louis, 2012), more than half of the Kuwaiti teachers expressed compassion for a student who stutters—an emotion that was suggested to reflect the Arab culture, where “within the Arab world, a child who has a problem is considered 'muskene'—to be pitied, consequently a family feels dishonored or shamed and has difficulty admitting when a child needs particular attention” (Karola, 2002, p. 47). In addition, approximately fifty percent revealed that in case of talking to a PWS, they would feel uncomfortable and tense. Many were informed incorrectly about the etiology of stuttering and held negative attitudes and stereotypes regarding individuals who stutter (Abdalla & St. Louis, 2012). In another study comparing Kuwaiti and American teachers (Irani, Abdalla, & Gabel, 2012), almost one-third of the teachers related to the PWS as unlikeable, unsociable, hostile, weak in character, or unemployable, and a great part of teachers also demonstrated unfavorable attitudes. Moreover, specifically to the strong–weak aspect, Kuwaiti teachers had slightly more negative attitudes.

In Hong Kong and China (Ip, St. Louis, Myers, & Xue, 2012), the attitudes toward stuttering were generally similar. The differences between groups resided in

the precision of knowledge regarding the etiological factors of stuttering and of the degree to which participants would be comfortable with stuttering or with PWS who are at their intimate social circles. Most of these differences reflected more positive attitudes in the Hong Kong sample. The above-mentioned authors suggested the relatively more positive responses of Hong Kong participants to be the result of Western influences in Hong Kong, due to the history of Hong Kong, which was governed by Britain for many years until 1997. When looking into the POSHA-S worldwide database and comparing these findings, it appears that the responses of both groups were yet within the lowest quartile of the database. Ip and colleagues (2012) explained that this result might be a consequence of the low availability of speech-language treatments as well as relatively small activity of self-help organizations for stuttering.

Employing the same instrument, St. Louis and Roberts (2010) compared the attitudes of Canadians, Cameroonians, and Americans. Results indicated that a greater similarity existed between Canadians and Americans than between Canadians and Cameroonians, indicating once again the possible role of environment, that is country and culture, in the acceptance and perception of stuttering.

In a clinical report, Campbell (2000) explored attitudes toward stuttering among African American and Hispanic students. Among the African Americans, myths with respect to stuttering included viewing stuttering as a curse of the devil or the consequence of inappropriate nutrition by the child's mother while she was nursing. Other myths claim that if a child is hit in the mouth by a dishtowel, or if nutmeg is put under his tongue, or if the child's feet movements are restricted while he speaks, the stuttering would be cured. Among the Hispanic community, stuttering is considered extremely shameful. Some Hispanic individuals believe it can be cured

by placing insects in the child's mouth, placing a ring of garlic around the child's throat, or arranging a barn swallow to pinch the child's tongue. According to a common attitude of both African American and Hispanics, a child can stop stuttering merely by trying. The actions taken against CWS along with the latter's ostensible responsibility for their stuttering be extremely unpleasant and painful for them.

Both the POSHA studies and the Campbell (2000) study clearly demonstrate how socio-cultural settings may influence the manner in which PWS are perceived. However, only a few studies have explored the way CWS and PWS are actually addressed in different socio-cultural settings.

An early report of Lemert (1952) offers a description of the attitudes toward stuttering among the North Pacific Indians. In his report, he states that PWS were laughed at. Furthermore, in two specific areas (Bella Bella and Tsimshian), parents were prone to feel ashamed in case their children stuttered, given that these parents were more demanding of their children. An example of the negative attitudes of parents toward CWS can be demonstrated specifically by one Tsimshian PWS who recalled his father expressing disapproval of his stuttering by telling him that he was "acting crazy". Among the Tsimishian and Haida tribes, too, people with speech defects would take a back seat during tribal ceremonies and were not permitted to participate actively in them.

Less formal discrimination against PWS was manifested in the Nootka tribes, where a PWS was allowed to participate in the ceremony if he were able to overcome his speech difficulty. That said, during their evening games on the beach, Nookta boys frequently mimicked famous tribal orators and recited excerpts from the latter's legendary speeches before an audience of elders so as to be pinpointed as having a successful future. This and other factors sparked anxiety among Nooktan parents with

regard to the future speech ability of their children, resulting yet again in negative attitudes and behavior toward CWS.

In a different part of the non-Western world, Sub-Saharan Africa, a survey on stuttering was conducted. Simon (2011) reported that PWS in Africa are considered to be cursed, to bring bad luck, and to be dominated by vicious spirits. This often implies that PWS are exiled from their own community. They are being treated by approaches consisting mostly of rituals, magic spells, and potions that have been passed throughout generations, usually involving brutal and unique practices, as evidenced by the following examples: a wet cloth being thrown violently into the face of the CWS in order to perforate his skin; healers cutting the frenulum (the flap of skin that lies below the tongue) of children who reach the age of six and still stutter, which in most cases causes the death of the child due to massive loss of blood or to blood infection caused by traditional knives; burning the tongue with a red-hot knife; and isolating CWS from any contact with the world in full moonlight in order to prevent the stuttering from becoming more severe. The most extreme practices involve starving children until they speak "well", culminating in the death of the child, or, in Uganda, the deliberate killing of children who failed to stop stuttering by age seven.

Another study about stuttering and socio-cultural settings was conducted in South Africa (Platzky & Girson, 1993), where 70 percent of the black population consult with indigenous healers regarding medical, psychological, religious and social issues (Holdstock, 1979). Consequently, these healers play an essential role in primary health care, which includes the treatment of stuttering. Research on the practices of those healers, who originate from different African ethnic backgrounds, has found that treatment methods for stuttering include herbal medication, butchering animals, controlling breathing, inhaling smoke from the ashes of remedial products,

prayer, communing with ancestors, prolonged speech, and parental guidance (Platzky & Girson, 1993).

Abdalla and Al-Saddah (2009), mentioned above regarding the use of the POSHA instrument in Kuwait, also performed a qualitative study obtained by interviews in order to collect information regarding the school experiences of three Kuwaiti individuals who stutter. A common theme consistent among the three interviewees was of time pressure. For example, one interviewee retold that he was advised not to raise his hand in class or was ignored when in fact he did, an advice that affected him negatively and caused him social withdrawal. The authors stated that despite the inability to generalize this result on the basis of the personal reports of three individuals, such evidence is a striking reminder of how the teacher's approach can have a detrimental affect on the student, thereby leading to feelings of isolation and shame.

Interestingly, Zhang and Kalinowski (2012) conducted a study on listeners' gaze behaviors toward PWS during a verbal interaction. Different gaze responses were found among the three types of conversational partners. For example, African American participants manifested the longest time of gaze fixation over the mouth of the PWS in reaction to stuttering, in comparison to the Chinese and European-American participants. Once again, these results were interpreted by considering the background culture of each participant, suggesting that culture may have a significant effect on listeners' behavior in response stuttering. It was suggested that the oral tradition of the African American culture, which highly values the ability to speak continuously (Terrell & Jackson, 2002), might be a detrimental consideration.

The review in this section presented the attitudes and behavior toward PWS in several countries and cultures. However, little is known about the experience of PWS

in Israeli society. The following section aims to describe Israeli society and the possible implications for Israeli PWS.

## **5.2 Stuttering in Israeli society.**

### ***5.2.1 Demographics of Israel.***

According to Israel's Central Bureau of Statistics (CBS, 2014), the population of the State of Israel numbers approximately 8,200,000. Israeli society is highly heterogeneous and consists of various religions: 75.4 percent of the inhabitants are Jewish (about 6,037,700 individuals), 20.6 percent are Muslim and Christian Arabs (about 1,656,600 individuals), while the remaining four percent (about 318,100 individuals) are defined as "others" (family members of Jewish immigrants who are not registered as Jews at the Ministry of Interior, non-Arab Christians, non-Arab Muslims, and residents who do not have an ethnic or religious classification) (CBS, 2014). Among the Jewish Israelis, who comprise the greater part of the Israeli population, further groups and subgroups exist. A major reason for this is the fact that the State of Israel has served as a melting pot for Jews from all over the world (Diaspora Jews) since its establishment in 1948 (Yuchtman-Yaar, 2005). According to the CBS (2013), in 2011, Jewish society consisted of 70.2 percent Sabras (Israeli-born) – mostly second- or third-generation Israelis, while the rest were Olim (Jewish immigrants to Israel) – 20.5 percent from Europe and the Americas, and 9.3 percent from Asia and Africa, including the Arab countries. Other subgroups can be differentiated according to socio-economic status and political views.

Israeli Jews are also classified according to their religious denomination. A CBS (2012) survey of Israel's Jewish population shows that 43 percent of adult Jews

define themselves as secular, 38 percent as traditional, 10 percent as observant (Orthodox), and nine percent as ultra-Orthodox.

### ***5.2.2 Israeli Jewish subcultures.***

This study focuses on exploring two Israeli subgroups: secular Jews and ultra-Orthodox Jews. The following section describes these sub-groups.

#### *5.2.2.1 Secular Jews in Israel.*

Secular Jews comprise the largest Jewish sub-culture in Israel. This group, which is also heterogeneous and can be sub-categorized according to socio-economic subgroups, ethnic differences, level of education, native-born Israelis versus immigrants, and recent immigrants versus veteran immigrants (Arian & Keissar-Sugarman, 2011).

Secular society is a relatively open-minded culture that is exposed to changes in everyday reality. The essence of the values of this society resides in realizing the individual's best interests and achieving quality of life. Secular Jews believe in universal human democratic values, social justice, and in their freedom to follow people rather than Jewish religious laws (Malchin, 2000). According to Arian and Keissar-Sugarman (2011), the vast majority of secular Jews define themselves as secular but not anti-religious, with only a minority within this group defining 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 (Cohen & Zisser, 2003), not necessarily in a religious manner, but rather in the national sense of belonging – for instance, using Jewish symbols or seeking alternative ways to celebrate the Jewish festivals. Some examples: 98 percent of Israeli Jews fix a

*mezuzah* (a ritual doorpost device) to their front doorpost; 85 percent participate in a Passover *seder* (ritual meal); 67 percent fast on the Day of Atonement; 58 abstain from eating non-kosher food (Levi, Hana, & Katz, 2002).

Sheleg (2010) noted that in recent years, secular Israeli culture has begun to reincorporate the Jewish tradition, with some secular Jews participating in Jewish studies in Orthodox or secular institutions. However, this is not an indication of a general tendency on the part of secular Jews, but only of its cultural and social elite.

Moreover, like the majority of Israelis, secular Jews believe in the democratic principles of the Israeli State and its institutions. This is manifested in the adherence to the justice system, to the principle of separation of powers, and to the Basic Laws of Israel (Malchin, 2000). The vast majority of secular Jews view themselves as Zionists, that is, they support the notion of the Israeli State for all Jews, obey its laws, and serve in the Israel Defense Forces (IDF) (Arian & Keissar-Sugarman, 2011).

#### *5.2.2.2. Ultra-Orthodox Jews in Israel.*

Located at the other extreme of Israeli society are the ultra-Orthodox (UO) Jews. The UO community, the "Haredi Society" occupies the other – religious – end of the Israeli Jewish continuum (Feinson & Meir, 2014). UO Jews differ significantly from general society by their look, which is determined according to the court or affiliation to which they belong. In any case, their appearance is always characterized by modest attire that covers elbows, knees, neck as well as head covering (either by wig, hat or a kerchief) for women, and black hats and suits, white shirts, sidelocks, and beards for men (Shaked, 2005).

Despite their distinctive appearance and common principles, UO society is heterogeneous, diverse, and subdivided (Baumel, 2006; El-Or, 1992; Eran, 2003;

Friedman, 1991). This is exemplified in the dissimilar religious–philosophical approaches of the "Hasidim" and their opponents, the "Mitnagdim", each of which reflects a different rational philosophy pertaining to Judaism and the Jewish rituals (Brown, 2000).

A further salient subdivision of the UO community is the dichotomy between Ashkenazi Jews (Jews of European background) and Sephardic Jews (Jews of Middle Eastern or North African background) (Bilu & Goodman, 1997).

The highest values in UO society are the strict obedience of the Jewish law (*Halacha*), and, particularly for men, all day study of the Jewish texts, predominantly the Torah (the Bible) and the Babylonian Talmud (Shaked, 2005). The principle of daily Torah studies has led to the unique phenomenon of a "learning society" (Friedman, 1991), in which most Israeli UO men do not work (nor do they enlist in the IDF in order to perform their mandatory military service) (Stadler, 2004). This distinctive Israeli phenomenon exacerbates the poverty of UO families, which have 6.7 children on average (Zidki, 2013). As a result, there is massive dependency on financial support systems within the community (Berman, 2000) that reinforces UO solidarity with the community's values and needs (Friedman, 1991).

UO society can be described by means of four specific characteristics that can be particularly challenging to UO PWS:

*(1) Segregation and social control*

Ultra-Orthodox Jews are a minority in Israel and maintain a complex relationship with Israeli society at large (Efron, 2003). Most of them have adopted a model of segregation from the hegemonic values of society in general in order to fanatically preserve their cultural principles and patterns (Ayalon, Ben-Rafael, & Sharot, 1989; Lee & Tse, 1994; Orbe, 1998). This segregation results in "the Enclave

Culture" (Sivan, 1995), namely, a minority that functions with the overall aim of preserving its unique characteristics and has no interest in nurturing a relationship with the "external" general culture (Berry, 1990). In that sense, ultra-Orthodox Jews can be partially compared to the Amish and Mennonite sects of the United States of America, whose followers fastidiously keep their system of culture and symbols separate from American society in general (Driedger, 2000; Hostetler, 1993; Keim, 1993). Various strategies are implemented in order to achieve that segregation, including: (a) Geographic segregation, by living in ultra-Orthodox neighborhoods and boroughs. This has been termed "voluntary ghettoization" (Friedman, 1991; Sheleg, 2000); (b) Food segregation: Most citizens in Israel consume kosher food (food types and food preparation that are consistent with Jewish law). However, the UO consume food that is *kosher le'mehadrin*, that is, food to which additional restricting rules have been applied. As a result, UO Jews cannot visit their non-UO families and eat their food, nor can they eat at restaurants with a standard kosher certificate; (c) Educational segregation: the UO community has a different, independent education system in which strict separation between the sexes is enforced.

Segregation from society in general leads to "mechanical solidarity" (Durkheim, 1969), which allows the individual neither leeway nor independence, forcing him instead to commit himself to the interests and needs of the group (Goodman, 2003; Yafe, 2004), assume an identity that is defined by place and role in society rather than by individual ambitions or thoughts, control his emotions and urges, and obey the dictates of the community and its leaders (Goodman, 2003). The aim of achieving homogeneity, obedience, and resemblance among its members reflects the "orderly" pattern of this society (Barzilay, 2003), which exists in other religious groups as well. The high degree of interdependency of the members

engenders stringent social supervision; for example, adolescents' spiritual level is overseen by a *mashgiach*, a supervisor, or by one another during their daily studies or in the UO neighborhoods (Hechter, 1983, 1987). This unyielding social control can impose difficulties for individuals with special needs or circumstances, who are unable to fulfill the UO expected identity or behavior (Goodman, 2003).

(2) *The education system and values*

In the UO community, the greater part of childhood education focuses on the commitment to observing the Commandments and Jewish Law. Education is the primary tool for preserving the heritage and tradition of each UO community both individually and with the rest of ultra-Orthodoxy. This philosophy implies a 'total educational perception', that is, education that encompasses the student's world in its entirety (Heilman & Witztum, 2000).

At age three, UO boys start attending *cheider* (the UO kindergarten for boys) where they acquire reading skills, engage in religious studies, and play. At age five, they start attending *Talmud Torah*, an UO elementary school, where the focus gradually shifts from general studies to religious studies. At ages 14 to 17, the adolescents attend *Yeshiva Ktana* (Small Yeshiva), where only religious studies are taught, and at age 17, they begin attending *Yeshiva Gdola* (Big Yeshiva), concentrating on religious studies only, until marriage. Once married, the UO youngsters move to the *Kollel*, a Yeshiva for married UO men, where they continue spending most of the day studying (Berman, 2000; Heilman, 1992; Jobani & Perez, 2014).

There is also a special UO education system (primarily "Beit Ya'acov") for UO girls. The latter begin attending kindergarten at age three, and then attend elementary school until age 14. At that point, they attend the *seminar* until age 18. In

the following two years, they continue studying at the *seminar* in order to acquire professional certification in the various fields of education, graphics, informatics, or music. In recent years, for socio-political reasons, academic studies for UO men and especially for women have been recognized. The reason for this is to enable the women to support their families while their husbands engage in full-time study at the Kollel. For that purpose, a number of UO colleges have opened (Baum, Yedidya, Schwartz, & Aran, 2014), as have special separate programs within secular universities (Ezrati-Vinacour & Weinstein, 2011).

As described above, both boys and girls study in the UO education system, where they gain in-depth knowledge of Jewish studies. However, it is clear that the main emphasis and expectations of success are directed at the boys, particularly when they reach the Yeshiva stage. Upon entering the Yeshiva, the adolescents begin to learn and endorse the cultural codes expected of them as UO men, with the aim-of becoming a *ben Torah* ("son of the Torah") who meticulously practices all possible commandments. It is there that they absorb the feelings of continuity, righteousness, and social stability that are inherent in the overall UO mind-set. The young men'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 families' position in the UO hierarchy (Heilman & Witztum, 2000; Marx, 1993).

### (3) *Marriage arrangements*

Among the UO community, marriages are arranged by parents and a matchmaker. After the initial decision has been made, the two young people meet alone and converse. In some sectors of UO society, they meet only once; rarely do they meet more than four or five times. The ultimate decision of engagement remains by young couple (Greenberg, Stravynski, & Bilu, 2004).

The matchmaking process can be compared to a business deal, in which all parties frantically seek information. The matchmaker, therefore, encourages families and future spouses to collect valuable background details before accepting the matchmakers' proposal. In order to obtain this information, thorough enquiries are made. The information requested has been reported to concern hereditary diseases, physical and psychological traits of the prospective party, financial status, mental health, level of religious observance, and academic standard (Lehmann & Siebzeiner, 2009). Thus, the "rate" of people who are physically or mentally challenged or "flawed" in any other way declines steeply on the UO "stock market". Stigma may lead to a decline in social status in the closed UO society as well as the exclusion from the elite. Ultimately, the young people themselves or their siblings may be deprived of suitable "decent" marriage arrangements (Heilman & Witztum, 2000).

#### *(4) Speech-related religious practices*

The UO community in Israel affords certain cultural and religious circumstances that render the use of speech and communication particularly interesting. Since the UO attempt to adhere as strictly as possible to the Jewish religion, it is worthwhile considering the historical or traditional perspective.

According to tradition, God gave Moses the Written Law (the Torah) on Mount Sinai. Tradition further holds that the Oral Torah was delivered-at the same time in an oral modality. The Oral Torah is an elaboration on the Written Law and constitutes the basis of Jewish Law, which has been passed down from generation to generation ever since (Avot A:1), with discussions and argumentation concerning the true intention of the Oral and Written Law. The acts of communicating, discussing, learning, and debating the Oral Law were all conducted by means of dialogues and arguments among the Tannaim and later among the Amoraim (the equivalent of

rabbis), until they were finally transformed into written texts, namely, the Mishna and the Talmud. To this day, the acts of learning, arguing, and debating remain important acts of involvement in the Jewish lifestyle and duties. This implies that speech is an essential and frequently-used tool in everyday Yeshiva life.

Additionally, public performance plays a significant role in the life of UO men (Greenberg et al., 2004). It consists of three types of situations: learning, teaching, and praying. As described previously, teaching Torah confers the highest status in the UO world, and the title of *talmid haham*, that is, a student with an unrivalled level of religious knowledge, is a symbol of the topmost social achievement. The *talmid haham* is invited to give oral speeches at various social situations, including social encounters, ceremonies, and holiday meals. He is expected to deliver an oration pertaining to a religious theme. Hence, the act of speaking in public demonstrates the highest given appreciation. (Greenberg et al., 2004).

Another form of verbal studies is the *chavruta*, performed daily at the Yeshiva, wherein men study independently, in pairs, or in small groups. Leading prayers or reciting blessings is the most public performance situation. Communal prayer is considered as more valuable than individual prayer, and takes place three times a day. Three times a week, the prayers includes the ceremony of Torah reading, which involves several participants: the Torah reader, who is expected to read directly from the Torah scrolls according to a specific melody, the *gabbai*, the synagogue representative who invites specific people to an *aliyah* (the act of participating in the reading of a Torah paragraph by standing next to the reader), and the people who are invited to the Aliyah, which is accompanied with reciting a specific blessing loudly (Greenberg et al., 2004). The communal prayer is sang by the public and led by a *shliach tzibur*. Being a *shliach tzibur* is considered an honor that is only given to a

man with a good name (Orach Hayyim, 53:4 as cited in Greenberg et al., 2004).

Accepting the request is encouraged after a display of humility:

[He should] demur a little before going to lead the prayers, but not too much.

The first time he is asked, he should refuse; when asked a second time, he should get ready as if he is willing; and when he receives the third request, he should go straight there (ibid., 53:16).

Similarly, it is inadvisable to decline an invitation to recite the blessings over the Torah during public prayer since it is considered an honor (Greenberg et al., 2004).

Other public speech-related duties that are expected of and performed naturally by men within the UO community include reciting *kaddish* (an ancient prayer in memory of the deceased, recited daily by the mourner in a public prayer during the first year after death), *kiddush* (the benediction over wine), *hamotzi* (the benediction over bread), *birkat hamazon* (the benediction after the meal has ended), and *zimmin* (a loud, formal invitation issued to the men at the meal to commence reciting *birkat hamazon*).

Special events within the Jewish life cycle involve public speaking or praying – for example, a bridegroom under the *chupah* (i.e., the marriage ceremony), the blessing recited by the father of a male infant during the *brit mila* (i.e., the circumcision ceremony), and a youth of 13 celebrating his *Bar Mitzvah*, which is a ceremony that involves reciting blessings and reading from the Torah at the synagogue, as well as delivering a speech at the Bar Mitzvah party. All these events usually take place publicly in a gathering of family and friends.

These speech roles and situations are part and parcel of Jewish life and are performed by the majority of observant Jews – Orthodox and UO alike. However, the

circumstances of the UO community are such that since most UO men attend the Yeshiva on a daily basis, they participate in these ceremonies every day (in contrast to modern Orthodox men, who work and may recite one prayer a day or attend synagogue only on the Sabbath; Arian & Keissar-Sugarman, 2011).

In conclusion, UO society is characterized by unique social features and values related to observing Jewish law and traditions. This differentiates it greatly from Israeli society in general. However, this differentiation also results in a high demand for uniformity among its members, leading to social pressure that may exert an adverse effect on the person with individual needs or weaknesses. When reaching marriage age, the matchmaking process favors factors such as success in Jewish studies, robust health, and an immaculate family background. This means that challenged youngsters have a lower status and, consequently, fewer marriage options.

Considering the UO reality, it is inevitable for UO PWS to face frequent and unique speech circumstances. In addition to experiencing the reality of a closed and united society, UO PWS may be subjected to increased social pressure regarding their speech, possibly causing them to suffer from the burden of stuttering even more acutely.

However, a different factor involved in the UO membership should be considered, namely, religiosity. Being UO inherently implies high levels of religiosity, as discussed earlier. In the following paragraph, the role of this factor will be discussed.

### *Religiosity*

The term *religiosity*, or religiousness, refers to a wide range of aspects, for example, spirituality, the level of faith, communal participation in religious rituals and social support obtained through religious sources (Cohen, 2002).

It has been suggested that religion can enhance well-being in several aspects. These may include the fulfillment of wishes for self-transcendence, sociability, understanding the significance of reality, and a sense of control (Krause, 2011). All these may be the result of feeling close to God, being empowered by a perceived sense of orientation of a specific path to follow, and the resources of coping and support that are provided from the community and oneself (Hill & Pargament, 2003). Additionally, religiosity may create a solid social frame (Maselko, Hughes, & Cheney, 2011); and encourage the ability to self-regulate one's own endurance (McCullough & Willoughby, 2009). However, it has been argued that there is no fixed universal rule regarding the relationship between religiosity factors and psychological well-being, and that it is probably determined individually according to culture and the specific religion (Lavrič & Flere, 2008).

The following sections aim to depict how clinical populations are perceived and treated within UO society. Later, reports regarding UO PWS will be detailed.

#### *5.2.2.2.1 Reports about clinical populations within the UO community.*

UO society is a segregated society, and as such, does not easily permit any intrusion or inspection from the outside. It is difficult to gain access to the UO, and the challenges of attempting to recruit research subjects have been reported previously (Coleman, 2007; Gurovich & Cohen-Kastro, 2004; Neria-Ben Shachar, 2008; Rier, Schwartzbaum, & Heller, 2008). Thus, studies pertaining to UO society are harder to conduct, and publications dealing with respect to its members are limited in number and scope.

In recent decades, the awareness of the need for professional intervention in mental disturbances, learning disabilities, attention deficit disorders, and social

problems has grown greatly, and parents and kindergarten teachers are much more amenable to professional knowledge and assistance than they were previously (Yafe, 2009). Of the few studies performed among UO participants, some demonstrate a positive approach toward the disabled individual in UO society. For example, in Shaked's (2005) study, in which mothers of autistic children were interviewed, positive perspectives were demonstrated by most mothers – for instance, suggesting that their child had a high spiritual status or came to their lives with an important religious duty (Shaked, 2005). In another study dealing with the coping strategies of UO and secular parents of adolescent children with developmental disorders, parents filled in questionnaires regarding the sense of personal growth and the sense of coherence (the internal belief of the individual in his/her ability to cope with reality). The UO parents reported a greater sense of growth and coherence than the secular parents, emphasizing the role of religious faith in the coping process of families of children with developmental disorders (Manor-Binyamini, 2012). These studies may serve as an example of the role of religiosity in coping with a serious condition of a family member. Similarly, in a survey about life satisfaction among the UO and secular populations, including normal people and people with disabilities, nine percent of UO with disabilities reported that they were not satisfied with their lives as compared to 17.3 percent in the secular sector.

Although strength of religious belief has been found to play an important role in helping family members cope with difficult circumstances, it may also be a source of conflict. It is important to emphasize that the UO community still tends to be strictly traditional, and social stigma may arise from any minor alternation of the particular social norms. The social stigma in the case of UO society may stem from a lack of knowledge about a specific condition. This may be attributed to several

reasons. First, the fact that the UO constitute a closed community that eschews the national media, secular books, or the Internet (Berman, 2000) and may consequently miss out on general knowledge that may be acquired independently in other social groups. Second, the fact that a large proportion of the UO community is poor, for ideological reasons (Gonen, 2000; Shilav, 1997), may lead to lower standards of education, which in turn may result in misconceptions or ignorance concerning certain special medical or developmental conditions. It has been demonstrated that economic status and knowledge are correlative and may affect adherence to treatment or the implementation of medical recommendations (Bilenko, Yehiel, Inbar, & Gazala 2007).

An example of the role of stigma can be found in a report regarding cancer in the UO community. The authors, Mark and Roberts (1994), discuss the issue of stigma within the Hassidic UO community based on patients' expressions of fear that their disease would have a negative impact on their children's marriage possibilities. Another common example of the manner in which UO society generates stigma is the case of the widespread preconception against individuals diagnosed with a mental illness. Mentally ill individuals are often tagged and perceived as strange and disabled (Bilu & Witztum, 1993; Greenberg & Witztum, 1994; Shaked, 2001). They are frequently relegated to the margins of society and are placed in insolated mental institutions (Goodman, 2009). Unlike mentally ill secular people, some of the UO fail to seek psychiatric-psychological therapy in order not to be observed or discovered by others (Shtruch et al., 2007).

In the field of mental disorders, Greenberg et al. (2004) presented three cases of social anxiety disorder in the UO community. These cases deal with performing, that is, either delivering public speeches regarding religious issues – an act which

represents high social positioning and appreciation, or leading public prayers or rituals – an act which is associated with holiness and faithfulness. In addition, the fundamental value of learning leads to perceiving the challenged child as a failure – something that the family will attempt to hide (Marx, 1993). In the case of autism, Shaked's (2005) study of 30 UO mothers of autistic children explored their views on their children's functioning. All mothers discussed how their children would not meet the UO standards of Halacha and studying. Most viewed their son's condition and behavior as such that does not allow them to participate publicly in the communal activities and wished that there would be a way in which their children will be able to take part in the public setting and not be excluded (Shaked, 2005).

#### *5.2.2.2.2 Ultra-Orthodox Jews who stutter.*

Very few reports or studies dealing specifically with the field of stuttering in the UO community have been published, possibly because individuals from this community who stutter have hitherto kept their stuttering to themselves, or consulted with their rabbi instead of with a speech-language therapist (Ezrati-Vinacour & Weinstein, 2011). The latter researchers provided a specific description of the difficulties involved in recruiting UO participants for a study on stuttering and cluttering and revealed that the main obstacle resided in the fact that the Yeshiva boys were not allowed to participate. However, in their review, they described the management and challenges of stuttering with respect to UO Jews:

In Israel the social and cultural processes that exemplify the importance of modern technologies have been ignored by the Jewish ultra-Orthodox sector, where speech has retained its importance. It is used as a tool to transfer knowledge, values, and Jewish philosophy in the framework of the family and

in different learning settings. The fact that yeshiva students focus on studying Torah in pairs or groups, [...] stresses the importance of speech as their main tool for study and debate, with rapid speech being considered an advantage. It is very difficult for PWS to take part in a study setting of this kind (ibid., p. 175).

Another brief report on stuttering and the Jewish cycle of life described the fears of a Jewish PWS when he was called up to read the Torah during his Bar Mitzvah service upon reaching the age of 13 (Robinson Jr., 2012). In the United States, which boasts a large Jewish community numbering 5-5.8 million of whom only ten percent are Orthodox (The Pew Research Center, 2008), the Jewish Stuttering Association (JSA; Merkaz Kvad Peh) was established, its mission to "increase stuttering awareness within the Jewish community" (Schwartz, 2011, p. 34). According to Prof. Chuck Goldman, a member of the JSA board, the rich tradition of Judaism lies on the transmission of ideas and texts orally

*Chavruta* (joint study) learning to sharing a *vort* (short speech) and *davening* (praying) for the *amud* (the lectern where the leader of prayer stands) [...] At the Shabbos table or in the classroom, when many people children are competing for attention, the stutterer may be left out [...] and of course, on the *shiduch* (matchmaking) scene, a time already fraught with anxiety, stuttering only compounds it (ibid., p. 35).

In our daily clinical practice, we meet the UO PWS, who describe their challenges in concern to their stuttering, in many of the above mentioned circumstances. Our clinical experience with respect to working with UO clients has accumulated over the years, and understanding of their life circumstances has been helpful in defining treatment goals. Also, we have come to realize that certain

adaptations must be made when working with such clients. Examples for such adaptation are the preference of a male SLT in case of an adult PWS; when the SLT is a woman, most UO clients would prefer that the clinic door be left partially open; most UO clients would avoid eye contact with a female SLT. Research data about stuttering therapy for UO clients, and the experience of therapy for them, is yet unavailable.

## **6. Research Purpose**

In the field of stuttering, various etiologies have been proposed in order to explain the origin of the disorder. In recent years, it is referred to as a disorder with an organic predisposition which interacts with environmental factors (Rustin, Botterrill, & Kelman, 1996; Yairi & Seery, 2011). The nature of stuttering, that is, occurring and being frequently overt in communicational situations, with variable degrees of severity, assigns a meaningful role to the conversational partner of the CWS or PWS.

In this paper, we extend our view regarding the role of the conversational partner to the role of society, which includes not only individuals but also trends and attitudes of larger groups of people toward stuttering. Studies on public attitudes toward stuttering demonstrate the negative stereotype of CWS and PWS as well as the differences between countries and cultures. The attitudes and perceptions of stuttering result in reported negative behaviors toward PWS throughout their lifetime. As stuttering commences and persists, the individual who stutters sets out on a journey in which he experiences the multi-dimensionality of the disorder and its impact on his daily life. Among the dimensions of the disorder are the severity of stuttering, the tribulation of daily communication, the emotions and attitudes toward his stuttering, and the effect of stuttering on his quality of life and on his sense of well-being.

As is the case with any problem, the mechanism of coping becomes active and results in several coping strategies. Despite the knowledge and findings regarding stuttering and the attitudes toward it in several cultures, little is known about stuttering and Israeli society. Additionally, the Israeli culture is diverse and may include different attitudes and behaviors toward the PWS. In Jewish Israeli society, UO society is considered to be a sub-culture that is segregated and cohesive – a fact that may result in community pressure and expectations. This is a culture in which

men are dedicated to worshipping God and performing religious acts and ceremonies on a daily basis. On the one hand, this reality could be a source of great pressure and conflict for the PWS. On the other, the high levels of religiosity that are inherent in the UO culture may provide the PWS with a more positive frame for coping. This possibility is described in studies showing the role played by religiosity in the positive well-being of the individual.

The aim of this dissertation, therefore, is to explore the experience of stuttering in accordance with the cultural perspective in Israel. Specifically, this study seeks to investigate the experience of stuttering among adults from the UO Jewish community and from the secular Jewish community. By so doing, we hope to contribute to the understanding of the possible role played by various socio-religious cultures in the experience of stuttering. The findings pertaining to the UO culture may benefit PWS from other socio-religious cultures around the world as well.

## 7. Research Design

In order to address the goals of the present research, we chose a methodology of triangulation, which includes the combination of both quantitative and qualitative research. As stated by Denzin and Lincoln (2005, p. 5):

The use of multiple methods, or triangulation, reflects an attempt to secure in-depth understanding of the phenomenon in question... Triangulation is not a tool or a strategy of validation, but an alternative to validation (Flick, 2002, cited in Denzin & Lincoln, 2005). The combination of multiple methodological practices, empirical materials, perspectives and observers in a single study is best understood as a strategy that adds rigor, breadth complexity, richness and depth to any inquiry.

In the case of the present dissertation, we would like to expand the breadth and depth of the study by using different methods for different research components (Greene, Caracelli & Graham 1989). Consequently, two studies were designed: Study I addresses the study questions in quantitative methods, whereas study II uses qualitative ones. Due to the fact that little is known about stuttering with respect to religious or social background, and in particular among the UO society, we chose to present research questions, rather than research hypotheses.

## Chapter B: Method

### 1. Study I: The Experience of Stuttering among UO and ST PWS

#### 1.1 Research questions.

The main question of this study was whether the socio-cultural background of PWS is associated with the experience of stuttering. In attempt to answer this question within the quantitative section of study, this question was divided into two sub-questions:

1. Is there a difference in the <sup>1</sup>experience of stuttering between Israeli Ultra-Orthodox PWS and Israeli secular people who stutter? If so, in which measures, and towards which direction?
2. Is there a difference in the <sup>2</sup>coping behavior, specifically avoidance of speech and speech situations, between Ultra-Orthodox PWS and secular people who stutter? If so, in which direction?

---

<sup>1</sup> For the sake of this study, the term "The experience of stuttering" was defined as including: The subjective self-perception of stuttering, the emotional reaction to stuttering, the burden of stuttering, the impact of stuttering on their quality of life, general life satisfaction, the perception of the role of speech for personal success

<sup>2</sup> The following study, in which qualitative methods are used, will allow a broader description of other coping behaviors as well.

## **1.2 Participants.**

Sample included a total of 100 participants in the ages of 18-67 years. All participants were adults who stutter. The recruitment process of participants was based on volunteers. The call for volunteers was in the following ways: contacting speech language therapists who work with clients who stutter- either by phone or through an advertisement on the Speech Language Therapists forum on the Internet; an advertisement on the Facebook forum for people who stutter; contacting the Israeli Stuttering Association (AMBI) and spreading the call for volunteers among its mailing list.

Inclusion criteria:

- Being a person who stutters at the present.
- Age of at least 18 years
- Being Jewish and an Israeli citizen for at least 20 years.
- Gender- given that stuttering is a disorder that affects mostly males, we decided to focus this study on male people who stutter, in order to isolate the gender variable.

Exclusion criteria:

- a. The presence of any other speech disorders
- b. The presence of other physical, neurological or psychiatric disorders.

Additionally, a second step of recruited was attempted by contacting speech language therapists from Canada, USA and England, in attempt to collect data on participants from their respective Jewish communities in attempt to enlarge the

number of participants. However, we reached only 4 participants: 1 participant was a woman who stutters, and the remaining 3 were modern-orthodox people who stutter. Since these participants did not match the study purpose and questions, it was decided to exclude their answers from the statistical analysis.

The participation on this study was mostly anonymous by questionnaires. Thus, the fact that a participant is in fact a person who stutters was determined by three criteria:

1. Self-definition: the participant defines himself as a person who stutters. All participants were asked about their stuttering (e.g."are you a person who stutters?","when did you start stuttering?") and answered positively that they do stutter at the present.
2. External criterion: All participants were recruited either by speech language therapists, who referred present or former clients who stutter, or via the Israeli Stuttering Association (AMBI) e-mailing member list
3. Subjective self-rating of stuttering severity: All participants rated their stuttering severity on a scale of 1 to 10 (see research tools). Ratings of all participants were above 2.

In addition, the majority of participants reported on having been treated for their stuttering by attending speech therapy ( $n=83$ ; 87.3%).

### ***Social/ religious group division.***

As a first step, we divided our sample to religious-social groups, according to their answers in the demographic questionnaire (see in research tools) to the question "Please mark your denominational (religious) affiliation: Ultra-orthodox/ modern

orthodox/ traditionalist/ secular". Consequently, participants were divided into three main groups: Ultra-orthodox (UO;  $n=33$ ), modern-orthodox (MO;  $n =18$ ), and secular-traditionalists (ST;  $n =49$ ). Secular and traditionalist were merged to be on the same group since usually traditionalists are people who usually keep a lifestyle that is similar to the one of secular Jews, with the preservation of few Jewish habits (as eating Kosher food, attending the synagogue on the special Jewish festivals), but generally not committed to a religious lifestyle or habits (The Israeli Democracy Institute, 2011).

While viewing our data, we noted that the gender distribution in the whole sample reached to 72% ( $n =72$ ) males and 27% ( $n =27$ ) females. This ratio is a somewhat different than the one reported in literature, with higher percentage of females and lower percentage of males (the most recent work, by Van Borsel, Moeyaert, Rosseel, Van Loo & Van Renterghem, 2006, reported on a male-to-female ratio of 4.6:1 for school aged children; this ratio may be higher for adults). In addition, after the division of groups, Chi-Square analysis was performed in order to examine whether the gender distribution was comparable. Results are presented in table 1.

Table 1

*Gender Proportions (%) and Chi-Square Result among the Religious-Social Groups*

Categories	UO (n=33)	MO (n =18)	ST (n =49)	$\chi^2$
Male	97	50	63.3	16.382**
Female	3	50	36.7	

*Note.* UO= ultra-orthodox; MO= modern-orthodox; ST=secular-traditional

As shown in table 1, the male-to-female distribution is statistically different between groups. This finding, in addition to the unexpected male-to-female ratio in the whole sample, led us to exclude female participants from the present analysis, resulting in 72 male participants: 44% ( $n =32$ ) male Ultra-Orthodox (UO), 13% ( $n =9$ ) male Modern Orthodox (MO) and 43% ( $n =31$ ) secular-traditionalists (ST). Further analysis of involving the female participants will be reported in section ZX.

In addition to marking their religious-social affiliation, participants were asked to rate their level or religiosity on a scale of 1 to 10 (10=extremely religious, 0=not religious at all). In order to examine whether participants differed in their subjective self-rating of religiosity, ANOVA was performed. Results are presented in table 2.

Table 2

*Means, SD and ANOVA of Self-Rated Level of Religiosity among Groups*

	UO (n=32)	MO (n=9)	ST (n=31)	ANOVA	Post-hoc
Subjective rating of religiosity	9.34 (1.2)	7.13 (2.73)	2.73 (2.08)	128.64*	UO>MO>ST

*Note.* UO= ultra-orthodox; MO= modern-orthodox; ST=secular-traditional. \*  $p<0.001$

As shown, significant differences in the self-rating of level of religiosity were found between groups. Post hoc analysis revealed that ultra-orthodox rating of religiosity was significantly higher than the Modern Orthodox, which had higher rating than the secular traditionalist group. This result validates the division of participants into the religious-social groups reported above.

***Stuttering assessment.***

Due to the anonymous nature of this study, the measurement of the participants' stuttering levels was inapplicable. However, subjective self-rating of stuttering was assessed (see research tools). In order to examine whether participants differed in their subjective self-rating of stuttering severity, ANOVA was performed. Table 3 shows means and standard deviation of the subjective self-ratings of stuttering severity of the three groups. No significant differences in the subjective self-rating of stuttering severity were found between groups ( $p=0.75$ ).

Table 3

*Means and Standard Deviation of the Stuttering Severity Self-Rating among Groups*

Variable	UO ( <i>n</i> =32)	MO ( <i>n</i> =9)	ST ( <i>n</i> =31)	ANOVA	$\eta^2$
Self-rated stuttering severity	5.19 (1.81)	4.63 (1.68)	4.13 (1.77)	2.69	0.75

*Note.* UO= ultra-orthodox; MO= modern-orthodox; ST=secular-traditional

Additionally, chi-square analysis was performed in order to examine whether groups differed in their speech therapy history. Results are presented in table 4. No differences were found between groups.

Table 4

*Percentage of Participants who Attended Speech Therapy*

Variable	Categories	UO (N=32)	MO (N=9)	ST (N=31)	$\chi^2$
Speech therapy	Yes	93.5	88.9	80.6	2.35
	No	6.5	11.1	19.4	

*Note.* UO= ultra-orthodox; MO= modern-orthodox; ST=secular-traditional

***Demographic characteristics.***

Chi-square tests were performed in order to compare the nominal variables and ANOVA in order to compare the parametric variables. The distribution of the participants in the nominal background variables: country of birth, marital status, education and the results of chi-square test are presented in table 5.

Table 5

*Distribution of Demographic Data in Percentages and Chi-Square Results for Each Group Individually*

Variable	Categories	UO (n=32)	MO (n=9)	ST (n=31)	$\chi^2$
Country of birth	Israel	86.7	77.8	83.9	0.810
	Abroad	13.3	22.2	16.1	
Marital status	Single	73.3	44.4	41.9	9.46
	Married	20	33.3	51.6	
	Divorced	6.7	22.2	6.5	
Education	up to 12 years	12.5	44.4	32.3	5.352
	Beyond 12 years	87.5	55.6	67.7	

*Note.* UO= ultra-orthodox; MO= modern-orthodox; ST=secular-traditional

Chi-square analysis yielded no significant differences between groups in their country of birth and education background. However, it should be noted, that the marital status variable nearly reached significance ( $p=0.051$ ), with higher percentage of single participants in the UO group.

Table 6 presents mean and standard deviation of groups in the parametric variables: age, and socioeconomic status, measured by the ratio between the number of persons in the house per the number of rooms.

Table 6

*Means and Standard Deviations of the Parametric Variables, Followed by ANOVA and Post-Hoc Analysis*

Variable	UO (n=32)	MO (n =9)	ST (n =31)	ANOVA	Post-hoc analysis
Age	30.4 (5.75)	30.42 (13.93)	39.24 (13.49)	2.73	UO=MO=ST
Person/room	1.61 (1.01)	1.17 (0.31)	0.87 (0.37)	8.12**	UO>ST

*Note.* UO= ultra-orthodox; MO= modern-orthodox; ST=secular-traditional.\*\*p<0.001

ANOVA revealed significant differences between groups in the person-to-room ratio, indicating that UO's ratios are higher than the ST's ratios. This characteristic is not surprising, since the UO society is known for having high fertility rates and low income (Berman, 2000).

### **1.3 Research tools.**

#### 1. Personal information questionnaire

This questionnaire included questions about demographics, religious affiliation, medical and psychological background, information about the stuttering onset, duration, and family history. This questionnaire also included questions about the religious background, as follows:

- a) Jewish religious identity and observance ("what specific denomination are you?"), recoded as: 1 = hiloni (secular), 2 = masorti (traditional), 3 = dati (modern orthodox), 4 = haredi (Ultra-orthodox).

b) Level of religiosity – Participants were asked to rate their level of religiosity ("what is your level of religiosity?" on a Likert-type scale, from 1 to 10, where 1 represents "not religious at all", and 10 "extremely religious".

## 2. Subjective self-rating of stuttering

This tool was used in order to assess the individual's self-perception of stuttering severity. Each participant was asked to rate his stuttering severity on a scale between 1 to 10, where 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). (For an example of such scale, see appendix 1).

## 3. The Overall Assessment of the Speaker's Experience of Stuttering (OASES; Yaruss & Quesal, 2006).

This questionnaire aims to describe the experience and impact of stuttering from the perspective of the individual who stutters. The measure consists of 100 items in four separate sections, each examining a different aspect of the stuttering condition:

- I. General Information- This is a 20 items subscale, which aims to measure general perspectives about stuttering such as (a) perceived fluency, (b) speech naturalness and (c) knowledge about stuttering
- II. Reactions to Stuttering- This 30 items subscale pertains to the speaker's emotional reaction to stuttering, by rating items on (a) feelings, (b) associated secondary stuttering symptoms and (c) attitudes.

- III. Communication in Daily situations- This 25 items subscale aims to measure the degree of difficulty speakers have when communicating (a) in general situations, (b) at work, (c) in social situations and (d) at home
- IV. Quality of Life- This 25 items subscale aims to measure how much stuttering interferes with the PWSs' satisfaction with their (a) general quality of life, (b) their ability to communicate, (c) their relationships, (d) their work and (e) their overall sense of well-being.

Responses are rated on a Likert scale with response choices ranging from 1 to 5. Higher scores indicate higher levels of impact. Responses are totaled into raw scores and then converted to scaled-scores or “impact” scores and impact ratings (mild–severe). Importantly, an overall impact score is provided for each section and for the entire instrument. Impact scores provide an indication of the impact of stuttering on various aspects of the speaker’s life. Empirical data have provided preliminary support for the reliability and validity of the OASES, based on samples collected in the United States (Yaruss & Quesal, 2006). Analyses revealed a high degree of test–retest reliability for impact scores, with mean differences ranging from 2.1 to 3 (standard error ranged from 1.9 to 2.6). Comparison between impact ratings revealed strong reliability between initial and follow-up administration of the OASES (Yaruss & Quesal, 2006).

This questionnaire was translated to Hebrew by two SLTs who dominate both English and Hebrew. When translation was concluded, a back translation from Hebrew to English was performed by a third independent SLT who was not familiar with the English version of the questionnaire. In case of differences of meaning between the original English version and the back translated version, these differences

were discussed by all three SLTs until an agreement of the best translation version was reached. Item 70 of the original questionnaire: "ordering food at a drive-thru", could not be translated to Hebrew due to cultural differences; a drive-thru is not common in Israel. Hence, we have replaced it with an item that could be similar in function and significance to the person who stutters: "ordering food on the phone". Cronbach's alpha for the present study was calculated for each section: section I=0.86; section II= 0.95; section III= 0.95; section IV= 0.97.

#### 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. Each item is to be rated on a Likert scale ranging from 1 to 4.

Answers to the questionnaire were averaged (negatively-keyed items were reverse scored, see appendix 2). A high number reflects a concept of high life satisfaction.

Reliability: This questionnaire was translated to Hebrew and was found to be highly reliable among Israeli adolescents, as was calculated by Cronbach's alpha 0.766 (Sagi, Ezer, Gilat & Reuveni, 2009). In the present study, Cronbach's alpha reached 0.865, indicating a high internal consistency.

#### 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 of interpersonal communication situations, e.g. ordering food at a restaurant, speaking on the telephone. Each item is to be rated in a Likert scale ranging from 1-5. Answers were averaged in order to reach a final score that reflects the avoidance behavior of the participant. A high score reflects high avoidance behavior. This questionnaire was translated to Hebrew and validated in a

previous study by Madnick (2006). Reliability: Calculations of Cronbach's alpha for the present study reached 0.98, indicating a high internal consistency. (An example of the SABC can be found in appendix 3).

#### 6. The Perception of Speech Significance in the Social Environment Questionnaire (PSSQ).

This questionnaire was especially composed for this study. It contains 26 items, divided into two main sections: section A and section B. Section A aims to assess the perception of speech significance in the social context ("In my social circle, it is important to..") and section B aims to assess the level of disturbance caused by stuttering. Section A includes 17 items: (I) 14 items relate to the significance of speech in the individual's society in specific speech activities: (i) 6 items regard situations that are common in all types of Jewish sub-groups (e.g., Deliver a speech at a festive family gathering/occasion, to express an opinion in an argument or discussion with friends), and (ii) 8 items regard speech situations that are mainly relevant for the religious Jewish lifestyle (e.g. to lein the *parasha*, to make *kiddush* in front of other people). (II) 3 items relating to the significance of speech to the personal success (e.g., my speech is the main way in which I express my expertise and knowledge). Section B includes 9 items: (i) 4 items relate to the level of disturbance of stuttering at the present, in specific situations or places (home, work, yeshiva, university) (ii) 5 items relate to the degree of disturbance of stuttering in the past in different places (home, school, work, yeshiva, university). Participants were required to rate each item on a scale ranging from 1 to 5 (or choose- Non Applicable): "1" represented in section A: "Strongly disagree", in section B "Not at all", "5" represented the extreme opposite (for an example of this questionnaire, see appendix 4). Alpha

Cronbach's calculations indicated high level of internal consistency between items, reached 0.865, indicating a high internal consistency: for section A, Cronbach's alpha was I (i) 0.917, I(ii) 0.92, II 0.784. For section B, Cronbach's alpha was (i) 0.919, (ii) 0.889, (iii) 0.852.

In order to examine the validity of Section B(i), i.e. " Disturbance of stuttering at the present" and Subscale III "Communication in daily situations" of the Hebrew OASES Pearson correlation was performed. Results revealed a significant positive correlation ( $r=.64$ ,  $p<0.01$ ), indicating a high validity.

In order to examine the validity of Section I subscale A of the Hebrew OASES and the subjective self-rating of stuttering, Pearson Correlation test was performed. Results revealed a significant positive correlation, among participants of all groups ( $r=.404$ ;  $p<0.01$ ;  $N=67$ ), indicating that as the perceived level of stuttering severity increases, the scores on Section I subscale A also increase. This result contributes to the validation of the subjective self-rating of stuttering, and Section I subscale 1 of the Hebrew OASES.

To assess validity of Section IV items ("quality of life") of the Hebrew OASES, Pearson correlation test was also calculated between Section IV of the Hebrew OASES scores("quality of life") and the Life Satisfaction scale scores. Results revealed a significant negative correlation between scores ( $r= -.64$ ;  $p<0.001$ ), indicating that as the effect of stuttering on life quality (scores of OASES Id) decreases, the scores of Life Satisfaction are higher. These results support the validity of the Hebrew translation of this section of questionnaire.

#### **1.4 Research procedure.**

Participation in this study was based on self-filling questionnaires. Questionnaires were spread both online and in printed copies. The online questionnaires were published on the Limesurvey platform of TU Dortmund University. The direct link to the questionnaires was published and spread among all potential participants or speech therapists. The printed questionnaires were spread with a prepaid envelope, among SLTs who work with UO clients. The hard-copy questionnaire distribution was necessary in order to reach UO participants, since most UO people do not use the internet, due to religious restrictions set by the head Rabbis (CBS, 2012).

On the first page, participants were introduced to the study, and a short explanation about the topic of the study was generally provided: "the topic of this study is to explore stuttering in the cultural context". Participants were asked to answer all questions anonymously, i.e. they were not asked to state their name or ID number. Only in the last page of the survey, were the participants offered to proceed to a second step of the study, and in case they were interested, they were to leave their contact information.

## **2. Study II: Stuttering across the lifespan, coping and therapy**

### **2.1 Research questions.**

The purpose of this study is to expand our view of the experience of stuttering among UO Israelis who stutter, and secular Israelis who stutter. By using a qualitative approach, in-depth information can be provided. The research questions of this study are as follows.

1. How do Israeli UO and secular interviewees who stutter experience stuttering at the present and in the past? What kind of responses to stuttering have they experienced? How do they feel about stuttering?
2. Are there any experiences of stuttering related to the culture/social background of the Israeli UO and secular interviewees?
3. What kind of coping strategies can be identified among Israeli UO and secular interviewees who stutter?
4. How have the UO and secular interviewees who stutter experienced therapy? What are their insights about past and present therapies?

## **2.2 Participants**

The participants of this part of the study are people who completed printed or online questionnaires for study 1, and agreed to leave their contact details in the final section of the survey, after the completion of questionnaires. Thirty one people left their contact details and were contacted. Out of those contacted, fourteen responded back, five UO, seven secular, and two who did not belong to the UO or secular groups. Finally, eight participants, those who were available in time and place, were interviewed. Four adults from the Israeli UO community, in the ages of 22- 38 years (mean age 29.75), and four Israeli secular Jews, in the ages of 27-62 years (mean age 41.25) participated in this study. Due to the epidemiological nature of stuttering, which describes significantly higher ratio of males versus females in adulthood, most responses to the survey were men. In order to unify the gender factor, all interviewees were males.

## **2.3 Research design.**

A qualitative methodology was employed in order to analyze oral interviews that were held with adults who stutter who are UO and secular Israeli Jews. Prior to the practical stage of interviews, the study was authorized by the ethics committee of Ariel University of Samaria, Israel.

## **2.4 Research procedure.**

A semi-structured questionnaire, which consisted of 19 open ended questions, was used in order to interview each participant. This questionnaire was developed in a brain storming process of two SLTs who are experts in the field of stuttering, one psychologist and one psychologist who is also a SLT.

As a first step, questions that are commonly used in an evaluation interview (e.g. Guitar, 2006) were selected. As a second step, these questions were elaborated in order to assure detailed answers. As a last step, specifically relevant questions for the purpose of the study were added. The questionnaire mainly included questions about retelling episodes about stuttering from the different stages of life, from childhood to adulthood; in addition, they were asked to describe their experience of stuttering in specific speech situations, their perception about their stuttering, questions about their family and social environment and their reaction to the stuttering, and finally, they were asked about their experience of therapy and their insights about stuttering (see Appendix 5).

Each interview took place at the best convenient location for the participant: four interviews were performed at the researcher's clinic, four at the interviewees' work place. In average, most interviews lasted two hours. At the beginning of the interview, each participant signed a consent stating that the participation in the study is out of his free will. All interviews were recorded using a Phillips Voice Recorder. After conclusion of interviews, they were manually transcribed. Then, transcriptions were analyzed.

## **2.5 Data analysis.**

In order to start building a coding frame, a distinction between relevant and irrelevant parts of the data, in order to focus on the relevant parts (Schreier, 2012). In order to avoid creating bias when selecting material, the selection of data was held in a research team (Schreier, 2012), which consisted of another researcher who double-checked the passages that were marked as irrelevant or doubtful (Schreier, 2012).

Then, we continued with a process of structuring a coding frame, i.e. deciding which dimensions will be used to describe the data, and then generating subcategories for each dimension (Schreier, 2012). This process was achieved by combining two strategies: (a) A concept-driven way, (b) a data-driven way. The concept driven way included using the interview topics as a deductive framework that provided the initial identification of the main dimensions (Schreier, 2012). Then, a data-driven approach, derived from the grounded theory (Strauss & Corbin, 1990) was used in order to base the dimensions, and further create categories and subcategories.

Specifically, the process of analysis was as follows: First, all transcriptions were read independently by two experts (the researcher and a statistician) using a holistic perspective aimed at identifying the salient dimensions constituting the focal points in the conversation. After reaching an agreement on the list of these broad dimensions, the descriptions were reanalyzed, aimed at identifying more specific categories in each dimension. The two experts also carried out this procedure in order to reach agreement on the list of categories.

In addition, throughout the analysis, attention was given to the use of language by participants, and language was analyzed according to the semiotic approach to language (Tobin, 1991; Tobin, 1994). The methods for text analysis developed by the semiotic approach are based on the premise that there is a causal connection between the non-random distribution of the language in a spoken and written discourse/text and the extra-linguistic message of that discourse/text. The goal of this textual analysis is to uncover this non-random distribution of the language in the text and indicate its direct and indirect contribution to the extra-linguistic message of the discourse/text.

## Chapter C: Results

### 1. Study I

This chapter presents results arranged in themes, which will be the basis on which the discussion chapter will follow. The research tools that were used for this study are the basis for presenting the results.

As detailed in the method chapter, the statistical analysis was conducted on the male participants of the study, reaching 72 male adults who stutter, of three religious affiliations: ultra-orthodox (UO), Modern Orthodox (MO), and secular-traditionalist (ST). Out of those three groups, the MO group consisted of a small sample size ( $n=9$ ), which does not permit their inclusion as a group in the study. Furthermore, the option of merging the MO group with the UO group was considered but ruled out, due to significant sociological and ideological differences between these religious groups. Consequently, the MO participants were excluded from the study sample. The following results relate to two main groups: the Ultra-Orthodox (UO) people who stutter (PWS;  $N=32$ ), and the Secular-Traditional (ST) people who stutter (PWS;  $N=31$ ).

The first section of results relates to the main research question: whether UO and ST PWS differ in the experience of stuttering, which includes: The subjective self-perception of stuttering, the emotional reaction to stuttering, the burden of stuttering, the impact of stuttering on their quality of life, the general life satisfaction, the level of avoidance of speech and speech situations and the perception of the role of speech for personal success.

#### 1.1 Overall experience of stuttering.

In order to compare groups in the overall experience of stuttering as measured by the overall impact OASES scores (i.e., average of all answers of the full

questionnaire), analysis of covariance (ANCOVA) was conducted with the group (ST/VO) as an independent variable, severity of stuttering as a covariate and the OASES total average scores as the dependent variable. Results indicated a significant difference between groups  $F(2,55)=3.96, p<0.05, \eta^2=0.067$ , with lower impact scores for the VO group ( $M=2.42, SD=0.52$ ) than in the ST group ( $M=2.59, SD=0.76$ ), indicating a more positive stuttering experience among the VO group. These results are displayed in figure 1.

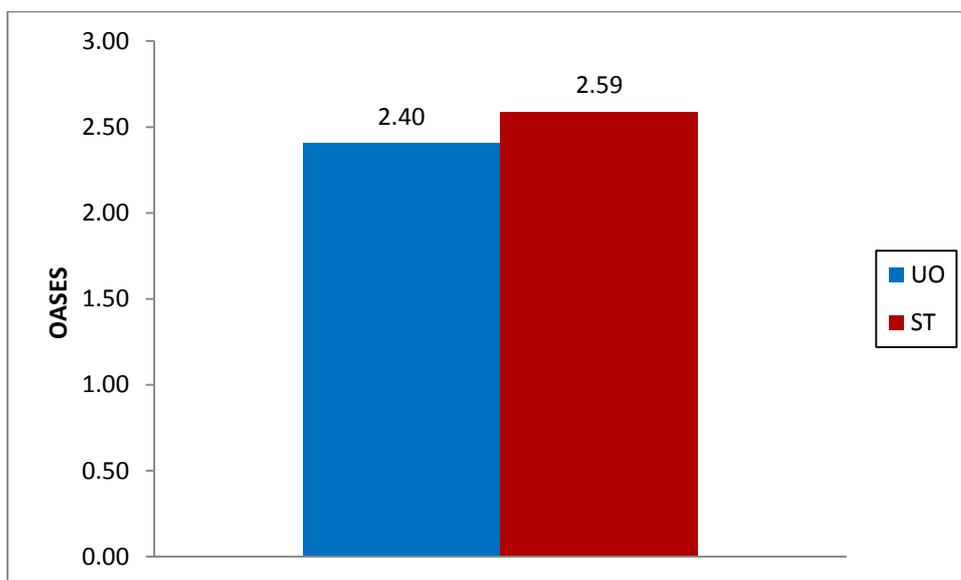


Figure 1. Group comparison of mean scores of the Overall Assessment of Speaker's Experience of Stuttering (OASES; Yaruss & Quesal, 2006). VO= Ultra-Orthodox; ST=Secular traditional.

\* $p<0.05$

## 1.2 Self-perception of stuttering.

In order to compare the self-rated stuttering severity between the VO participants ( $M=5.19, SD= 1.81$ ) and the ST participants ( $M=4.13, SD=1.77$ ), a t-test was conducted. Results revealed a significantly higher level of severity self-ratings in

the UO group ( $t(61)= 5.31, p<0.05, \eta^2=0.083$ ) than in the ST group, indicating that the UO participants perceive their stuttering as more severe than the ST participants.

Additionally, the perception of stuttering was measured in more detail in section I of the OASES ("general information"). Therefore, in order compare the mean scores of the OASES-I subscales ("general information") between the UO participants and the ST participants, multiple analysis of variance (MANOVA) was performed. Using the Pillai's trace, the MANOVA test revealed no significant multivariate main effect of group,  $F(3,53)=1.92, p=129$ . Means and standard deviation of the OASES-I subscales and total average score are presented in table 7.

Table 7

*Means and Standard Deviations for Section I Subscales of the OASES in the UO and ST Groups*

OASES-I	UO <sup>a</sup>	ST <sup>b</sup>
	<i>M(SD)</i>	<i>M(SD)</i>
A	2.68(0.5)	2.85(0.58)
B	2.74(0.91)	2.83(0.94)
C	2.61(0.62)	2.9(0.83)
Total	2.68(0.53)	2.91(0.58)

*Note.* UO=Ultra-Orthodox who stutter; ST= Secular-Traditionalists who stutter.

<sup>a</sup> $n=28$ . <sup>b</sup> $n=30$ .

Due to the differences in stuttering severity self-ratings, the following analyses of variance were conducted by controlling for the variable of self-rating of stuttering severity, which may be considered also an independent variable.

### 1.3 The cognitive and emotional reaction to stuttering.

In order to examine whether UO and ST groups differ in their mean scores of the OASES section II ("your reaction to stuttering") three subscales and total scores (see table 8), multiple analysis of covariance (MANCOVA) was performed, with the groups (UO/ST) as an independent variable, severity of stuttering as a covariate, and SECTION II average scores of the OASES as the independent variable. Using the Pillai's trace, the MANCOVA test revealed no significant multivariate main effect of group,  $F(3,52)=2.27, p=.091$ .

Table 8

*Means and Standard Deviations for Section II subscales of the OASES in the UO and ST Groups*

OASES-II	UO <sup>a</sup>	ST <sup>b</sup>
	<i>M(SD)</i>	<i>M(SD)</i>
A	2.38(0.93)	2.62(0.92)
B	2.62(0.92)	2.68(0.87)
C	2.93(0.73)	2.76(0.98)
Total	2.64(0.57)	2.91(0.58)

*Note.* UO=Ultra-Orthodox who stutter; ST= Secular-Traditionalists who stutter.

<sup>a</sup> $n=28$ . <sup>b</sup> $n=29$ .

#### **1.4 Avoidance.**

In order to examine whether the level of avoidance of speech differs between the UO ( $M=2.15$ ,  $SD=0.65$ ,  $n=26$ ) and ST ( $M=2.09$ ,  $SD=.86$ ,  $n=22$ ) groups, analysis of covariance (ANCOVA) was conducted with the group (UO/ST) as an independent variable, severity of stuttering as a covariate and the Situation Avoidance Behavior Checklist (SABC; Cooper, 1976) scores as the dependent variable. No significant differences were found between groups,  $F(1,45)=0.41$ ,  $p=0.52$ .

As a further step, in order to see whether specific items differed between groups, multiple analysis of covariance (MANCOVA) was conducted for each of the 50 items of the questionnaire. Only two questions were significantly different between groups. This result was considered to be coincidental and therefore not presented.

#### **1.5 The burden of stuttering.**

In order to examine whether groups differ in their rating of burden of stuttering scores of Section III of the OASES, and scores of section B subscales of the Questionnaire for the Perception of Speech Significance.

In order to examine whether UO and ST groups differ in their mean scores of section III of the OASES (see table 9), multiple analysis of covariance (MANCOVA) was performed, with the groups (UO/ST) as an independent variable, severity of stuttering as a covariate, and subscales of Section III of the OASES average scores as the independent variable. Using the Pillai's trace, the MANCOVA test revealed no significant multivariate main effect of group,  $F(4,36)=1.22$ ,  $p>0.05$ .

Table 9

*Means and Standard Deviations for Section III Subscales of the OASES in the UO and ST Groups*

OASES-III	UO <sup>a</sup>	ST <sup>b</sup>
	<i>M(SD)</i>	<i>M(SD)</i>
A	2.55(0.79)	2.51 (0.85)
B	2.61(0.98)	2.35 (1.09)
C	2.13(0.85)	2.31 (1.04)
D	1.80(0.74)	1.79 (0.9)
Total	2.3 (0.59)	2.31 (0.87)

*Note.* UO= Ultra-Orthodox who stutter; ST= Secular-traditionalists who stutter.

<sup>a</sup>*n*=16. <sup>b</sup>*n*=26.

In order to examine whether groups differ in scores of the section B subscales of the Perception of Speech Significance Questionnaire (PSSQ), two-way analysis of variance with repeated measures: GROUP x TIME (at the present/in the past) was performed, with the perceived burden of stuttering. The analysis yielded the main effect of time,  $F(1,47)=5.09, p<0.03, \eta^2=.37$ , resulting from a higher level or burden in the past than at the present. No significant interaction was found,  $F(1,50)=1.81, p>0.05$ , indicating that the effect of time does not differ between the two groups. In addition, no significant main effect of group was found  $F(1,50)=0.01, p>0.05$ .

Means and standard deviations are presented in table 10.

Table 10

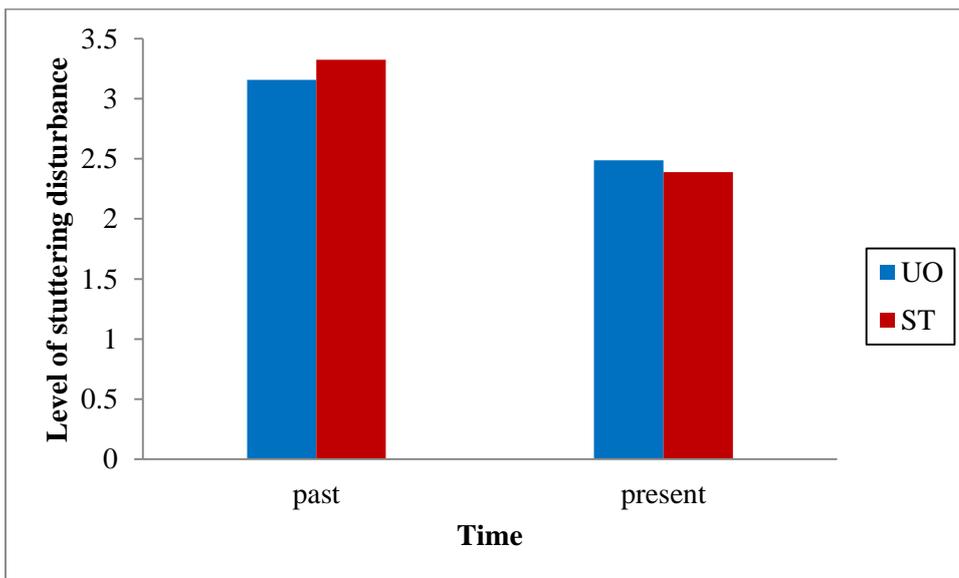
*Means and Standard Deviations for Section B Subscales of the PSSQ in the UO and ST Groups*

PSSQ-B	UO <sup>a</sup>	ST <sup>b</sup>
	<i>M(SD)</i>	<i>M(SD)</i>
i (present)	2.58(0.94)	2.36(1.04)
ii (past)	3.16(0.85)	3.28(1.09)

*Note.* UO=Ultra-Orthodox who stutter; ST= Secular-Traditionalists who stutter,

PSSQ-B= Perception of Speech Significance Questionnaire, section B. <sup>a</sup>*n*=26. <sup>b</sup>*n*=24.

The results are displayed in figure 2.



*Figure 2.* Group comparison of mean scores of the level of disturbance of stuttering, at the present and in the past (PSSQ-B). UO= Ultra-Orthodox; ST=Secular traditional.

### **1.6 The impact of stuttering on quality of life.**

In order to examine whether UO and ST groups differ in their average scores of section IV ("quality of life") of the OASES, multiple analysis of covariance (MANCOVA) was performed, with the groups (UO/ST) as an independent variable, severity of stuttering as a covariate, and average scores of SECTION IV subscales of the OASES as the dependent variable. Using the Pillai's trace, the MANCOVA test revealed a significant multivariate main effect of group  $F(4,46)=3.13, p<0.05$ , with lower scores in the UO than in the ST group, indicating that UO report on less impact of stuttering on quality of life than the ST do.

Uni-variate analyses resulted in significant differences in subscales B,  $F(1,40)=6.68, p=0.01, \eta^2=.14$  and E,  $F(1,40)=6.34, p=0.01, \eta^2=.13$ . Comparisons for the remaining subscales (A,C,D) showed no significant differences ( $p>0.05$ ). Means and standard deviations are presented in table 11.

Table 11

*Means and Standard Deviations for Section IV Subscales of the OASES in the UO and ST Groups*

OASES-IV	UO <sup>a</sup>	ST <sup>b</sup>
	<i>M(SD)</i>	<i>M(SD)</i>
A	2.61(0.94)	2.54(1.1)
B*	2.07(0.83)	2.66(1.19)
C	2.05(1.01)	2.00(1.13)
D	2.04(1.05)	2.16(1.21)
E*	2.04(0.86)	2.6(1.38)
Total*	2.04(0.78)	2.39(1.14)

*Note.* UO=Ultra-Orthodox who stutter; ST= Secular-Traditionalists who stutter.

\* $p < 0.05$ . <sup>a</sup> $n=18$ . <sup>b</sup> $n=25$ .

As shown, differences were found between groups in subscales B and E, with lower average scores for the UO group than for the ST group. These results indicate lower levels of interference of stuttering in the UO group than in the ST groups on satisfaction from communication and on the overall sense of well-being.

### **1.7 General life satisfaction.**

In order to examine whether the general life satisfaction levels differ between the UO ( $M=2.98$ ,  $SD=0.71$ ,  $n=31$ ) and the ST ( $M=2.85$ ,  $SD=0.67$ ,  $n=30$ ) groups, analysis of covariance (ANCOVA) was conducted with the group (UO/ST) as an independent variable, severity of stuttering as a covariate, and SLSS scores (Life satisfaction; Hubener, 1991) as the dependent variable. No significant differences were found between groups,  $F(1,61)=2.09$ ,  $p=0.154$ .

### **1.8 The perception of the role of speech for personal success.**

In order to examine whether the perception of the role of speech for personal success, as rated in the PSSQ (Section A part II) differs between the UO group ( $M=3.5$ ,  $SD= 0.94$ ,  $n=28$ ) and the ST group ( $M=3.04$ ,  $SD=1$ ,  $n=30$ ), analysis of covariance (ANCOVA) was conducted with the group (ST/UO) as an independent variable, severity of stuttering as a covariate and the perception of the role of speech for personal success scores as the dependent variable. No significant differences were found between groups,  $F(1,47)=0.09$ ,  $p>0.05$ .

While observing the descriptive data of the Speech Significance Questionnaire scores, it was interesting to note the average scores of the UO participants on items regarding the significance of speech in religious situations. Whereas most mean rates for each item ranged from 2.52 to 3.56, question number 8: "In my social/cultural environment, it is considered important to...take an active part with my chavruta" yielded a higher mean of 4.12 ( $SD=1.2$ ), indicating that the "Chavruta" situation is considered highly important in the life of the UO participants.

In order to deepen our understanding of the relation between the socio-cultural background and the experience of stuttering, we continued our analysis by examining whether groups differ in the relation between stuttering severity and the experience of stuttering, and if so, in what manner. For that purpose, Pearson correlation tests were conducted between the stuttering perceived severity, and the other measures, for the whole sample and for each group separately.

## 1.9 Perceived stuttering severity and the experience of stuttering.

### 1.9.1 The emotional reaction to stuttering and stuttering severity.

In order to examine whether the perceived stuttering severity is related to the emotional reaction to stuttering (OASES; Section II), and whether this relation is similar among both groups, Pearson Correlation Coefficient was calculated.

For the whole sample, result yielded a significant positive correlation between the perceived stuttering severity and the emotional reaction to stuttering ( $r=.36$ ,  $p<0.01$ ,  $N=58$ ). Within the UO group, results yielded no significant correlations between the perceived stuttering severity and the emotional reaction to stuttering levels ( $r=.19$ ,  $p>0.05$ ,  $n=28$ ). Within the ST group, significant positive correlation was found ( $r=.54$ ,  $p<0.001$ ,  $n=30$ ). Results are displayed in figure 3.

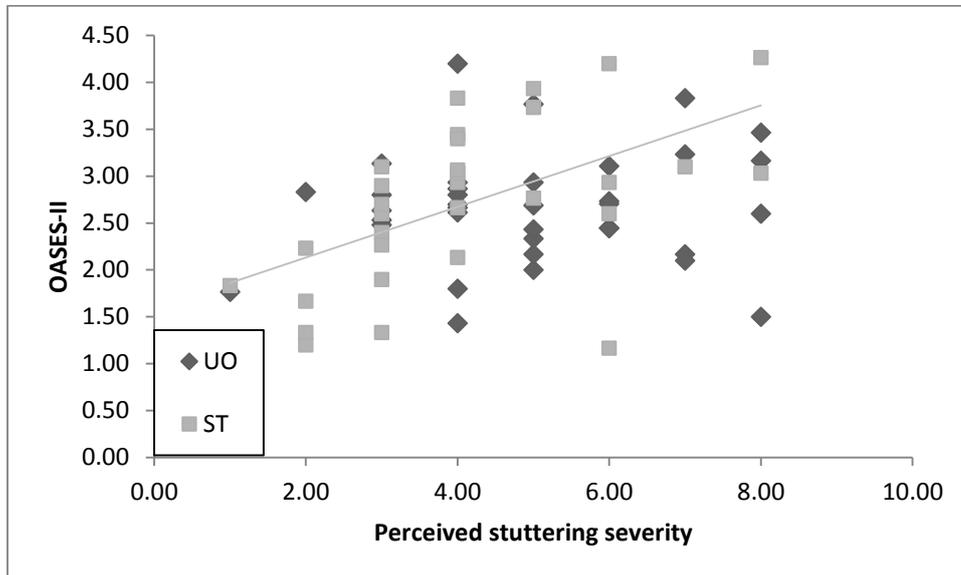


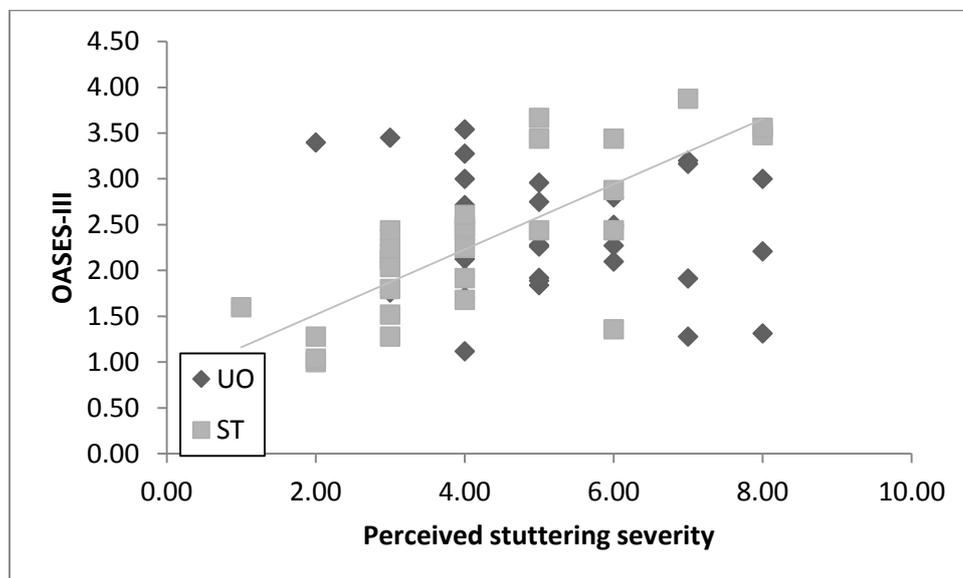
Figure 3. Groups correlations of OASES-II scores (The emotional reaction to stuttering) and the perceived stuttering severity. UO= Ultra-Orthodox; ST=Secular traditional.

These results indicate that as the perceived stuttering severity increases, the emotional reaction to stuttering also increases, for the whole sample, but when groups are inspected individually, the result is repeated only within the ST group.

### ***1.9.2 The burden of stuttering and stuttering severity.***

In order to examine whether the perceived stuttering severity is related to the burden of stuttering (Section III of the OASES, and scores of section B subscales of the PSSQ), and whether this relation is similar among both groups, Pearson Correlation Coefficient was calculated.

Within the UO group, results yielded no significant correlations between the perceived stuttering severity and the burden of stuttering (OASES-III) levels ( $r=.005$ ,  $p>0.05$ ,  $n=27$ ). Within the ST group, significant positive correlation was found ( $r=.77$ ,  $p<0.001$ ,  $n=26$ ). These results are shown in figure 4.



*Figure 4.* Group correlations of OASES-III (The difficulty of stuttering in daily situations) scores and the perceived stuttering severity rates. UO= Ultra-Orthodox; ST=Secular traditional.

Additionally, for the whole sample, result yielded a significant positive correlation between the perceived stuttering severity and the burden of stuttering as measured by the OASES-III ( $r=.45, p<0.001, N=53$ ).

For the second measure of burden, PSSQ-B, results of the whole sample yielded a significant positive correlation between the perceived stuttering severity and the burden of stuttering at present ( $r=.50, p<0.001, N=51$ ) and in the past ( $r=.39, p<0.01, N=50$ ). Within the UO group, no significant correlations were found between the perceived stuttering severity and the burden of stuttering levels as rated in PSSQ-B at present ( $r=.13, p>0.05, n=27$ ) and in the past ( $r=.18, p>0.05, n=26$ ). Within the ST group, a significant positive correlations was found between the perceived stuttering severity and the burden of stuttering at present ( $r=.81; p<0.001, n=26$ ) and in the past ( $r=.625; p<0.01, n=24$ ). These results are presented in figure 5.

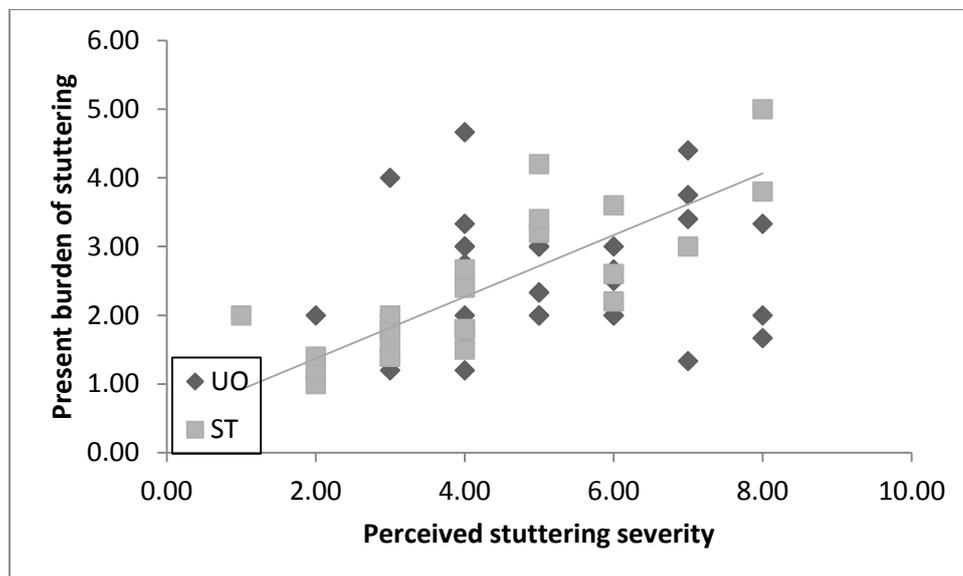


Figure 5. Group correlations of present burden of stuttering scores (QPSS-B) and the perceived stuttering severity rates. UO= Ultra-Orthodox; ST=Secular traditional.

These results indicate that as the perceived stuttering severity increases, the burden of stuttering (in all measures) also increases, for the whole sample, and specifically only among the ST group.

### ***1.9.3 The impact of stuttering on quality of life and stuttering severity.***

In order to examine whether the perceived stuttering severity is related to the impact of stuttering on quality of life levels (OASES-IV), and whether this relation is similar among both groups, Pearson Correlation Coefficient was calculated.

For the whole sample, result yielded a significant positive correlation between the perceived stuttering severity and the emotional reaction to stuttering ( $r=.45$ ,  $p<0.001$ ,  $N=52$ ). Within the UO group, results yielded no significant correlations between the perceived stuttering severity and the impact of stuttering on quality of life levels (OASES-IV) ( $r=.22$ ,  $p>0.05$ ,  $n=27$ ). Within the ST group, significant positive correlation was found ( $r=.74$ ,  $p<0.001$ ,  $n=25$ ). The results are displayed in figure 6.

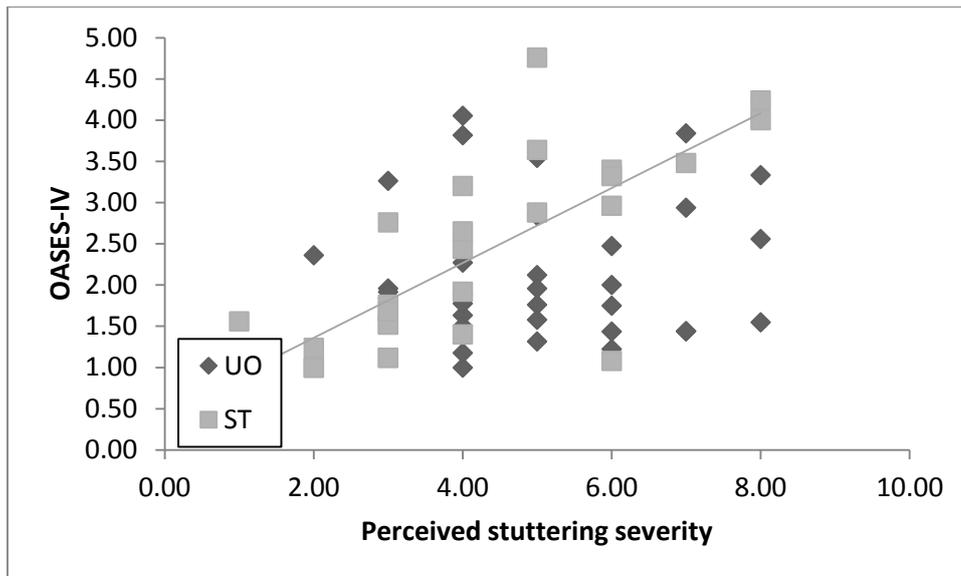


Figure 6. Group correlations of the impact of stuttering on quality of life (OASES-IV) and the perceived stuttering severity rates. UO= Ultra-orthodox; ST=Secular traditional.

These results indicate that as the perceived stuttering severity increases, the impact of stuttering on quality of life also increases, for the whole sample, but when groups are inspected individually, the result is repeated only within the ST group.

#### ***1.9.4 General life satisfaction and stuttering severity.***

In order to examine whether the perceived stuttering severity is related to Life Satisfaction levels, and whether this relation is similar among both groups, Pearson Correlation Coefficient was calculated.

For the whole sample, results yielded a significant but weak negative correlation ( $r = -.24, p = 0.02, N = 61$ ). When examining each group separately, no significant correlations were found among the UO group ( $r = -.13, p = .23, n = 31$ ). The

only significant negative correlation was found among the ST group ( $r = -0.49$ ;  $p = 0.03$ ,  $n = 30$ ). These results are displayed in figure 7.

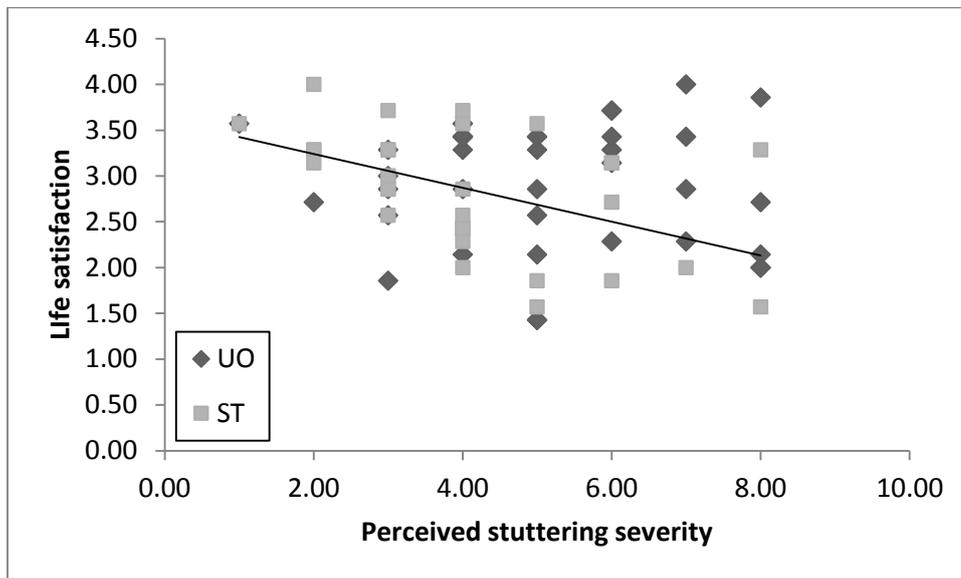


Figure 7. Group correlations between Life satisfaction scores and the perceived stuttering severity rates. UO=ultra-orthodox; ST= secular traditional.

This result demonstrates that as the perceived stuttering severity increases, life satisfaction decreases within the whole sample, and specifically only within the ST group.

### ***1.9.5 Avoidance and stuttering severity.***

In order to examine whether the perceived stuttering severity is related to levels of avoidance of speech and speech situations, and whether this relation is similar among both groups, Pearson Correlation Coefficient was calculated.

For the whole sample, results yielded a significant correlation ( $r = .35$ ,  $p = 0.04$ ,  $N = 61$ ). When examining each group separately, no significant correlations were found

among the UO group ( $r=0.48$ ,  $p=0.4$ ,  $n=26$ ), and positive correlations only within the ST group ( $r=.75$ ;  $p<0.001$ ,  $n=31$ ). Results are displayed in figure 8.

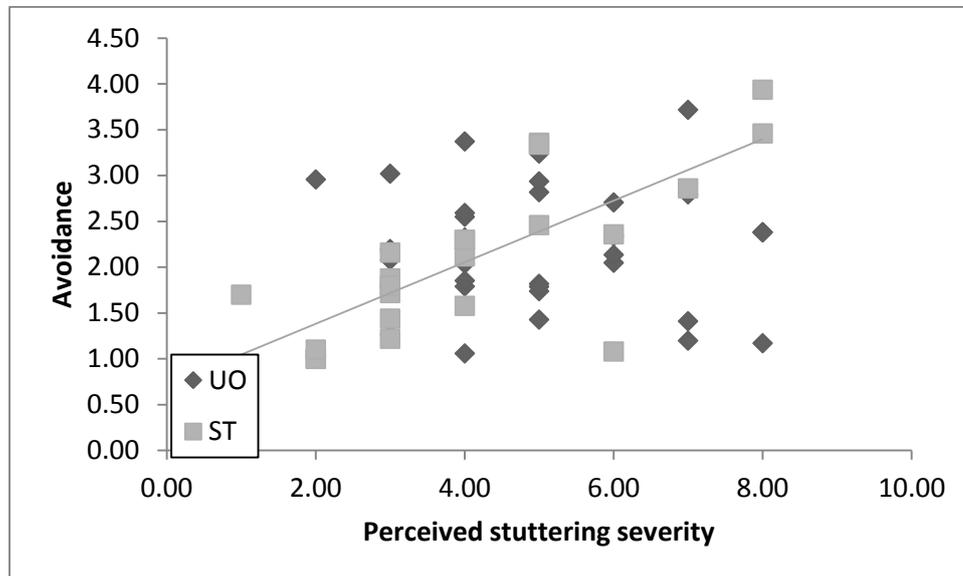


Figure 8. Group correlations of avoidance scores and the perceived stuttering severity. UO=ultra-orthodox; ST= secular traditional.

These results indicate that as the perceived stuttering severity increases, the avoidance levels also increase, but only among the ST participants.

### ***1.9.6 The perception of the speech significance and stuttering severity.***

In order to examine whether the perceived stuttering severity is related to the perception of speech significance for personal success, and whether this relation is similar among both groups, Pearson Correlation Coefficient was calculated. For the whole sample, no significant correlations were found ( $r= .17$ ,  $p>0.05$ ,  $N=50$ ). Same result was repeated for each group individually: among the UO group ( $r=0.06$ ,  $p=0.38$ ,  $n=26$ ) and among the ST group ( $r=.28$ ,  $p=0.08$ ,  $n=24$ ).

Additionally, we continued exploring the relation between the self-perception of stuttering severity and the perception of significance of speech in general speech situations by using Pearson correlation test. Among the UO group, no significant correlations were found ( $r = -.2$ ;  $p > 0.05$ ,  $n = 26$ ). Among the ST group, significant positive correlations were found ( $r = .4$ ;  $p < 0.05$ ;  $n = 23$ ). These results indicate that the higher the importance of speech is (in any speech situation), the higher is the rating of stuttering severity.

In order to further explore the significant differences between socio-cultural groups, and examine the prediction of those dependent variables as a function of the independent variables, a series of multiple regression analyses were conducted.

The dependent variables were: perceived stuttering severity, the impact of stuttering on their quality of life, the overall experience of stuttering (total OASES scores).

For the multiple regression analysis of perceived stuttering severity, this variable was considered the dependent variable in order to explore its predictors. The predictors were: age, perception of the significance of speech for personal success, the perception of significance of speech in general speech situations, family history of stuttering, feelings and attitudes towards stuttering.

The results of the multiple regression analysis yielded no significant regression for the UO group  $R^2 = .07$ ,  $F(5, 18) = .27$ ,  $p > .05$ . For the ST group, the multiple regression analysis was significant,  $R^2 = .72$ ,  $F(5, 17) = 3.04$ ,  $p < .05$ , and indicated that the only predictor which explained 72.1% of the variance of stuttering severity was the feelings and attitudes towards stuttering ( $\beta = .59$ ,  $p < .05$ ).

The further multiple regression analyses were performed with the perceived stuttering severity as a predictor.

For the multiple regression analysis of the impact of stuttering on quality of life (section IV of OASES), the predictors of this regression were: age, perceived stuttering severity, perception of the significance of speech for personal success, the perception of significance of speech in general speech situations, family history of stuttering. We did not use other variables for this regression, given that the other measures (e.g. the burden of stuttering, feelings and attitudes) are inherent, as a calculation of correlations between the OASES sections yielded high correlations ( $r > .80$ ;  $p < .05$ ).

The results of the multiple regression analysis yielded no significant regression for the UO group  $R^2 = .16$ ,  $F(5,18) = .68$ ,  $p > .05$ . For the ST group, the multiple regression analysis was significant,  $R^2 = .68$ ,  $F(5,17) = 7.54$ ,  $p < .01$ . Two predictors explained 68.9% of the variance of the impact of stuttering on quality of life (section IV of OASES). The predictors were the perceived stuttering severity ( $\beta = .67$ ;  $t = 4.35$ ;  $p < 0.001$ ) and the perception of significance of speech for personal success ( $\beta = .39$ ;  $t = 2.53$ ;  $p < 0.05$ ).

These results indicate that the impact of stuttering on quality of life cannot be predicted by the above variables, among the the UO. However, among the ST group, the impact of stuttering on quality of life is highly predicted by the perceived stuttering severity and the perception of significance of speech for personal success.

For the multiple regression analysis of the overall experience of stuttering (total OASES scores), the predictors of this regression were: age, perceived stuttering severity, perception of the significance of speech for personal success, the perception of significance of speech in general speech situations, family history of stuttering. As noted before, we did not use other variables for this regression, given that the other measures (e.g. the burden of stuttering, feelings and attitudes) are inherent, as a

calculation of correlations between the OASES sections yielded high correlations ( $r > .80$ ;  $p < .05$ ).

The results of the multiple regression analysis yielded no significant regression for the UO group  $R^2 = .15$ ,  $F(5,18) = .63$ ,  $p > .05$ . For the ST group, the multiple regression analysis was significant,  $R^2 = .65$ ,  $F(5,17) = 6.53$ ,  $p < .01$ . Two predictors explained 65.3% of the variance of the overall experience of stuttering on (total OASES scores). The predictors were the perceived stuttering severity ( $\beta = .66$ ;  $t = 4.09$ ;  $p < 0.001$ ) and age ( $\beta = -.36$ ;  $t = -2.5$ ;  $p < 0.05$ ).

These results indicate that the overall experience of stuttering cannot be predicted by the above variables, among the UO. However, among the ST group, the overall experience of stuttering is highly predicted by the perceived stuttering severity and age, indicating that as stuttering is perceived as more severe and at younger age, the experience of stuttering is more negative.

The results of the multiple regression analyses are summarized in table 12 for the UO and table 13 for the ST group.

Table 12

*Summary of Regression Analyses for Variables Predicting the Experience of Stuttering of the UO Participants (n=31)*

Predictor	Perceived stuttering severity		Impact of stuttering on Quality of life		Overall experience of stuttering	
	<i>t</i>	$\beta$	<i>t</i>	$\beta$	<i>t</i>	$\beta$
Age	.60	.14	.23	.05	-.33	-.07
Stuttering severity	-	-	.86	.19	.25	.05
Speech for personal success	.25	.06	.78	.17	1.11	.25
Speech in general speech situations	-.92	-.22	-.40	-.09	-1.04	-.24
Family history	.42	.10	1.32	.29	.95	.21
Feelings and attitudes	.01	.002	-	-	-	-
<i>R</i>	.26		.4		.38	

*Note.* the impact of stuttering on quality of life = OASES-IV; Overall experience of stuttering= OASES; Feelings and attitudes= OASES-II, the reaction to stuttering.

Table 13

*Summary of Regression Analyses for Variables Predicting the Experience of Stuttering of the ST Participants (n=31)*

Predictor	Perceived stuttering Severity		Impact of stuttering on Quality of life		Overall experience of stuttering	
	<i>t</i>	$\beta$	<i>t</i>	$\beta$	<i>t</i>	$\beta$
Age	1.25	.26	-1.6	-.22	-2.5	-.36*
Stuttering severity	-	-	4.35	.67***	4.09	.66***
Speech for personal success	-.24	-.05	1.87	.2*	1.58	.26
Speech in general speech situations	1.5	.30	2.53	.39	-1.07	-.18
Family history	.63	.12	.21	.032	.62	.09
Feelings and attitudes	2.77	.59**	-	-	-	-
<i>R</i>	.93		.83		.81	

*Note.* The impact of stuttering on quality of life = OASES-IV; Overall experience of stuttering= OASES; Feelings and attitudes= OASES-II, the reaction to stuttering.

\* $p < 0.05$  \*\* $p < 0.01$  \*\*\* $p < 0.001$

### **1.10 Other results- the experience of stuttering and gender.**

As reported earlier in the method chapter, the initial overall sample of recruited participants reached to 72.7% ( $n = 72$ ) males and 27.2% ( $n = 28$ ) females. The argumentation for not to including women in the main statistical analysis was detailed previously. The following section will present results which include female

participants as well. A close inspection of the whole sample ( $N=99$ ), revealed that only 1 woman belongs to the UO community, versus 26 who are either modern orthodox ( $n=9$ ), secular-traditionalists ( $n=18$ ). Consequently, it was decided to exclude male UO participants from the following statistical analysis. The remaining sample ( $N=67$ ) was divided into groups according to gender: male adults who stutter ( $n=40$ ) and female adults who stutter ( $n=27$ ).

The results of this section address the experience of stuttering, in the gender perspective, i.e., whether the experience of stuttering is associated with gender. The order of results is consistent with the order of results in the first section. As a first step, comparisons between groups will be presented. Then, correlations of groups, between the dependent variables and the stuttering severity will be presented

#### ***1.10.1 Overall experience of stuttering.***

In order to compare the Overall Assessment of the Speakers Experience of Stuttering (OASES; Yaruss & Quesal, 2006) scores between the male participants ( $M=2.6$ ,  $SD=.73$ ) and the female participants ( $M=2.53$ ,  $SD=.59$ ), a t-test was conducted. Results revealed no significant differences between groups,  $t(63)=.65$ ,  $p>0.05$ .

#### ***1.10.2 Self-perception of stuttering.***

In order to compare the self-rated stuttering severity between the male participants ( $M=4.24$ ,  $SD=1.74$ ) and the female participants ( $M=4.15$ ,  $SD=2.08$ ), a t-test was conducted. Results revealed no significant differences between groups,  $t(63)=.18$ ,  $p>0.05$ .

Additionally, in order compare the mean scores of the OASES-I ("general information") between the male participants ( $M=2.87$ ,  $SD= .61$ ) and the female participants ( $M=2.97$ ,  $SD=.45$ ), a t-test was conducted. Results yielded nearly significant differences between groups,  $t(63)=.65$ ,  $p=0.59$ .

### ***1.10.3 The emotional reaction to stuttering.***

In order to examine whether male ( $M=2.71$ ,  $SD=.86$ ,  $n=40$ ) and female ( $M=2.71$ ,  $SD=.72$ ,  $n=25$ ) groups differ in their mean scores of the OASES section II ("your reaction to stuttering") a t-test was performed. No significant group differences were found,  $t(63)=.025$ ,  $p>0.05$ .

### ***1.10.4 The burden of stuttering.***

In order to examine whether groups differ in their rating of burden of stuttering, scores of Section III of the OASES, and scores of section B of the Questionnaire for the Perception of Speech Significance were analyzed.

In order to examine whether male ( $M=2.4$ ,  $SD= .86$ ) and female groups ( $M=2.36$ ,  $SD=.69$ ) differ in their mean scores of section III of the OASES, a t-test was performed, resulting in no significant differences,  $t(62)=.17$ ,  $p>0.05$ .

Additionally, we continued to examine whether groups differ in scores of the section B subscales of the Perception of Speech Significance Questionnaire (PSSQ), at present and in the past. Means and standard deviations are presented in table 14.

Table 14

*Means and Standard Deviations for Section B subscales of the PSSQ in the Male and Female Groups*

PSSQ-B	Male <sup>a</sup>	Female <sup>b</sup>
	<i>M(SD)</i>	<i>M(SD)</i>
i (present)	2.21 (0.96)	2.45 (1.07)
ii (past)	3.17 (1.09)	3.1 (1.09)

*Note.* Male =male adults who stutter; female= female adults who stutter, PSSQ-B= Perception of Speech Significance Questionnaire, section B. <sup>a</sup>*n*=33. <sup>b</sup>*n*=21

In order to examine whether groups differ in scores of the section B subscales of the Perception of Speech Significance Questionnaire (PSSQ), two-way analysis of variance with repeated measures: GROUP x TIME (at the present/in the past) was performed, with the perceived burden of stuttering. The analysis yielded the main effect of time,  $F(1,51)=27.54$ ,  $p<0.03$ ,  $\eta^2=.32$ , resulting from a higher level or burden in the past than at the present. No significant interaction was found,  $F(1,51)=.94$ ,  $p>0.05$ , indicating that the effect of time does not differ between the two groups.

#### ***1.10.5 The impact of stuttering on quality of life.***

In order to examine whether male ( $M=2.38$ ,  $SD=1.08$ ,  $n=34$ ) and female ( $M=2.12$ ,  $SD=.86$ ,  $n=24$ ) groups differ in their average scores of section IV ("quality of life") of the OASES, t-test was performed. Results yielded no significant differences  $t(56)=.97$ ,  $p>0.05$  between groups.

### ***1.10.6 General life satisfaction.***

In order to examine whether the general life satisfaction levels differ between the male ( $M=2.85$ ,  $SD=0.62$ ,  $n=40$ ) and the female ( $M=2.73$ ,  $SD=0.71$ ,  $n=27$ ) groups, a t-test was conducted. No significant differences were found between groups,  $t(.65)=-.72$ ,  $p>0.05$ .

### ***1.10.7 Avoidance.***

In order to examine whether the level of avoidance of speech differs between the UO ( $M=2.16$ ,  $SD=0.81$ ,  $n=31$ ) and ST ( $M=2.10$ ,  $SD=.72$ ,  $n=21$ ) groups, t-test was conducted. No significant differences were found between groups,  $t(50)=.28$ ,  $p>0.05$ .

### ***1.10.8 The perception of the role of speech for personal success.***

In order to examine whether the perception of the role of speech for personal success, as rated in the PSSQ (Section A part II) differs between the male group ( $M=2.95$ ,  $SD= 0.92$ ,  $n=33$ ) and the female group ( $M=2.96$ ,  $SD=.97$ ,  $n=21$ ), t-test was conducted. No significant differences were found between groups,  $t(52)=0.03$ ,  $p>0.05$ .

In order to further examine the association between gender and the experience of stuttering, we continued our analysis by examining whether groups differ in the relation between stuttering severity and the experience of stuttering, and if so, in what manner. For that purpose, Pearson correlation tests were conducted between the stuttering perceived severity, and the other measures, for each group separately.

In order to examine whether the perceived stuttering severity is related to the emotional reaction to stuttering (OASES; Section II), and whether this relation is

similar among both groups, Pearson Correlation Coefficient was calculated. Results are presented in table 15.

Table 15

*Correlations between the Perceived Stuttering Severity and the Experience of Stuttering Variables, for Male and Female Groups*

	Male		Female	
	<i>n</i>	<i>r</i>	<i>n</i>	<i>r</i>
OASES-I ("general information")	38	.193	25	.36*
OASES-II ("your reactions to stuttering")	38	.47**	25	.55**
OASES-III ("communication in daily situations")	37	.58***	25	.61***
PSSQ-i ("level of disturbance at present")	31	.77***	21	.56**
PSSQ-ii ("level of disturbance in the past")	31	.57***	21	.002
OASES-IV ("quality of life")	32	.63***	24	.59***
OASES-total	38	.55***	25	.64***
Life satisfaction	38	-.43**	27	-.32*
Avoidance	29	.61***	21	.68***
the role of speech for personal success	31	.24	21	-.01

*Note.* \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$

As can be seen, a similar pattern of significant correlations was in both groups. Both groups showed significant correlations between stuttering severity and the variables: feelings and attitudes, the difficulty of stuttering today, difficulties in daily communication, quality of life, life satisfaction and avoidance

Groups differed in the correlations of:

1. OASES-I- The first section of the OASES, which includes items on the speech fluency and knowledge of the speaker, correlated positively with the perceived stuttering severity only among females, indicating that as stuttering severity increases, so do scores on the reported features of stuttering . No significant correlation was found between these variables among males.

2. The burden of stuttering in the past levels correlated positively with the perceived stuttering severity only among men, indicating that the as stuttering is perceived as more severe, so is the disturbance of stuttering in the past. While among males, stuttering severity (at present) correlated significantly with the level of stuttering disturbance in the past, this result was not found among the female participants.

### 1.11 Summary of Study I findings.

With respect to the research questions, results are as follows.

1. The overall experience of stuttering, as measured by the Overall Assessment of Stuttering Experience (OASES) was found more positive among the UO participants.
2. Stuttering is evaluated as more severe among UO than among the ST participants.
3. Levels of cognitive, emotional and behavioral (avoidance) reactions to stuttering were similar between groups.
4. The burden of stuttering levels were similar between groups, as also similar differences between the burden of stuttering in the past and at the present.
5. The impact of stuttering on quality of life was less severe among the UO, in comparison to more severe among the ST participants. Specifically, the UO rated less impact of stuttering on *satisfaction* from communication and the overall sense of well-being.
6. General life satisfaction were similar between groups.
7. The perception of the significance of speech for personal success was similar between groups. However, the "Chavruta" is considered specially important in the life of the UO participants.
8. The perceived stuttering severity was associated with the other variables of the "experience of stuttering" (cognitive, emotional and behavioral reactions; burden of stuttering; quality of life; life satisfaction), among the whole sample and specifically only among the ST group.
9. Perceived stuttering severity could be predicted by feelings and attitudes only within the ST group.

10. The impact of stuttering on quality of life could be predicted by the stuttering severity and the perception of role of speech for personal success, only within the ST group.
11. The overall experience of stuttering could be predicted by the perceived stuttering severity and age, only within the ST group.

Additional results, beyond the study purpose, are as follows.

1. Males and females who stutter showed similar experience of stuttering levels.
2. The perceived stuttering severity correlated positively with OASES-I only among females, whereas the former also correlated positively with the burden of stuttering in the past only among males.

## **2. Study II**

Holistic reading of the eight interviews yielded 3 main dimensions:

1. The experience of stuttering across the life span
2. Coping strategies that were adopted due to the experience of stuttering
3. The experience of therapy.

These dimensions were repeated among both groups of participants. For each dimension, categories and subcategories were identified. The dimensions and categories are mostly identical. Subcategories are partly similar and partly differentiated between the two groups of interviewees. Table 16 presents the first dimension.

Table 16

*Categories and Sub-Categories of the Experience of Stuttering Dimension, among UO and ST Interviewees*

Categories	Sub-categories	
	UO	ST
First memories of stuttering	Age of onset	Age of onset
	Cause of stuttering	Cause of stuttering
	Emotional experience with stuttering	-
Elementary school years	Being tagged	Being tagged
	Helplessness	-
	Loss of control	-
	Suffering	-
	Teasing	-
	Hopelessness	-
	-	Difficulties with stuttering
High school years/ Yeshiva	Authoritative figures (Rabbis) and stuttering	Authoritative figures and stuttering
	Environmental speech expectations	Environmental speech expectations
	Extreme distress	-
	-	Negative reactions
	-	Avoidance
	-	Difficulties in daily conversation
	-	Development of speech strategies

---

Advanced studies (after high-school)	Active coping with stuttering Description of emotions Difficult situations	Active coping with stuttering - -
Work	Work as an opportunity for a change Encouragement of authoritative figure (Rabbi) -	- - Coping with stuttering challenges at work
The search for a spouse	Being trapped Low self esteem The necessity to hide stuttering Stuttering and the UO matchmaking process Negative emotional experience Negative reactions by girls Loss of prestige - - - -	Being trapped Low self esteem - - - - - Stuttering as deterrent for dating Stuttering as a determinative factor Positive coping with stuttering Functional difficulties with stuttering

---

*Note.* UO=Ultra-Orthodox who stutter; ST= Secular-Traditionalists who stutter

## **2.1 Dimension 1: The Experience of Stuttering across the Life Span.**

As shown in table 16, this dimension included 6 categories:

- 1.1 First memories of stuttering
- 1.2 Elementary school years
- 1.3 High-school/ Yeshiva
- 1.4 Advanced studies (after high-school/Yeshiva)
- 1.5 Work
- 1.6 The search for a spouse

### **Category 1.1: First memories of stuttering.**

The interviews provide a description of the first moments of stuttering as reflected in the retrospective view of at least 19 years. Some of the interviewees rely on the description heard from other family members.

## **UO INTERVIEWEES**

### Age of onset

According to their memory, stuttering began between the ages of three to five:

Generally, this is the first vague memory I have of myself, around three and a half or four years. Later at the age of five-six I remember it more clearly.

I can't really remember what happened when I was three, but they remember it started right from the beginning when I started speaking"

### Cause of stuttering

The appearance of stuttering in childhood is associated by interviewees with circumstances of change or a frightful event that were the cause for the onset of stuttering or its significant worsening. Only among the UO stuttering is also associated with genetic inheritance.

#### a. A meaningful or traumatic event:

I think it started because of a trauma I went through back then, I wasn't aware of it back then, but now I believe that's what it was. Two episodes of beating, yelling, and one incident of a cat that was ran over and it heart me a lot"  
"[...] because I was four when I immigrated to this country, I changed the language, and I think it was something that worsened the problem, but I don't know, my mother says this is what caused me this problem, but my brother says I stuttered even before.

#### b. Genetics:

There wasn't any specific situation that happened. Usually people relate it to my uncle who stutters, it's probably somehow related to that.

### Emotional experience with stuttering

Emotional experiences related to stuttering are narrated as follows:

I remember at some point I started to notice that it is harder for me to speak than to my young or older brothers

I went to speech therapy and they talked to me about my stuttering, and I didn't quite understand what they wanted, and then they let me hear myself and it was terrible, I remember it clearly, I was very young, around seven or eight, I don't exactly remember. I remember it clearly, I was absolutely shaken.

## **SECULAR INTERVIEWEES**

### Age of onset

Similar descriptions of age were identified within the secular interviewees:

When I was four or five, I think maybe by then I was stuttering like crazy, we turned off a fire and I put my fingers in the fire, I think I got burnt, I don't know, just some nonsense I have in my head

It's something that was always there, I mean I can't remember myself not stuttering. My parents say that it started when I was very young, so I don't know maybe when I was three or four.

### Cause of stuttering

A meaningful or traumatic event

At first grade, or preschool.. I went with the older kids to the forest, and I remember they were playing something like *ash laila* (a challenging activity at night involved with fear and mystery), and they did something like 'where is the gold hand? Where is the gold hand?!' and finally when they got to me, I was crying and I started stuttering.

## **Category 1.2 Elementary school years.**

No specific memories were raised with regard to the experience of stuttering at preschool, except for the first memories of stuttering which are mostly at the preschool age. The following subcategories regard to the elementary school years.

### **UO INTERVIEWEES**

The narratives of this group of interviewees detail a live and precise reconstruction of episodes in elementary school. The stories are provided in a factual style. It is interesting to note that self-reflection was spontaneously embedded in the narratives by the interviewees. These narratives provide descriptions of strong emotional experiences, characterized by a strong negative tone. Some of these experiences were a direct result of the speech expectations at school.

#### Being tagged

The experience of being identified and tagged by teachers as a child who stutters, and the consequence of such reality in class, is manifested at the young age of elementary school:

Teachers knew they shouldn't ask me any questions, I have always had that tension, whether the teacher knows, if he was informed about me, whether he will ask me, they didn't ask me, usually.

#### Helplessness

The interviewee describes the traumatic experience of being helpless in a stressful situation, at which speaking is required and expected:

In fifth grade I remember going to a new school, and there it started, and in eighth grade, when I was twelve it was very severe and we tried going to treatments that didn't help, speech therapists and all... You want to say something to the head master, to people with authority, and you stand there for an hour, and it doesn't come out, once, and then you don't do it anymore. Like, for what?!

### Loss of control

An extreme aggressive reaction toward being teased is provided in the following description. This behavior resulted in unsupported reaction of parents and headmaster:

In second grade the teacher asked a question and I wanted to answer, and while answering someone behind me started imitating me, I don't remember exactly the situation, but I do remember being surprised, I was shocked.. I remember getting up of my chair and throwing the chair on this boy. Now, it's not like I am such a relaxed person, but I do not throw chairs on people. I remember my parents; it surprised my parents and the headmaster.

### Suffering

A tormented emotional world of a young child who stutters is depicted in the following quote:

You want to say something to the headmaster, people with authority.. and you stand there for an hour and it doesn't come out, once, and then you don't do it anymore. Like, what for? Poor child, he is so embarrassed.

### Teasing

The experience of stuttering in class is also characterized by the imitation of the stuttered speech by another classmate as a way of teasing:

In second grade the teacher asked a question and I wanted to answer, and while answering someone behind me started imitating me.

### Hopelessness

The sense of hopelessness is evident by the following narrative, which is a recollection of having adopted a pessimistic perspective about the future at a very young age:

I think in the first grades of school I did talk a little, I think, I am not sure. After that, it was very clear that I don't speak. I didn't speak at all. I know I had no choice, I wasn't able to talk. When I was twelve I had a clear vision that my life has no future. It was clear to me, really, that's what I am carrying inside me ever since.

Linguistic characteristics were identified within the description of the UO group:

- switching to second grammatical person "*You* stand there for an hour and it doesn't come out , once, and then *you* don't do it anymore"
- Switching to third grammatical person "Like, what for? Poor *child*, *he* is so embarrassed"
- Repetitions "[...] I don't *remember* exactly the situation, but I do *remember* being surprised, I was shocked.. I *remember* getting up of my chair and throwing the chair on this boy. Now, it's not like I am such a relaxed person,

but I do not throw chairs on people. I *remember* my parents; it surprised my parents and the headmaster"

## **SECULAR INTERVIEWEES**

Contrary to the UO interviewees, the stories of the secular group are characterized with a more moderate emotional description of the difficulties associated with stuttering at the elementary school age. There are no signs of great disturbance of stuttering on the routine activities.

### Being tagged

Similar to the description of the UO interviewees, the following description details the experience of being tagged as a child who stutters, but by classmates:

At school we always had the thing of being asked to read out loud my homework or stuff like that. It was very hard. I mean, if I raised my hand and it happened because I wanted it to happen, than my speech would go fine, but if I was asked to read, it was very difficult [...] I remember that once a few friends, we were a groups of four five kids, and they started calling me 'stutterer'. It wasn't something.. They said it four times, not the whole year. I don't think it was about teasing me or something like that, it's more like saying 'the fat guy', so with me it was 'the stutterer'. Was it fun? Probably not.

### Difficulties with stuttering

This description reflects an internal conflict between the wish to be seen, and the wish not to stutter. The conflict is solved by avoiding speech and choosing non speech activities:

At the end of elementary school I was very introverted. I think that basically when there was a crowd of people, or something like that, I didn't talk. I did always participate in things which do not involve speaking in front of many people, maybe I sang, or danced. It was pretty obvious, I mean, I didn't try to go against nature, to put it this way, I did what I felt like. Like, I realized that this does not fit me and that's it. I don't want to do it.

At elementary school I may have had a problem (to speak spontaneously). On one hand, I did mind talking, but on the other hand, I felt loved even when I had all sorts of behaviors, so I didn't mind talking to anyone.

### **Category 1.3: High school years/Yeshiva.**

The experience of stuttering through adolescence is provided in the following section. While secular interviewees studied at high school, UO interviewees studied at Yeshiva.

## **UO INTERVIEWEES**

### Authoritative figures (Rabbis)

A high association between stuttering and the Rabbis is manifested in the following descriptions. A Rabbi's negative position towards the stuttering is described:

I remember I was learning that year, it was our first year (at Yeshiva) and we learned at the old Rabbi who was the head of the Yeshiva, but he asked other Rabbis to test us. I also felt like he couldn't stand my stuttering because he said something about it a few times.

Another interviewee described how his Rabbi didn't know how to act towards the stuttering:

When I was sixteen, I was asked to read out loud in class, and it was as bad as it was here, and it was a terrible experience, I wanted to bury myself in the ground, and the Rabbi didn't know how to end this situation, so he just let me continue reading like I don't know.. and when I was seventeen, because of what happened before, the Rabbi told me that he doesn't want to let me read, and he asked whether I do want to read, and I said yes, what should I have said? 'no'?, so he understood that it's a 'no', and didn't let me read.

The pressure from Rabbis and friends versus the fear of speaking puts the adolescent in a conflict. No support of a formal figure is described by the interviewees regarding the years in the Yeshiva.

### Environmental speech expectations

The centric and important role of speech for participating in religious rituals is described, including the reality of Yeshiva life which involves the active participation in speech demanding religious rituals:

At the Yeshiva I remember new things starting, that did not happen in elementary school: being a Hazan at the prayer (leading the public prayer), or being called up to the Torah, things like that, or study in Chavruta with friends, or deliver a Shiur (lecture about religious topics). Sometimes a young fellow makes a small Shiur to his friends. There are all sort of things like that-

I mean, it's a different kind of institution with things I hadn't done before and I remember it took me a while to get used to them.

There's the '*gabay*' of the Yeshiva, who calls people up to the Torah and all, and he is the one also to ask someone to lead the prayer, and he needs to talk or do it in the middle of the prayer, which actually wouldn't have been weird if I hadn't done it, because it is only one person who gets to have this position for a while. And yet I did it, because I was asked to do it. And I told myself, if it was offered to me.. usually if I wasn't offered something, it was because of the others, not because of myself, I mean, it's not like I ever asked to be a '*gabay*' because I thought that maybe the Yeshiva doesn't want it or maybe the other fellows don't want it.

### Extreme distress

Highly strong emotions are depicted in the following quotes:

I was asked to read out loud in class, and it was as bad as it was here, and it was a terrible experience, I wanted to bury myself in the ground.

My Yeshiva was in Tel Aviv, it was a very strict high school, I was new there and I was terrified to death, even more because I remember myself not being able to talk.

I went to the old Rabbi and each time I went there it was a torment to me that I didn't know how to come out of it.

### Linguistic characteristics

- The use of yes-no, "when I was 17, because of what happened before, the Rabbi told me that he doesn't want to let me read, and he asked whether I do want to read, and I said *yes*, what should I say? '*no*'?, so he understood that it's a '*no*', and didn't let me read... on one hand *yes*, I did want to be like everybody else, but on the other hand I truly understand him, because it means to put me in a tense and stressful position"
- Switching to second grammatical person "so you feel really limited"
- Using words or phrases derived from a negative semantic field "very hard experience", "torment"
- The use of metaphors "I was broken", "my whole world collapsed"

### **SECULAR INTERVIEWEES**

#### Authoritative figures and stuttering

Contrary to descriptions of the UO, support and encouragement of an authoritative figure is described in the following narrative:

One of the leaders of the this topic at school, enounced one day that he was organizing some kind of meeting of the whole board of the school [...] and I am supposed to join him and speak about our project [...] so I told him 'listen, I am terribly afraid to come. I don't want to go. How will I speak in front of all these people? I ever speak in class, so you want me to speak with all these people', etc.. So he gave me this look saying 'what are you talking about?!' a very strange look, and told me 'listen- you are saying your stuff, whatever you have to say, and don't drop any word of yours, nothing. And all these people will sit next to the table and everyone will be patient and everyone will listen.

You don't need to worry about that, I don't excuse you from this' [...] I guess his courage affected me too, so I said to myself 'OK, I am going'.

### Environmental speech expectations

A gap between the environmental expectations and the actual speech ability.

Negative reactions to the speech difficulty are also described:

One of the leaders of the this topic at school, enounced one day that he was organizing some kind of meeting of the whole board of the school [...] and that I am supposed to join him and speak about our project [...] so I told him 'listen, I am terribly afraid to come. I don't want to go. How will I speak in front of all these people? I ever speak in class, so you want me to speak with all these people', etc. So he gave me this look saying 'what are you talking about?!' a very strange look, and told me 'listen- you are saying your stuff, whatever you have to say, and don't drop any word of yours, nothing. And all these people will sit next to the table and everyone will be patient and everyone will listen. You don't need to worry about that, I don't excuse you from this.

In eighth or ninth grade we had some stupid activity about Prime Minister Rabin, about democracy and about the assassination. We were about 130 students sitting in a big circle, and everyone had to tell where he was at the night of the assassination. When it was my turn to talk, I got stuck, and it didn't stop, and I noticed people were starting to lose their patience. I don't know, started giggling, laughing a bit. I don't remember exactly, just some comments. It was terrible. Eventually I said I was asleep [...] and everybody told me, you are such an idiot, how could you just say that after everyone has

been waiting for so long. You really came out as an idiot in front of everybody.

### Avoidance

Avoidance of speaking and exhibiting the stuttering is described, specifically regarding reading aloud in the classroom setting:

In high school, as I told you, I had this friend who would read my homework. I didn't participate. It was hard for me. I guess reading aloud was hard for me

### Difficulties in daily conversations

The act of participating in a simple conversation is depicted as difficult:

[...] especially if you want to talk to a girl. It's mostly being hard to merge in socially in a conversation, to speak fast, that's very very hard. Fast, I mean, switching quickly from one person to the other. Or when everybody is sitting together, and you know, a conversation is like a war, who's going to say the full sentence, because everybody is interrupting each other. When you stutter it's very hard to merge in a conversation.

### Development of speech strategies

Developing more awareness about how to facilitate fluency occurs at this age:

In junior high and high school, I was much more aware of my abilities, and how I can manipulate my speech. To stretch some letters, all sort of things that would help me talk.

### Linguistic characteristics

The interviewees of the secular group also describe difficulties with their stuttering, fear and worry as a result of the speech demands. However, the emotional state is described using moderate language:

- Short laconic descriptions,
- Poor use of words driven from the emotions semantic field
- No use of metaphors
- The use of first grammatical person
- Facts are presented in a neutral tone, and the negative consequences are expressed indirectly "and after I finished they told me- waw, you sounded like an idiot, how could have you said such a thing after so many people waited, how could you have said that after all that stuttering of yours. You really looked like an idiot to the whole class"
- The use of general and less personal expressions "there is a difficulty to speak"
- Switching to second grammatical person "if you want to talk, for example"

### **Category 1.4 Advanced studies (after high-school/Yeshiva).**

#### **UO INTERVIEWEES**

The descriptions of the UO interviewees regarding this period of life, is characterized with a sense of moderation of the emotional intensity. Nevertheless, difficulties with stuttering are still described. Descriptions of active coping with stuttering are provided in this category for the first time.

### Active coping with stuttering

#### a. Using speech therapy techniques:

There have been some calls for the Torah which I was able to do only after the fluency shaping therapy, I did it fine.

#### b. Avoiding stuttering:

At college I think it was very much alike, I mean, I spoke to people, I replaced lots of word. Once people got to know me, it became easier.

#### c. Behavioral confrontation, shifting attention from cognitive to practical coping:

I don't mind so much about what other people think of me. I can lead a prayer at the morning and afternoon service and stutter all the time, without thinking about what other would think.

As noted, in prior years the main theme described regarding stuttering was anxiety, but at this stage, the main component of descriptions relate to their coping mechanism (Note: the coping mechanism will be further detailed in the second dimension of the results)

### Description of emotions:

Occasionally when I talk to a friend and I can't say a full phrase, it bothers me a bit that I cannot pass on the message in a good way, but fine.

### Difficult situations:

Problematic situations, in which speech is required, is described by interviewees. These anxiety inducing situations are both while speaking in front of a few people, with friends or in front of an audience:

[...] That's something I don't do so much. If only few friends are present, so it's fine, but something more general, for example during a lecture, I don't like it.

With my friends, once in a while I get to think about what kind of sentence I will be able to actually say, but not too often.

## **SECULAR INTERVIEWEES**

In comparison to the descriptions of the High-school period, less anxiety is described with respect to this age, and the descriptions relate more to the coping mechanism.

### Active coping with stuttering

Descriptions of successful coping with stuttering are provided. Coping at this stage is manifested in more exhibition of speech and less of avoidance, as a result of either cognitive reasoning or using speech strategies:

[...] the German course I started attending this year at university, and the teacher keeps telling us [...], 'you can't learn the language unless you speak it' [...] later I realized it's not going to work, we are a small class, [...] I have to speak German in order to learn. The pronunciation and the fluency, that's what build the language. There's nothing I can do, I have to do it. So I speak and I get stuck, and other people don't really understand what's going on there- if it's whether I don't know German or because something strange is going on, terrified. Others try to help, say a word or two for me, and that helps me a lot.

I might remember once or twice that I didn't know what to do, because I got really stuck, so I stopped, I took a breath, and continued. But this is something that may have happened twice, or I just don't remember the rest, but it doesn't bother me much. Again, if I want to read – I read, it doesn't make a difference.

### **\Category 1.5: Work.**

#### **UO INTERVIEWEES**

##### Work as an opportunity for a change

The stage of starting to engage in work provides a context that promotes the coping mechanisms with stuttering. Various strategies of coping with the stressful experience of the stuttering in inter-personal situations are mentioned by the interviewees. Change is manifested at the work setting in two strategies.

##### a. Controlling the work setting

Work provides an opportunity to create a situation with no pressure to talk, as a bridging stage for dealing with stuttering in a safe environment, chosen by the speaker:

I only work at my job for a year and a half [...] Before that I worked at my uncle's firm, and one of the reasons for working there was that I could get used to people [...] I knew I was at my uncle's firm so I don't need to justify myself so much to anyone.

#### b. Coming out of the closet

At this stage of work, the active coping with stuttering is manifested in the decision to exhibit stuttering in an act of self-exposure:

As time passed I gradually started to get used to coming out of my closet. And then it started [...] it was easier for me and I could gradually come out [...] I told myself 'that's it, I have to show my stuttering already and face it.

#### Encouragement of an authoritative figure (Rabbi)

A semi therapeutic experience is described, as a Rabbi's wider perspective of stuttering is expressed towards the interviewee:

My Yeshiva is the Yeshiva of Rabbi Lau, who is actually the Rabbi of Tel Aviv [...] and at the end of my first year there [...] his assistant [...] went abroad and he asked me if I wanted to replace him [...] I asked him if he wouldn't be bothered by my stuttering, and he said he preferred someone who got things right and doesn't speak fluently, than someone who doesn't get things and speaks fluently.

#### Linguistic characteristics

Positive expressions appear frequently in the responses of the interviewees: "I liked it", "I love", "I felt very good", " I enjoyed it".

### **SECULAR INTERVIEWEES**

Among the secular interviewees, work is also describes as an opportunity to positive changes.

### Coping with stuttering challenges at work

Successful coping with a stressful speech situation is dealt with courage, by confronting directly with the situation by the act of speaking:

I was standing on the stage and I realize I am on my own there in front of the audience. I told myself, ok, I will start and whatever happens- happens. So I started, I stuttered a little, and I spoke

At work I had to give some lectures to the employees, a few times. Nowadays I manage; I do it with pleasure, no problem. At the beginning it was hard

### Linguistic characteristics

Positive expressions: "I do it with pleasure", "it had very good consequences [...], it resulted well", "I don't want to compliment myself too much".

## **Category 1.6: The search for a spouse.**

### **UO INTERVIEWEES**

The stage of searching for a spouse is described through the individual experiences and feelings of the interviewees with regard to stuttering, and also in the frame of the UO matchmaking process. This reality results in negative consequences of pressure and negative reactions or advice with respect to the stuttering.

### Being trapped

The following narrative describes the bind between the fact that his stuttering may cause the refusal of girls to meet him, and a further trap by the fact that any agreement to meet him despite his stuttering results in viewing the girl less favorably:

I once met a match-maker that was very impressed with me [...] He said he would look for a girl that accepts the fact that I stutter. I told him, that if he does find a normal girl that agrees to meet me after she knows I stutter, so I am the one who will rule her out, for agreeing to meet a guy who stutters. I don't know, people tell me 'you've got a good heart and you are so caring', but still, she could find a good hearted and caring guy who speaks well. So if she does agree to meet me, she must have some problem.

Another theme of being trapped refers to the date situation itself, where stuttering cannot be ignored:

Even if she knows I stutter, and even if she agrees to meet me, and hears my actual stuttering, with my speech and facial grimaces when I get stuck, it is very hard to look at the inside of my personality by then.

### Low self esteem

The cognitive perception of low self-esteem is described as a crucial negative factor in the dating situation:

When I go to meet a girl, my self-image is very low and it blocks me. When will I be able to improve my self-image and self-confidence? nobody knows how to do it, I tried in many ways.

### The necessity to hide stuttering

Meeting a girl for the first time creates immense pressure and effort on the interviewee, stemming out of the notion that stuttering cannot be manifested during the encounter:

At some point I had started dating girls, and it was clear to me that I had to hide my stuttering, and I was under immense pressure because of it. So what I remember is that when I would meet girls [...] I would come back home a day earlier [...] rest and do my fluency exercises like crazy and I was under immense pressure

Additionally, the personal anxiety is described in the context of the social norms of the UO society:

Look, at the UO society, people try to market themselves as the essence of perfection, and once you have a problem, the solution is to hide it. That's what people do, people hide their problem until they're married and then it's a done deal.

#### Stuttering and the UO matchmaking process

The reality of matchmaking in the UO society is described, specifically in association with stuttering. The descriptions entail more pressure on the person who stutters and a feeling of less acceptance of this difficulty by girls from this sector:

Your speech is always important, but specially before the match-making stage. It seems like there is more variety (of candidates) for those who do not stutter than for those who don't [...] It's best to start this period when I speak better. The match-making issue is one thing. Girls from my sector don't accept it as girls from other sectors.

In this sector, the ultra- orthodox, a guy doesn't have any contact with girls who are not family [...] In the other sectors, it could happen that a girl will like a guy and only afterwards will find out he stutters [...]. In the UO sector,

this doesn't happen, because it's the first thing she'll know. [...] Usually the girl first know I stutter, and then all the rest. So, if, for example, I wasn't UO, I would meet a girl spontaneously, she would see my general behavior and my good qualities, and only then she would talk to me and see my stuttering, after she realized I was a good guy. Maybe if it happened that way, after getting to know me she would say- 'OK I don't mind that he stutters'. But in the UO society, because the stages are the other way around, first she knows I stutter and only then the rest, so she will never [...] A normal girl from a normal home is not supposed to reach the point where she gets to know my personality, because even if she knows I stutter, and even if she agrees to meet me, and hears my actual stuttering, with my speech and facial grimaces when I get stuck, it is very hard to look at the inside of my personality by then.

### Negative emotional experience

The emotional consequences of the stuttered speech in the context of the dating situation are expressed in the following quotes. The great distress of the interviewees occurs before and at the date, and includes feelings of nervousness, frustrating, anxiety and difficulty:

I think they are told about it before, and come to the date, and some don't want to meet. I feel very bad about that, I can't show my skills, I am being judged by specific things and it is very problematic

It was very very hard with him

So what I remember is that when I would meet girls [...] I would come back home a day earlier [...] rest and do my fluency exercises like crazy and I was

under immense pressure [...] I was very very nervous and anxious, and I spoke nonsense. I said nonsense because for me it was the most stressful thing in the world [...] Sometimes I could speak fluently at the date but afterwards I was so beat I couldn't move. So that's what I remember, it was very terrifying

### Negative reactions by girls

Refusal and disappointment are expressed with regard to the attempts to meet girls, who refused to continue the relationship due to the stuttering:

I saw a wonderful girl, who was the best thing that ever happened to me. But after one date she said she didn't want to continue, because of the stuttering. I think it was just an excuse

I was very nervous and anxious and also spoke nonsense. I spoke nonsense because for me this is the most stressing situation in the world. Nothing came out of it.

### Loss of prestige

A significant Rabbi urges the interviewee to compromise and lower the demands on the type of women to marry due to the speech problem:

My Rabbi told me 'yes, you have to compromise and marry someone who isn't exactly what you want, because you've got a speech problem', that was something I was very very troubled with.

### Linguistic characteristics

- Metaphors "it killed me" "like a lunatic", "like crazy"
- Extreme negative words "very terrifying", "crazy", "immense pressure", "it killed me", "very problematic".

### **SECULAR INTERVIEWEES**

Similar to the UO interviewees, the stage of searching for a spouse results in being bound and pressured, lowered self-esteem and negative thoughts with respect to stuttering. Additionally, functional difficulties with stuttering are described, as well as recollection of positive coping with stuttering.

### Being trapped

The fact that the stuttering is manifested right from the beginning of the encounter puts the interview in a trapped situation because it is seen before any deeper impression has been established:

Relationships are hard with the stuttering, I think. Because until the other person gets to really know you, all he hears is- I don't know, that's how I feel- my stuttering

### Low self esteem

Stuttering is described as a factor that lowers the self esteem

When I was at university, there was a girl I liked, and I think my stuttering.. I had a few hard blocks while talking to her, and I think it had an impact on her. It also affects the self-confidence and all, it breaks you

### Stuttering as a deterrent for dating

Stuttering is viewed as a factor that discouraged girls from accepting or initiating any romantic contact:

When I was at university, there was a girl I liked, and I think my stuttering.. I had a few hard blocks while talking to her, and I think it had an impact on her. No one asked me out because of it.

### Stuttering as a determinative factor

The interviewee questions whether the choice of his spouse would have been different, had he not stuttered. This thought reflects the major role of stuttering on the interviewee's life:

I can tell you that even my wife, if I stuttered as much as I did before meeting her, I don't know if she would have agreed to marry me, I don't know [...]. A woman, I don't know, maybe I would have married a different woman if I hadn't had the stuttering and my life would have been different.

### Positive coping with stuttering

Despite the obstacles of stuttering, the following descriptions offer a more positive attitude and coping in the dating circumstances. Coping is manifested in acknowledging it directly and viewing it a smaller perspective:

Look, first of all, I'm gay, so that's a different story. So most of my relationships started on the internet or at a pub, where you don't really hear or see the person you are talking to. And then, in a one on one date, it's not something you can really hear, and yet I have always found myself after a first

date texting the guy 'are you bothered by my stuttering?', I can't think of anyone who said 'yes'. I can't remember such a thing, it's not such a big issue, it could be, but I don't let it.

Relationships are hard with the stuttering, I think. Because until the other person gets to really know you, all he hears is- I don't know, that's how I feel- my stuttering. Either on the phone or on any other situation, it's hard. But I got over it once, I hope to be able to get over it again.

### Functional difficulties with stuttering

In addition to the cognitive and emotional consequences of stuttering, actual behavioral difficulties with the stuttered speech are also provided:

Meeting her family is very hard. I did it a few times, but it was just suffering, as if you are facing some kind of committee. With one girl, who is used to bringing the boyfriend home and all her family sits next to him and they talk. She didn't tell me that before, so I don't panic, so I just went into her house and everybody was there. Eventually I managed through, but it's one of those moments when you tell yourself 'oh god, what do I need this for?!'.

In a relationship... Any ordering of tickets, to the theatre, movies, opera and all the other stuff is all still done by phone. You try to do it by e-mail, but they still ask you to call them.

### Linguistic characteristics

- The use of second person " " when you tell yourself 'oh god, what do I need this for?!'

- Metaphor "it breaks you"

## **2.2 Dimension 2: Coping.**

The theme of coping with stuttering was mentioned in the analysis of the "life span" dimension but since it was one of the major themes raised by the interviewees it was decided to present it in a more detailed manner, particularly the description of strategies employed by them. In some cases, the strategy description was accompanied with self-insights about it.

The dimension of coping was divided into the following subcategories:

- 2.1 Emotion-based coping strategies
- 2.2 Cognitive-based coping strategies
- 2.3 Behavior-based coping strategies

Table 17 displays the categories and subcategories of the coping dimension.

Table 17

*Categories and Sub-Categories of the Coping Dimension, as Identified among UO and ST Interviewees*

Categories	Sub-categories	
	UO	ST
Emotion-based coping strategies	Despair	-
	Aggression	-
Cognitive-based coping strategies	Positive insights about stuttering	Positive insights about stuttering
	Assuming responsibility	Assuming responsibility
	Expanding knowledge	-
	Expanding perspectives	-
	Guilt elimination	-
	Devaluation of stuttering	-
	Self-empowerment	-
	-	Self-motivation for speaking
	-	Acceptance and resignation
	-	Avoidance of being positioned as a PWS
Behavior-based coping strategies	Avoidance	Avoidance
	Speaking in spite of the difficulties	Speaking in spite of the difficulties
	Seeking help	Seeking help
	Creating easier circumstances	Creating easier circumstances
	Using speech techniques	Using speech techniques
	Coming out of the closet	-
	-	Disclosure of stuttering and speech preferences
	-	-

*Note.* UO=Ultra-Orthodox who stutter; ST= Secular-Traditionalists who stutter

## Category 2.1 Emotion-based coping strategies.

### UO INTERVIEWEES

#### Despair

The interviewee feels his life is destroyed, and gives up the possibility to change it:

In the first years of school, I did speak a bit, I am not sure. Later, it was clear that I wasn't talking. I didn't talk at all. I knew I had no choice, because I wasn't able to talk. When I was twelve years old, it was clear to me that I have no future in life. It was obvious to me. That's what I carry with me ever since.

#### Aggression

A negative reaction of a classmate toward the stuttering resulted in great frustration and offense, which consequently lead to aggressive actions which are partly viewed as loss of control:

In second grade, the teacher asked a question, and I wanted to answer. And while answering, somebody in the back started imitating my stuttering [...] I was surprised, I was shocked [...] I remember getting up, and throwing my chair over him. Now, it's not like I am such a calm person, but I don't throw chairs on people. I think about that situation a lot, because it was the first time I lost control because of my stuttering. The next episode was four five years later [...] It was in sixth grade, we stood in line to drink from the water cooler, and somebody there started imitating and mocking me about my stuttering [...] So I just remember I made him drink much faster than he could, and I was punished and sent home.

## **SECULAR INTERVIEWEES**

No descriptions of emotion-based coping strategies were provided by the Secular interviewees.

### **Category 2.2: Cognitive coping strategies.**

Cognitive strategies were aimed at reducing the stressful and threatening implications of the stuttering via different cognitive processes which aim to change the original meaning of stuttering into more helpful thoughts.

## **UO INTERVIEWEES**

### Positive insights about stuttering

Thoughts about the contribution of stuttering to the personal development are present in the following manners.

a. Stuttering is a reflection of the person:

Stuttering actually reflects me, the way I stutter, I wasn't just born with it. It reflects me. I am a person who likes to do things, finish them. I am not very patient. In the past, when I had a problem, I would hide it, and that's what happened also with my stuttering. I would stutter, so I would push the words out as hard as I could, to show everyone I am the best. Stuttering was always a reflection of me.

b. Stuttering leads to being more sensitive and introspective

The realization that stuttering has helped the person develop better observation skills on others and on the person himself, promotes the personal resources of the PWS:

It gave me a lot, I evolved because of it, it helped me reach into the bottom of my soul, as I told you about my self-confidence. It wouldn't have happened without the stuttering. I am always thinking, and searching and observing. Look, it made me who I am. I am more profound a person, more sensitive. Of course that's looking back retrospectively. Of course there were lots of bad things too" "People say I am more sensitive [...] I don't know maybe I was born like that, but maybe stuttering made even more sensitive.

c. Stuttering teaches you to ignore the opinion of others:

Now, stuttering taught me how to improve things about me- to stop being troubled by what other will think of me, because if I had continued being like that, I would have been able to keep on living. My brothers, my parents, my family- they still keep that track, to care about what others think. I reached a certain point where I realized I had no choice but to stop being like that

Assuming responsibility

The realization of self-responsibility is evident in the description of one UO interviewee, who chooses his active actions for managing his stuttering:

So I told myself, back then, that I will keep on treating my stuttering with fluency techniques but also with some self-acceptance principles.

Expanding knowledge

The act of searching for material about stuttering and managing stuttering is described in the following quote. By reading material about stuttering therapy and listening to

formal and informal talks about stuttering, this interviewee is empowered and able to start the change:

Five or six years ago I started looking for material about stuttering that I didn't know of yet. Back then, I know there was the approach of self-acceptance and the approach of fluency shaping, and none of those helped me. So I searched for other things in the world, but didn't find anything, until I [...] came across a podcast of three people who stutter, who talk about stuttering [...] and then, gradually, I started to change. I started reading Van Riper and Sheehan, heard lectures about them, bought DVD's and books.

### Expanding perspectives

The analysis of the data revealed some UO who stutter view themselves in a broader perspective that includes additional qualities and personal characteristics, and not only stuttering. The minimization of the significance of stuttering in the person's perspective, helps promote the sense of well-being, by acknowledging positive parts of the person's life and personality. Another interviewee compares stuttering to other impairments. These perspectives reduce the dimension of the stuttering problem

#### a. Self-introspection:

The fact that I am very good at other things, and I am doing well, helped me cope with my stuttering. My stuttering isn't something to be ashamed of.

I don't know how they describe me at the Yeshiva, but I am the most social, popular guy at the Yeshiva, I speak all the time. So what? Do I not want to make it better? I do, that doesn't stop me, it doesn't contradict.

As years passed it was very helpful to me to, to see the world not only in the scope of the problem, but beyond it. To see that other things exist too, not only stuttering.

b. External comparison to other impairments:

There are some people who cannot speak at all, or move, or do anything, so I am actually doing great.

[...] that it helps me observe and understand myself in the best possible way, and realize that everybody's got his own faults [...] It tells me automatically that I am not the only one with a problem, you have a long nose, he's fat, and he's ugly.

Guilt elimination

The following quote demonstrates the need to explain that stuttering is not the speaker's fault. This explanation may reflect some guilt feelings the person has about his own stuttering:

Stuttering is nothing to be ashamed of. I mean, it is, but it's not my fault, I don't do it on purpose.

Devaluation of stuttering

Assigning a less harmful significance to the stuttering, by referring to stuttering in a less stigmatic and more normative manner:

One of my critics about going to therapy is that you 'carry a flag' (Hebrew expression meaning to be identified with something). Once you carry the flag and tell society 'I'm different', it makes me feel bad, it only marks the

differences more, as saying 'look, I'm different' .If this is something you can do nothing about, that's fine, but I don't have to highlight it so much.

The fact that it never limited me and that my life would have been the same without the stuttering, helps me cope with it as something technical. I just don't speak fluently, and that's it.

### Self-empowerment

The interviewee is self-empowered by the fact that he is very successful in life, even more than his friends, and despite the stuttering:

I think the fact that I can communicate and get in touch with people, and do stuff that even successful people who speak fluently haven't managed to do, and I did, helps my self-confidence. I was self-confident without it also, but the fact that I manage despite the stuttering, helps even more. I am not saying it out of pride or anything; I guess it's just self-recognition. I do recognize the things I am good at, especially if it's despite the stuttering, that means I am really good at them. It made me realize how good I was.

## **SECULAR INTERVIEWEES**

### Positive insights about stuttering

The understanding the benefits of stuttering, despite the difficulties it raises, are helpful cognitive strategies. Mostly, stuttering resulted in personal growth, and enabled the suppression of impulsiveness, development of self-awareness and increasing sensitivity towards others.

a. Stuttering prevents impulsiveness:

On many occasions I tell myself- 'had I said what I thought so quickly, I would have gotten into trouble'. That's the stuttering. I think there's also the fact that I did earn things because of my stuttering. For example I was sometimes excused from talking, I don't know if that's what they thought, but I think they did.

b. Stuttering leads to being more sensitive and introspective:

I think I learned that you ought to be more sensitive to others, of course, I am not a saint, but I think you should try to be more sensitive to others and listen more, listening.

As much as my childhood was so painful, maybe it made me more sensitive to others. I think my personality evolved in parallel to the stuttering, it's really part of who I am.

Assuming responsibility

As evident among the UO interviewees, the following examples demonstrate how the interviewees realize their role in the process of managing stuttering. The first example refers to the self-responsibility of implementing speech techniques in order to facilitate stuttering. The second example also relates to self-responsibility, but in a more general perspective, by arguing that hard work can lead to results and realization of hopes:

When I did the fluency course in Hadassah, I was around 23 years old, and I realized I could control my speech. If you ask people who stutter, they usually

say that there's no hope, that the world is hopeless. But at that moment, I understood that in my specific case, it's up to me, if I practice and all.

First of all, I think people should not give up on things they want, I mean, to find their own special way to achieve it. Even if it's a long hard way, yes, do it, work hard, don't give up.

### Self-motivation for speaking (internal dialogue)

An internal dialogue encourages the person to talk, by the logic realization that speaking is beneficial for the person:

This year I started learning German at the university. My teacher told us that with all respect to reading comprehension, the most important thing is to practice speaking the language and that if we don't do it, we won't really learn it. So she keeps doing rounds of reading aloud in class, etc. And somehow she keeps asking me- 'do you want to read? Is that ok?' and somehow I never said 'no'. But I told her right at the beginning that I don't want to read in class, which was at the first lesson. Later I realized it's not going to work, because we are a small group. And also because she's right, what can I say.. I have to talk the language in order to know it, the pronunciation and the fluency, that's what makes the language. What can I say, I have to do it. So I talk, and I get stuck.

### Acceptance and resignation

Acceptance of stuttering is described as a cognitive strategy that promotes well-being and functioning with stuttering. By accepting stuttering, the interviewees view it differently and turn into a search for managing it more positively:

At that point I understood that this was a disorder or a problem I will not recover from so easily. It's not like there's any medication, or something like that, so I will live with it and learn how to deal with it- there's nothing else to be done.

I can describe it as if we went side by side, he knows I'm there, I know he's there, and we respect each other. I mean, I know what I can do and what I can't. I simply avoid a few things, and that's it, I won't change my life because of it.

I just reached a point where I live with it, and it lives with me, and we learn how to live together [...] I always tell people, that stuttering is a phenomenon that needs to be accepted, on one hand, and fought, on the other. That's my insight of life, if you don't accept it, it's going to be difficult for you.

#### Avoidance of being positioned as a person who stutters

A different strategy is described by the following interviewee. His behavior reflects the difficulty to accept stuttering as being part of him:

I never liked stutterers, it's very hard to walk around and hear others stutter, it's like a mirror to me. And generally, I didn't really discuss it anywhere, I mean, maybe my acceptance to come here today isn't just for you, it's also for me. To talk about it more deeply, at my age, after years of not touching it at all.

#### Confrontation (external dialogue)

The strategy described below regards the processing the issue of stuttering at a psychological level, by talking about it:

[...] that, and my last speech therapist who sent me to you. So even though I am an adult, and stuttering is something you treat as a child, I did feel that therapy helped me, because I felt like our talks are helping me to talk about it more, open up about it, and accept it.

[...] maybe my acceptance to come here today isn't just for you, it's also for me. To talk about it more deeply, at my age, after years of not touching it at all.

#### Choice of non-verbal profession

Another strategy for managing stuttering is the act of choosing a profession which does not rely on speech. By thinking ahead of the professional possibilities, easier circumstances for speech are planned in advance, in order to assure that stuttering would not be an obstacle according to their view:

My brother helped me look for a job, and I switched to accountancy after getting a degree in sociology. I wanted to work with American youth groups, who come to visit Israel, because I have good English skills and I grew up there and I am familiar with the mentality. I didn't do it because of my speech. I never gave up anything, except for politics maybe, local politics. I am very much interested in that, but I knew I wouldn't be able to handle it, because I won't be speaking to a public, so..

#### **Category 2.3: Behavior-based coping strategies.**

In this section, behavioral strategies for coping with stuttering are summarized. These strategies include mostly avoidance from talking or creating easier speech situations,

acknowledging the others about stuttering or exposing it, using speech techniques and speaking in spite the difficulty.

## **UO INTERVIEWEES**

### Avoidance

#### a. Avoidance of stuttering in words:

With word replacements I managed through somehow [...], because I switched lots of words but there were still those words I couldn't say.

#### b. Avoidance of speaking in public:

Speaking to an audience or giving a lecture or class? That's something I don't do. If it's only for a few friends, I do it. But if it's something more general, I don't.

Giving a class or lecture at the Yeshiva or stuff like that, I don't do even nowadays, because I am always afraid I will get stuck as badly as I did today.

#### c. Almost complete avoidance of speaking:

Of my childhood, I don't remember any incidents, because I hid my stuttering as hard as I could. I rarely spoke to people at all.

### Speaking in spite of the difficulties

The interviewee describes his act of trying to speak in public and in personal conversations, in spite of a great difficulty to talk. Although stuttering is experienced as painful, the interviewee decides to cope by not giving up on speaking:

It was my Bar Mitzvah. My older brothers read each the whole Parasha (text), so it was obvious to me that I would do the same, and I did. But, I had to give a speech as well, so I knew I would talk too. Eventually, I couldn't take the words out, but I stood in front of all the guests and I stuttered very much. Nobody understood a thing, what was it that I was doing, so they started dancing in circles, and my older brother came to me and took my papers away and put them inside his pocket and we dropped the subject. But in my memory, I did stand there in front of all those hundred people and tried talking, despite the fact that I stutter. It's not like I don't think about it, I do, but just speak anyways. I mean, if I ask a stranger on the street for instructions, I do feel a bit... For example, if I stuttered, I would tell myself 'oh no, you are stuttering now'. It will bother me, but not to the extent of not doing it because of the stuttering. I will always talk, I will always say.

### Seeking help

The strategies below are manifested in the search for help, which stems out of self-initiative of the interviewee for a change. The search for help is from professional and non-professional resources.

a. An active seek for non-professional advice from a significant personality:

There was this lawyer, Ronel Fisher, who I heard once speak and really impressed me. So I told myself that I had to meet him. I called him and we met. He is so much against going to speech therapy "this is who I am". He is a nice guy, I actually argued with him and we disagreed. I told him 'what's this nonsense all about?', because anyone who's got a problem and can treat it should say 'this is who I am'?! I mean, if

you can solve it, why not then? Is it just to prove that you manage with it even though you can treat it? I told him- 'I speak not less than you do'.

b. Learning and being encouraged by the experience of others:

I came across a podcast of three people who stutter, who talk about stuttering [...] So I started listening to it, and heard people who talk about their stuttering and feel happy, and don't talk about it sadly, I remember listening to a program where the speaker was talking in a sad intonation, this was different. They were happy. They were laughing and stuttering. So I told myself, back then, that I will keep on treating my stuttering with fluency techniques but also with some self-acceptance principles.

c. Seeking for professional help:

I got to know this doctor from the United States, who also stuttered. He helped me, I talked to him over Skype many times, and he gave me lots of advice. He helped me a lot because I didn't know how to handle it and he showed me.

I also remember going to a speech therapist, just for knowing if there was anything that could be done, and he talked to be about a few things and I didn't like it, because I wanted somebody to talk to me about the stuttering itself, and not only about psychological stuff which is also very important, I wanted someone to talk to me about the stuttering itself, I wanted the whole package.

### Creating easier circumstances

Creating circumstances that would not require speaking

With my teachers and Rabbis in class it was very hard for me. Basically, in class, I couldn't talk, I only spoke to them privately and also then, I replaced many words and I never knew if I would be able to speak or not.

### Using speech techniques

The use of speech techniques has been described to have been used occasionally by an interviewee after having learned them in speech therapy:

There have been some calls for the Torah which I was able to do only after the fluency shaping therapy, I did it fine.

### "Coming out of the closet"

This interviewee describes the initial intents to expose the stuttering in order to alleviate himself from the need for keeping it a secret and hiding it:

There was one girl at work who asked me for my age, and I couldn't say 30, which was my age back then. So instead, I said- 'very very old', so I wouldn't stutter. I told myself I was really really close to getting to my stuttering itself, and I told myself 'that's it!' I had to reveal my stuttering and face it [...] And there was another moment which I think was the first time I showed my stuttering, because I like finding the right moment. There was this guy at work, everybody knew he was gay, he said it in front of everybody. So when he came to me to ask me a question, I told him I decided to come out of the closet. So he asked me 'what? Did you decide to stop being religious?' and I answered that no, but that I stutter and I want to disclose it. He didn't understand. People don't understand what it's like to live in this cage of needing to speak fluently, people don't get it.

## SECULAR INTERVIEWEES

### Avoidance

#### a. Avoidance of stuttering in words:

Whenever I felt I was about to get stuck, I would prefer not to talk. I was very ashamed with my stuttering. I always tried to hide it. I preferred to look like an idiot than as a stutterer. I preferred to replace a word with another word that sounds strange, than to say the true word and stutter.

#### b. Doing something against your wish, in order to avoid speaking:

I remember in my military service, there were times when I felt I should not talk even if it costs me. For example we had to open a gate once, and another guy told me 'go open it', and I wanted to say 'you go', but I couldn't, so I just went and did it.

#### c. Avoidance of public speaking:

At university, in class, you'll probably not see me participate. Sometimes I just say answer loudly without raising my hand, but I wouldn't raise my hand and stand in front of everyone. I just sometimes shout the answers to the room and that's it.

In my Bar Mitzvah I decided not to be called up to the Torah, I told people stuff about it, but everybody knew the truth. I was too shy to be called for the Torah, so I blamed Hashomer Hatz'a'er [secular, left wing youth movement], saying that how could I be called to the Torah, it's against our values. But it wasn't really about that [...] At school, it was half the truth. My hand writing

is terrible, so my friend at school back then would read my homework aloud, claiming that I don't understand my own hand writing. Everybody knew this was just a cover, but they let me use it, and didn't make a big deal out of it.

### Speaking in spite of the difficulties

I was seventeen, in Meretz [a political party], at the times when everything was black and white, and everything looked better. I was also a member of the Youth counsel, and went to a conference of the party, in order to be elected. And for that I needed to talk, so I told myself 'I can do it', so I stuttered and got elected, which was the most important. So I will say my opinion, if I have a firm opinion. If not, then I won't. But if I feel I am right about something, my stuttering won't stop me.

There was a big event, where I presented an article I wrote. Now, the idea was that I wasn't going to be the one to talk, but a friend who helped with the article. We were four people doing the article, and I was the leader. He called me the day before and told me he is not coming, and that I should do the talking, and that if I felt uncomfortable, then not to do it and that's it. I was lucky it was a presentation of ten minutes, so I decided I was going to do it [...]. I decided it was very important, that I have something to say, that we did something important, and I was going to do it no matter what [...] For a person like me, ten minutes is no time, but I was confident with my PowerPoint presentation [...] I got on stage, and there was no PowerPoint [...] I realized I was all alone there with the audience. I told myself, Ok, I will start and whatever happens- happens. I started, stuttered, I don't remember a lot

more, but nice things happened afterwards. The article got published in a scientific journal.

### Seeking help

The following quotes detail the act of seeking help. Among these secular interviewees, the help is obtained only from professionals, namely speech therapists:

When I did the fluency course in Hadassah, I was around 23 years old, and I realized I could control my speech. If you ask people who stutter, they usually say that there's no hope, that the world is hopeless. But at that moment, I understood that in my specific case, it's up to me, if I practice and all. After two weeks of treatment I realized I could talk fluently. A bit differently, but fluently. I understood that I am not willing to stutter anymore, that I don't want it.

[...] that, and my last speech therapist who sent me to you. So even though I am an adult, and stuttering is something you treat as a child, I did feel that therapy helped me, because I felt like our talks are helping me to talk about it more, open up about it, and accept it.

### Using speech techniques

This strategy has been found useful for some of the interviewees of the secular group. This strategy was not reported to be used in among the UO, and actually ruled out by them. Speech strategies enhance fluency and the sense of being able to talk:

When I was in junior high and in high school, I was more aware of my abilities and the way I could manipulate speech, prolongate some sounds, all sorts of things I could do to talk.

I mean, if I can avoid it by changing the speech, like connecting letters, prolongation sounds, I will do it, regardless with whom, and whether he knows about it or not.

### Creating easier circumstances

The act of choosing the person to talk to is a strategy used described among the UO interviewees as well. When the conversational partner can be selected, the interviewee chooses to talk to someone who would seem to provoke less anxiety, hence creating easier circumstances of speech.

The small daily stuff could also be challenging, for example asking a stranger something. This is something fluent people do not understand. Occasionally, when I need to ask somebody at the street, I plan what words I will say, so that the sounds will be easier, and pick a person with whom you'll be comfortable to talk to, and not somebody who will stress you out

### The disclosure of stuttering and informing environment about speech preferences

Acknowledging the environment about the fact that the speaker stutters, as a means to controlling what people would think about the person. That way, the consequences of the perception of stuttering are assumed to be controlled.

I got there ready; I made some note and handed them to the commander and the chief Sargent, etc. Somehow they managed to spread them around everybody. Everybody knew about my stuttering and respected my request not

to put me in an unpleasant position.

In the army, this is something I will always remember, there is the morning parade, the commander says our names, and we have to respond 'yes sir!', and for me, it took time until I was able to say 'yes sir!'. So after a few minutes the commander noticed I wasn't saying that, and she thought I was disrespectful towards her, and started yelling at me. I wrote her a letter explaining the situation, she read it and apologized.

### **2.3 Dimension 3: Therapy.**

The therapy dimension was divided into three main categories:

- 3.1 The experience of therapy
- 3.2 The contribution of therapy
- 3.3 Criticism about previous therapies

The identified categories and subcategories of both groups of interviewees, are displayed in table 18.

Table 18

*Categories and Sub-Categories of the Therapy Dimension, as Identified among UO and ST Interviewees*

Categories	Sub-categories	
	UO	ST
The experience of therapy	Therapy caused awareness	Therapy caused awareness
	Multiple treatments	Multiple treatments
	No treatment was helpful	-
	-	The realization of no cure for stuttering
	-	Group therapy as a terrible experience
	-	Positive experience with emotion oriented therapy
The contribution of therapy	Speech techniques	Speech techniques focused treatment
	Attitudes and emotion focused treatment	Attitudes and emotion focused treatment
	The combined approach	Any treatment can be helpful at the right timing
	-	-
	Therapy for children raises awareness to stuttering	-
	Technical therapy is nonsense	-
	Charlatanism	-
	Speech therapists not attentive to clients' needs	Therapy tags you
	-	Therapy doesn't help
	-	Criticism of the therapeutic setting

*Note.* UO=Ultra-Orthodox who stutter; ST= Secular-Traditionalists who stutter

### **Category 3.1: The experience of therapy**

#### **UO INTERVIEWEES**

The experience of therapy, as retold by this group of interviewees, reflects mostly disappointment and frustration.

#### Therapy caused awareness

According to this interviewee, the act of going and participating in speech therapy as a child caused awareness to stuttering which resulted in negative attitudes towards it:

I went to speech therapy and they started talking to me about stuttering, but I didn't understand what they were actually saying. And then they let me hear myself and it was awful, I remember it even today. I was very young, about seven or eight, I was absolutely shocked. I sort of told myself back then 'if that's the way I talk then I should stop the stuttering'. And that was the beginning of my experience with stuttering

#### Multiple treatments:

Look, my mother, along with my father, took me to lots of speech therapists; I was really at many of them [...]. I was really in lots of treatments

Since I was a child, my parents took me to endless therapy sessions, to a point where if I see today some old picture of a popsicle, I can say 'this is the popsicle I used to get after speech therapy at the age of seven, or when I see a Volkswagen Beetle, I tell myself- 'this was the same one I saw when I went to therapy in Jerusalem when I was eleven'. All my memories of childhood are somehow related to speech therapy. I remember missing out a lot of class

### No treatment was helpful

No actual progress in fluency or functioning is expressed by the interviewees.

So when I was a young kid, I went to speech therapy, they let me hear myself and told me to stretch the words. That didn't help, maybe slowing down helped a bit, just a bit. After that I kept on going to many more treatments, including one about not being ashamed by my stuttering. That also didn't help. It didn't help me for the long run, because for me, whenever I felt the stuttering, I just couldn't speak

All of it did not help. Now I am also in speech therapy, I don't see any results, but we'll see

You could always think, how worse would have been my speech, hadn't I gone to speech therapy. But I don't have any proof that these treatments helped, because the fact is I do stutter pretty severely, you can't miss it [...] So I don't know if those treatments helped.

## **SECULAR INTERVIEWEES**

### Therapy caused awareness

Similar to quotes of the UO interviewees, the act of going to speech therapy at young age is regarded as causing awareness that something is wrong:

My parents told me about it, and took me to a speech therapist, so then I realized there was something wrong with me. But I kept being assured by them, that it's only in childhood, and that it will go away when I grow up.

### Multiple treatments

Similar experiences about going to many therapists are expressed in the following quotes. Generally, the experience described is of going to various therapists in multiple occasions. Most therapists are speech language therapists, but other types of therapies are mentioned as well, i.e. occupational therapy, healing:

I underwent lots of treatments and treatment attempts [...] I was in lots of treatments before the last one. Before that the last time was around my Bar Mitzvah.

I went to speech therapy when I was seven or eight. It wasn't a long treatment, maybe two or three months, with a speech therapist. Later I went to the same one in the summer between ninth and tenth grade, and when I was in the army I went to some sort of healer, I don't know exactly what it was. Negative and positive energies, I didn't really believe in it but I wanted to try it because I knew this person already before.

When I was a child I went to some kind of occupational therapist, and then when I was seventeen or eighteen, before I was enlisted to the army, I went to Hadassah for once a week sessions. When I was at school in America, in six grade, there was a speech therapist that would see me one a week or once every two weeks. Then when I was twenty three, I did an intensive treatment at Hadassah for two and a half weeks.

### The realization of no cure for stuttering:

[...] later until 10<sup>th</sup> grade I didn't go to treatment. I went later to another treatment and then I think I understood this was a problem, or a disorder, I won't get rid of so easily. It's not like there's some medication or something like that, so I will live with it and learn to live with it- there's nothing else I can do.

### Group therapy as a terrible experience:

I was participating in a therapy research in Tel Hashomer, where they tried to investigate group therapy. That was horrible, really horrible.

### Positive experience with emotion oriented therapy

This interviewee compares speech therapy which includes speech techniques that facilitate fluency, and speech therapy which regards feelings and cognitive attitudes about stuttering. According to this interviewee, the latter was more helpful to him:

I remember there were all sort of techniques with the tongue and the speech, that didn't make sense to me so much. I think I did better when I was treated by some speech therapist who was also a psychologist. I mean, doing little acting and playing, spitting out everything. That helped me more than techniques, to speech like that, to speech slowly, and all those kinds of things. Just to take it all out, that helped me much more.

## Category 3.2: The contribution of therapy

### UO INTERVIEWEES

#### Speech techniques

Fluency shaping therapy, which includes mostly speech techniques, is described as sometimes helpful:

There was a period of time were I did fluency shaping therapy, and then I managed to talk to people, to more people. I could speak better with my friends.

I, that I am so skeptical about all these treatments, I still do think you could improve the stuttering. I am skeptical about doing this technique, that technique, talking slowly. But still I do know that speech therapist have their techniques that can help a lot.

Around my Bar Mitzvah, I did speech therapy for a whole week, all day. She would tell me to go into a book store, and ask for a book, but talk really really slow. That really bothered me. You could always think, how worse would have been my speech, hadn't I gone to speech therapy.

I had a period of time were I tried to practice my fluency, by not replacing words for example. At the beginning it worked really well, until I completely lost my ability to speak, because my trick was to stop every time I felt a stutter was coming, and start again. But at some point I couldn't start again. So I went to a fluency shaping group, were I had to order a drink for the group, and I wanted to ask for cups. I got really stuck for ten minutes with that. I remember

I kept trying but couldn't do it [...]. My self- confidence was really down, my speech was bad, I couldn't even talk to my parents. And that was something I never experienced before. Later, step by step, my fluency instructors helped me go back to track and I told myself 'ok until the next time I try'. But that was such a dreadful experience, I was afraid to go through it again.

#### Attitudes and emotion focused treatment

Speech therapy which relates more to attitudes and feelings, rather than to speech techniques, is described as the appropriate approach for the interviewees:

[...] the speech therapist, who taught me how to breath and asked me why I wasn't practicing at home. And when I explained at the age of fourteen-fifteen that it doesn't work for me, that I can practice it at home two hundred times and still when I become anxious [...], I am so anxious I don't remember to breath and I can't breathe. So she told me 'no, you have to keep practicing', so I ran off that therapist.

The practical therapy of how to pronounce the words was just bullshit. The psychological treatment helped me much more. By the way, most of the speech therapy I got was psychological.

#### The combined approach

The experience of the interviewees with different kinds of therapies, lead them to the conclusion that speech therapy should combine technical and emotional methods:

Maybe some of the stuttering is because the muscles are week, but for many people there's lots of emotional stuff in it, so treatment should be combined.

To see first which part is in more need and work on that. Not just to work on one side of the stuttering.

## **SECULAR INTERVIEWEES**

### Speech techniques

Fluency shaping therapy, which includes mainly speech techniques in order to enhance fluency, are described positively in the following quote:

Then when I was twenty three, I did an intensive treatment at Hadassah for two and a half weeks [...]. I think after that course I realized I could do things.

### Attitudes and emotion focused treatment

Other interviewees believe that approaching stuttering by focusing on their attitudes and emotions to stuttering has been more helpful to them, through dealing actively with the difficulties raised and lived with stuttering:

My self-esteem was very important to me. The fact that I was confident enough, that I could see how I managed to travel by bus on my own, by myself an ice-cream, that was meaningful to me because it meant I was grown up, and that helped me a lot to overcome the stuttering. As saying- stuttering is just nonsense.

I think I did better when I was treated by some speech therapist who was also a psychologist. I mean, doing little acting and playing, spitting out everything. That helped me more than techniques, to speech like that, to speech slowly, and all those kinds of things. Just to take it all out, that helped me much more [...] Also at the present, with the last speech therapist I went to, I felt it was

very helpful, because I felt that talking about it helps me to talk about it, make amends with it. To open it up.

#### Right timing for treatment

Another interviewee suggested that any therapy can be helpful, as a function of the right timing:

I think everything was helpful, at the time. I don't think there was something specific that was more helpful.

### **Category 3.3: Criticism about previous therapies**

#### **UO INTERVIEWEES**

A few types of critic about previous therapies are identified through the interviews. Therapy is viewed negatively in respect to the fact that it raises awareness to a problem at young age, and viewed as unhelpful when including speech techniques and moreover, speech therapist are accused of charlatanism and not understanding what the client really needs.

#### Therapy for children raises awareness to stuttering:

I remember at some point I started to notice that it is harder for me to speak than to my young or older brothers.

I went to speech therapy and they talked to me about my stuttering, and I didn't quite understand what they wanted, and then they let me hear myself and it was terrible, I remember it clearly, I was very young, around seven or eight, I don't exactly remember. I remember it clearly, I was absolutely

shaken. I told myself, if that's my speech, I should stop stuttering. That's how my stuttering journey started.

#### Technical therapy is nonsense:

[...] speech therapists, who taught me how to breath and asked me why I wasn't practicing at home. And when I explained at the age of fourteen-fifteen that it doesn't work for me, that I can practice it at home two hundred times and still when I become anxious [...], I am so anxious I don't remember to breath and I can't breathe. So she told me 'no, you have to keep practicing', so I ran off that therapist.

#### Charlatanism:

What would I say to therapists? Don't be charlatans; don't try to sell what you don't have. I appreciated very much my last speech therapist, who told me 'that is it' when she felt she couldn't help me anymore [...] That was something I never saw before with other speech therapists, who taught me how to breath and asked me why I wasn't practicing at home. And when I explained at the age of fourteen-fifteen that it doesn't work for me, that I can practice it at home two hundred times and still when I become anxious [...], I am so anxious I don't remember to breath and I can't breathe. So she told me 'no, you have to keep practicing', so I ran off that therapist.

### Speech therapists not attentive to clients' needs

This interviewee criticized speech therapists for not understanding the help the client's needs. While the client wants to stutter carelessly, he finds speech therapists who, in his opinion, recommend differently:

Even fluency specialists, they don't really understand. I think if people would have seen my stuttering as it was five years ago, they would have had trouble understanding the great proportion of shame in my stuttering. And how do I know that? Because in all the treatments I went through, nobody understood the magnitude of my problem. They would hear me at the session, where I spoke beautifully. They didn't really understand, I told them that in at the real world, I can't manage to talk [...]. Nobody told me to start with a bit of stuttering, to show some of the stuttering, at least [...]. Because that could help me, if I felt the stuttering, I could stutter a bit before reaching a block. Nobody told me that, no body helped me with that. I also think that speech therapists today don't really want to treat the stuttering itself [...]. They want to treat the fluency, the emotions.

### **SECULAR INTERVIEWEES**

Among this group of interviewees, the criticism about therapy related to the fact that going to speech therapy tags you as a person with a problem, and on the other hand, it is viewed as unhelpful. Within this topic, one interviewee criticized the setting of therapy, which should be more intensive and persistent. A delicate criticism referred to the clients, which are depict as mostly not doing much of self-practice, thus not engaging properly into therapy.

### Therapy tags you:

On one hand, I would want to treat it, but on the other hand, in most cases it doesn't help and it just tags you. You begin thinking there's something wrong with you, if you are sent to therapy.

### Therapy doesn't help:

I underwent lots of treatments and treatment attempts. The past speech therapist told me it wasn't recommended to do fluency techniques because it would make me too focused on my speech and there's no need. I was in lots of treatments before the last one. Before that the last time was around my Bar Mitzvah.

### Criticism on the therapeutic setting:

Treatment should be continuous, not just some sessions and be discharged. The speech therapist should be persistent with homework and all that [...]. I don't know, maybe create a program, almost like one of a school. I don't know how to create such a thing, because people don't practice, and barely do anything, and after the therapy is over, they even do less.

## **Chapter D: Discussion**

### **1. Study I**

The purpose of this study was to explore the experience of stuttering and the coping strategy of avoidance in adults who stutter from different socio-cultural environments. The important role of the environment, which is dealt with extensively in this study, originated from the notion that each and every child and adult develops in an environment (Bronfenbrenner, 1979), and that the individual's direct and indirect environment affects his development (ibid., 1991) and the manner in which he copes with challenges (Lazarus & Folkman, 1984). To that end, PWS from two different Israeli Jewish subgroups were selected for this study: PWS from the ultra-Orthodox (UO) sector and PWS from the secular-traditional (ST) sector. These groups comprise the two extreme poles of Israeli Jewish society. The distinction between them stems from different attitudes toward religious perceptions and practices.

In an attempt to avoid modernism and secular influences, the UO constitute a closed, segregated society whose foremost ideal is to unquestioningly obey the Jewish laws and commandments and to spend their days studying the holy texts. This applies mainly to UO men. Secular society comprises the largest Jewish sector. Its culture encourages free choice and the pursuit of modernism, soul-seeking and self-defined values and goals. These totally divergent perceptions have evolved into two very different cultures within Jewish society. Hence, by identifying similarities and differences between PWS from these groups, a greater understanding of the role played by society in the PWS's lives may be achieved. In addition, it may be possible to apply the results of this study to other cultures, particularly those with similar characteristics, namely, a high level of religiosity, segregation from general society, and an anti-modern standpoint.

### **1.1 The experience of stuttering.**

In an attempt to measure whether the experience of stuttering differs according to cultural background, we administered the OASES (Overall Assessment of Speaker's Experience of Stuttering) (Yaruss & Quesal, 2006). This is a comprehensive questionnaire whose objective is to present a holistic picture of the experience of stuttering, in accordance with the ICF framework (World Health Organization, 2001). Comparisons between the total scores of the UO and ST groups on the OASES revealed significant differences, namely, the UO group experienced stuttering more positively than did the ST group. This result suggests that, on the surface, socio-cultural background is associated with the experience of stuttering.

Since no studies exist with regard to UO who stutter, we are unable to compare this result to any previous ones. However, given the speech-oriented activities of the UO that are performed on a daily basis, mainly in front of others –for instance, reciting a blessing, reading the Torah publicly, leading the prayers, and making *kiddush*, not to mention the social stigma associated with any physical or psychological problem and the social pressure that is exerted in a closed community, the more positive result yielded by the experience of stuttering among the UO is rather surprising. On the other hand, this result may be explained by considering the fact that one of the main characteristics of the UO community is its high levels of religiosity. The role of the latter will be discussed further when discussing the differences in quality of life between groups.

As regards the experience of stuttering among people from other socio-cultural backgrounds, there are reports concerning the attitudes toward stuttering in different countries (recently, in particular, the POSHA-S studies), as well as specific reports dealing with the negative and unfortunate experience of stuttering in specific cultures

such as those in sub-Saharan Africa (Simon, 2011) or the North Pacific tribes (Lemert, 1952). Although the comparison between the above-mentioned cultures and the UO culture seems far-fetched, it is clear that the cultural nuances of each society can affect the experience of the individual who stutters.

In the present study, the statistical comparison of the overall measure of the experience of stuttering (i.e., the OASES) revealed that the UO participants were less affected by stuttering as compared with the ST participants. This statistical result may have been obtained as a consequence of the significant difference in one specific section of the questionnaire – section IV, which deals with the impact of stuttering on quality of life. Further discussion regarding differences in quality of life will be presented in the following sections.

In addition, linear regressions showed that the experience of stuttering could be predicted among the ST participants by means of two variables, namely, perceived stuttering severity and age. In contrast, the UO do not follow that line of reasoning, and no prediction was obtained. This result is an example of how cultural background can affect the shaping of the stuttering experience. The first variable implies that the ST's experience of stuttering is related to how severe their perception of it is; in other words, the more severe stuttering is perceived to be, the worse the experience of stuttering is. This result seems reasonable. The way you perceive your impairment shapes the way you live with it, according to the cognitive behavioral therapy principles (Beck, 1967): the interpretation of a given condition (cognitive reaction) affects the way you feel about it (emotional reaction) and the way you respond to it (behavioral reaction).

The second variable was age: the younger a person is, the more negatively the experience of stuttering is described. Special attention will be devoted to the age

factor later on in the discussion. The fact that among the UO, no regression was obtained for the measurement of the OASES – in other words, no variable was found to predict the OASES, neither perceived stuttering severity nor age – may imply that there are other variables responsible for shaping the overall experience of stuttering that were not measured in this study. Above all, this difference in the UO result implies that there is a different underlying mechanism that shapes the UO experience of stuttering. These factors will be considered in the discussion of the subsequent results.

Each of the following sections discusses a separate component of the experience of stuttering as presented by both the OASES and other tools.

### **1.2 Perception of stuttering severity.**

In this study, participants rated their own stuttering severity on a scale of 1 to 10– in other words, they provided a subjective measure. Results indicated that the UO participants perceived their stuttering to be more severe than the ST participants did. The self-evaluation of stuttering was reported to be indicative of the speech disturbance, and could therefore be used as a measurement of speech. For example, a positive correlation was found between the stuttering evaluation of the researcher and the subjective, self-evaluated stuttering severity (Ezrati-Vinacour & Levin, 2004). While similar results were reported in other studies as well (Aron, 1967; Naylor, 1953; O'Brian et al., 2004), they demonstrated that for two out of 10 participants (O'Brian et al., 2004), there were disagreements between the participant's self-rating and the rating of an external rater. It was suggested that the self-rating of stuttering is indeed a valid tool, and in cases of discrepancies between the rating of the PWS and

that of an external rater, it can furnish information about the PWS's perception of his condition, that is very much determined by his attitudes or feelings.

In order to explain the differences in the perceived stuttering severity ratings, we attempted to re-examine the group characteristics for the purpose of considering group differences as a possible confounding variable with respect to this result. When scrutinizing the background characteristics of the two groups of participants, the only significant difference between them was that the UO came from a lower socio-economic background than the ST, that is, the number of people per room was higher among the UO. This characteristic is intrinsic to UO life, since they have a considerable number of children in each family (Zidki, 2013). That said, they live in small, modest homes for reasons of modesty as a principle as well as low income due to spending most hours of day at the Yeshiva (Gonen, 2000; Shilav, 1997). To the best of our knowledge, there is no evidence to suggest that socio-economic status is associated with stuttering severity or perceived stuttering severity. No other differences were found between the groups.

Thus, since socio-economic status may not be a satisfactory explanation, we suggest that the result of higher rates of perceived stuttering severity among the UO participants may be interpreted in two directions: (1) the UO actually differ from the ST in stuttering severity, and (2) the UO only *perceive* their stuttering to be more severe. If we consider the first interpretation, it implies that the participant's cultural background affects the level of stuttering severity. In order to prove this, additional objective information regarding the participant's speech would be required – for example, having an external rater use the SSI-IV (Riley, 2009) in order to measure stuttering severity. This, however, was beyond the scope of the present study.

If the above-mentioned interpretation were to be considered, it would be helpful to find other evidence in the literature demonstrating that the mere fact of belonging to a different cultural group affects stuttering severity (or symptoms). However, the literature shows that the association between culture and stuttering focuses primarily on studying the prevalence of stuttering in different cultures [for example, in Japan (Toyoda, 1959); in Egypt (Okasha, Bishrey, Kamel, & Hassan, 1974); and in Colombia (Ardila, Bateman, & Nino, 1994)]. Some of these studies were conducted decades ago, originally in order to provide evidence for the hypothesis that stuttering occurs predominantly in high standard cultures, suggesting that high demands, resulting in social pressure and competitiveness may cause stuttering (Yairi & Seery, 2011). In order to prove this hypothesis, reports about various American tribes, which consist of different values, showed that the prevalence of stuttering differed among cultures (Johnson, 1942; Lemert, 1952). Later, that claim was abandoned since it was found that stuttering does in fact exist (Zimmermann, Liljebald, Frank, & Cleeland, 1983) among those tribes where at first it was argued that stuttering was no evident (Johnson, 1942).

New attempts to review studies on the prevalence of stuttering among various cultures gave rise to different methodologies that yielded different results. Thus, before reaching any conclusions, consistent and modern methodologies should be implemented in new studies that focus on this aspect (Finn & Cordes, 1997). In one recent study dealing with the prevalence of stuttering among African American preschoolers (Proctor, Yairi, Duff, & Zhang, 2008), the researchers found that the prevalence of stuttering among African American (n=2223) and European American (n=941) children was similar between groups. Once more, this supports the idea that the extent of stuttering is similar among all cultures. The aforementioned result was

repeated in a survey conducted in East European countries: Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Lithuania, Poland, Romania, Russia, Slovakia, and Slovenia (Fibiger, Peters, Euler, & Neumann, 2008).

With respect to particular stuttering characteristics, only few studies were conducted on cultural groups. For example, Olsen, Steelman, Buffalo, and Montague (1999) explored the stuttering symptoms of 15 African American and 15 white boys (age range 8-12 years). Overall results revealed no differences between the two groups in their stuttering characteristics in neither reading nor conversation tasks. In contrast, differences in stuttering characteristics were reported between the African American (n=25) and white American adolescents (n=25).

It is therefore premature to conclude from the literature that stuttering is manifested differently in different subcultures. During our clinical observation of clients from other subcultures in Israel, we noted that adult PWS from the former USSR present with significantly more severe and visually noticeable stuttering symptoms. Although we have not found evidence to corroborate this observation in the research database, we can speculate that in the closed environment of the Former Soviet Union, non-supportive attitudes toward stuttering or different approaches for treating stuttering exacerbated the stuttering symptoms.

The second interpretation of the results of this study, namely, that the difference between UO and ST resides in the more negative perception of stuttering on the part of the UO, suggests that UO PWS are harsher in the self-rating of their speech for a variety of reasons.

The first explanation may be that the UO, whose upbringing dictates that they be self-demanding and self-disciplined, have more stringent expectations with regard to speech. One of the centric UO ideals is that of exercising self-control with regard to

their physical urges and emotions. While this refers particularly to sexual urges, it also includes overcoming feelings, exerting intellectual effort in order to obey the holy practices of their culture, and eschewing spontaneous actions and emotional expressions (Goodman, 2003).

Following a similar line of reasoning, it is possible that the fact of belonging to a closed society may promote rigorous social control that causes the UO to be concerned about their image in the eyes of society. Thus, it is possible that the UO participants were stricter with themselves with regard to their stuttering as a result of a strict *super ego* (Freud, 1923) or *parent ego-state* (Berne, 1961), nurtured by society's restrictive values.

The second possible explanation for the above-mentioned result is the fact that UO PWS have to deal with multiple opportunities for public performance involving speech activities within the Yeshiva and during Jewish rituals, studying, or teaching. The frequent encounter with those activities, usually in public (e.g., reciting blessings in the synagogue), may make the PWS even more aware of his speech problems and cause them be perceived more severely. Furthermore, while the performance in activities is highly valued, it is nevertheless subjected to social pressure. For example, as mentioned previously, teaching Torah confers the highest status in the UO world, and the *talmid haham* (literally, "wise student", referring to someone respected for his level of religious knowledge) is a symbol of the topmost social achievement. The *talmid haham* is invited to give oral speeches at various social situations, including social encounters, ceremonies, and holiday meals. He is expected to deliver an oration pertaining to a religious theme and teach others (Greenberg et al., 2004).

Consequently, speaking in public, reflects the highest level of social appreciation (Greenberg & Witztum, 2004). The lofty expectation that the boy,

adolescent, or man in the Yeshiva should succeed, and “buy himself the ticket” to the UO society (Marx, 1993) may also rely on speech to a great extent. This is because participation in daily rituals involves speech, as does the exposition of knowledge in the learning setting; thus, the need for better speech skills is stressed.

A young boy's success reflects on his family. However, failure that is attributable to learning or behavioral problems, for example, not only reflects negatively on his family, but may exert a detrimental effect on the quality of his siblings' potential marriage partners (Weill, 1990). Thus, the anxiety about speech performance may be even greater. In addition, since marriages in the UO sector are arranged by matchmakers, good personal characteristics (i.e., not having any problems) as well as success at the Yeshiva make the young man a suitable and sought-after marriage candidate (Lehmann & Siebzehner, 2009).

Moreover, since young UO men and women only meet a few times prior to their wedding, external characteristics are more noticeable, while inner qualities and traits may not yet be discovered. Thus, prior to or during the few encounters preceding the decision to become engaged (Greenberg & Witztum, 2004), the manifestation of stuttering may engender a great deal of worry or anxiety. In sum, the UO participants' self-rating of stuttering as more severe may reflect negative attitudes, worry, or anxiety with respect to their stuttering. Ingham and Cordes (1997, cited in O'Brian et al., 2004) suggested that in some cases, the client's self-rating may be more severe because of other covert factors such as word avoidance or anxiety, or less severe if he pays little attention to or is not concerned with stuttering severity.

Furthermore, stuttering may indeed be more severe among the UO due to their cultural circumstances, which raise the level of anxiety with regard to speech and communication and result in more severe stuttering. Anxiety in PWS has been viewed

either as a result of stuttering or as having a contributing role to the development of stuttering (Blood & Blood, 2007; Blumgart et al., 2010; Craig, 2000; Craig & Tran, 2006; Iverach et al., 2009). For example, Ezrati-Vinacour and Levin (2004) examined levels of state anxiety, speech-related anxiety, and subjective self-evaluation of stuttering severity among PWS, while being involved in reading and speaking tasks. Results indicated a strong positive correlation between the anxiety scales and the stuttering severity. The authors explained these findings in light of their clinical impression that "PWS often declare that the more anxious they feel the more their stuttering severity increases and vice versa" (ibid., p. 144).

Thus, UO PWS may feel more anxious or worried about their stuttering due to their cultural circumstances, and therefore rate it as more severe; alternatively it may in fact be more severe as a result of the elevated speech-related anxiety (Ezrati-Vinacour & Levin, 2004; Gregory, 1991; Van Riper, 1973).

Interestingly, when exploring predictive variables of perceived stuttering severity, we found that it was predicted according to feelings and attitudes toward stuttering only among the ST participants and not among the UO participants. Moreover, the perceived stuttering severity did not correlate with any of the other measures (e.g., cognitive and emotional reaction, quality of life) among the UO participants, whereas it did among the ST participants. These findings may serve to demonstrate that the UO detach their actual speech function, namely, stuttering, from their feelings about it – perhaps because their individual feelings are perceived as irrelevant or minor. We will elaborate on these findings later on.

In any case, since the goal of this study was to explore the *experience* of the PWS in two different cultures, this result suggests that UO do in fact experience their stuttering as more severe.

### **1.3 Cognitive, emotional, and behavioral responses.**

In this study, questions concerning the feelings and attitudes of both UO and ST participants were delivered via the OASES subscale II ("your reaction to stuttering"). The most common behavioral coping response of PWS, that is, the avoidance of speech and speech situations strategy, was measured using the Situation Avoidance Behavior Checklist (SABC) (Cooper, 1976). The result, showing similar attitudes, feelings, and avoidance levels among UO and ST participants, emphasizes the similarity of the experience and coping with stuttering across cultures. We have failed to locate studies that compare the feelings and attitudes of PWS themselves in other cultures.

However, bearing in mind that a society's attitudes toward stuttering are important, since they serve as a mirror to the individual who stutters and may have an impact on his own perception of himself, it is interesting to note different attitudes toward stuttering in different countries. The numerous studies dealing with the stereotypical and negative attitudes toward PWS across cultures exhibited some differences among countries (Abdalla & Al-Saddah, 2009; Abdalla & St. Louis, 2012; Ip et al., 2012; Irani et al., 2012; St. Louis & Roberts, 2010). For example, attitudes toward stuttering in Turkey were more negative than they were in America (Özdemir et al., 2011), implying that Turkey's Muslim culture influences the perception of stuttering.

The role of the environment is extremely important. It is described in Bronfenbrenner's (2009) Ecological Systems Theory as a set of structures that surround the child or person, in Lazarus and Folkman's (1984) Transactional Model of Stress, and in the research of others (Hobfoll, 1998; Hobfoll, 2001; Lyons et al., 1998) as a crucial factor in the process of coping with stressors. It has been argued that

social resources may promote the coping efforts of the individual by providing encouragement and support that can enhance the individual's self-confidence or self-esteem or function as a guiding source of information which is necessary for planning more efficient coping strategies (Holahan & Moos, 1991; Hobfoll, 1998). As the individual encounters a stressful event, the interaction between the individual and environmental factors shapes the resulting underlying emotional and cognitive processes, i.e., the primary and secondary appraisal (Lazarus & Folkman, 1984), followed by the resulting behavioral action taken in order to face the stressor.

Thus, if different cultures exhibit different attitudes toward PWS, it implies that in the culture in which the perceptions of PWS are more negative, the behavior toward them could be more negative, and vice versa. In any case, however, it is reasonable to hypothesize that different cultures interact differently with PWS. In the case of Israeli society, there is no data on the perceptions with regard to stuttering in Israel as compared with other countries, since no research has yet been conducted on Israeli subcultures and stuttering. We can only assume that cultures that differ so greatly, such as the UO culture and the ST culture, present different stressors with respect to stuttering that may result in different feelings and attitudes.

The absence of differences between groups may reflect the universality of the stuttering experience, implying that regardless of cultural circumstances, PWS develop emotional and cognitive responses in a similar manner, along with the adaptation to cultural idiosyncrasies.

Given that the cognitive and affective response levels, which influence the primary appraisal (Lazarus & Folkman, 1984), that is, the evaluation of threat to self in a given situation, were similar in the UO and ST groups, it is not surprising that the levels of behavioral response, that is, avoidance of speech and speech situations, are

also similar. This coincides with Beck's (1967) model of cognitive-behavioral therapy (CBT), in which thought, emotions, and actions are linked. Following this philosophy, the experimental trial of Menzies, O'Brian, Onslow, Packman, St Clare, and Block (2008) studied the efficacy of CBT on adults who stutter and showed a significant improvement in cognitive (unhelpful thoughts) and emotional (anxiety) levels, as well as a reduction in word and situation avoidance (i.e., behavior). These results exemplify the notion that the manner in which the individual interprets a situation affects how he feels, including physical consequences, which affect his behavior.

#### **1.4 The burden of stuttering.**

In the present study, the term "burden of stuttering" refers to the difficulty in communication that may stem from various factors: the stuttering severity itself and coping responses, as well as situational factors and listeners' responses. From a broader perspective, the burden of stuttering may represent the PWS's constant need to prove that, except for his stuttering, he is equal to others in every other way.

The result of this study shows that PWS from the UO and ST groups perceived the burden of stuttering in a similar way. Moreover, when asked to compare the burden of stuttering in the present and in the past, both groups responded that the burden of stuttering was much greater in the past, during adolescence, than in the present. For some participants, the period of time that had elapsed between adolescence and the present was only a few years, while for others it was longer.

This result may again exemplify the universality of stuttering. However, it should be noted that the participants were asked to describe how difficult stuttering makes communication not only in general situations but also in specific situations – at work, in social situations, and at home. Considering the fact that most UO either do

not work or hold part-time jobs, the comparison between the UO and ST groups may be partially incorrect. An examination of the work status of the UO participants in the present study revealed that only 11 (out of 31) worked, because it is common for UO men to spend all day studying in the Yeshiva. Interestingly, 16 participants responded to the items regarding their work situation, despite the fact that many of them did not work. On the other hand, the vast majority of the ST participants *did* work, and 26 (out of 30) responded to these items. Similarly, it could be argued that the most frequent challenging situation for the UO participants every day would be the Yeshiva, but due to the absence of items relating to that aspect, it is impossible to obtain a complete picture of the UO PWS. Consequently, the comparison between the Yeshiva situation and the ST work situation seems to be out of kilter. Further research is necessary in order to assess the burden of stuttering in the Yeshiva situation.

The finding that the burden of stuttering generally decreases with age in both groups is consistent with several findings in the literature. Manning, Dailey, and Wallace (1984) administered five questionnaires in order to examine the attitudes and personality characteristics of 29 PWS of between 52 and 82 years old. Results demonstrated that most participants of older age felt that stuttering was less harmful at present, in comparison to the way it was perceived previously at younger age. In a qualitative study of PWS in South Africa, one participant was cited saying, "As you get older you cope with it better, you hide it better, it becomes easier" (Klompas & Ross, 2004, p. 284).

In a qualitative study on old PWS's (over 55 years old, mean age of 70.7) perception of the influence of stuttering on being active and taking part (Bricker-Katz, Lincoln, & McCabe, 2010), some participants reported that the impact of stuttering at a more advanced age was the same, some reported that it was greater, and some

reported that it was less. Those who reported the latter related that perception to the realization that stuttering was less meaningful to them at present than as it was at younger age. They were much less critical with respect to themselves even at moments of stuttering, and the influence of stuttering on their self-esteem appears to have decreased to some extent. Some participants expressed resignation with regard to their stuttering. This came across as a manifestation of their own greater tolerance with regard to their stuttering. These participants realized that due to their age, it was unlikely that there would be a cure to their speech disorder. It should be noted that statements regarding a diminished impact of stuttering were also linked to the participants having retired from work and being relieved of the speech–work-related stresses (Bricker-Katz et al., 2010).

Hence, we learn that as PWS become older, some experience a diminished impact of stuttering on their communication, which is a result of maturity, acceptance, resignation, being able to forgive oneself, and also, for some, not having to go to work. In the present study, the age range of participants was lower (UO=18–56, mean age 30.4 years old; ST=18–67, mean age 39.24 years old). However, the participants in the present study underwent similar processes of acceptance and resignation since their responses demonstrated a shift to less burden in the present as compared with the past.

### **1.5 Life satisfaction and quality of life.**

After discussing the cognitive, emotional, and behavioral responses, we set out to measure the outcome (Lazarus, 1991) of these responses as regards life satisfaction and the impact of stuttering on quality of life. However, comparisons of life satisfaction levels between the groups yielded no significant results, signifying that

since the cognitive, emotional, and behavioral responses were of similar levels once again, the result showing no differences in life satisfaction seems reasonable as well.

That said, in subscale IV of the OASES (Yaruss & Quesal, 2006), which deals with the impact of stuttering on quality of life, the UO reported less impact of stuttering on their quality of life. Since the literature lacks data on UO PWS in general and with respect to their life satisfaction and quality of life in particular, we will attempt to discuss our pioneer findings in the context of the general literature.

Considering these results within the context of our knowledge of the particular characteristics of UO society, despite the possible difficulties for the UO PWS discussed earlier, we suggest that UO participants were less vulnerable to the negative results of stuttering due to their socio-cultural background and religiosity. Ellison, Gay, and Glass (1989) argued that the religious practice and faith may provide a thorough scheme, in which the person can reach an understanding of the human existence in the world and enjoy the relief associated with spirituality. This leads to the act of participation, also favorable for the individual, since it includes the communal interaction at the religious institute (church, synagogue, etc.) and meeting other community members who share common perspectives.. In other words, it may also serve as a "plausibility structure" (Berger, 1967; cited in Ellison et al., 1989), in which "Ideation and activity may be dialectally related, with religious participation reinforcing and solidifying individual religious convictions and the subjective interpretation of personal experience" (Ellison et al., 1989; p. 103).

Thus, religiosity may promote general well-being (Abdel-Khalek, 2010; Kortt, Dollery, & Grant, 2014; Levin, 2012, 2013; Rule, 2007) and coping when dealing with disabilities. For example, in a study about the manner in which white and African American elderly perceived their functional impairments, it was found that

despite the African American elderly being more impaired in the management of activities of daily living (ADL) and instrumental activities of daily living (IADL) than the white elderly, their depression degree was similar. It was interesting to note, nevertheless, that the African Americans rated themselves as more religious, thus suggesting that religiosity has a preventive role regarding depression caused by physical disabilities (Cummings, Neff, & Husaini, 2003).

In another example involving breast cancer patients in Croatia, higher levels of religiosity were found to be associated with a lower prevalence of depression (Aukst-Margetić, Jakovljević, Margetić, Bišćan, & Šamija, 2005). However, it should be noted that some research indicates that religion-based coping may also 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 in the UO community to quality of life when facing illness or other problems, the few studies conducted in this society show that being religious promotes coping. For example, UO women with breast cancer displayed better coping owing to hope, fatalistic acceptance, and reduced preoccupation as compared with secular women (Hasson-Ohayon, Braun, Galinsky, & Baider, 2009). In another study (Ivry, Teman, & Frumkin, 2011), mothers of children with disabilities described their situation as having been chosen by God to carry out a task assigned by Him as a test of faith and as an opportunity to show their devotion and to enhance their ability to cope with an autistic child by viewing his soul in a religious context. In a study on mothers of children with autism, the child with autism is viewed as a *tzadik*, a person with a pure soul, whose role is to compensate for the

sins of others. It was suggested that by displaying glorification for the child, the mothers were able to cope better with his condition (Shaked, 2005).

In general terms, the narrative of what quality of life may also differ between the UO and the ST. Although both groups consist of Jews, the fact that the UO emphasize Jewish values and the reading of texts promotes life satisfaction through a sense of gratitude for what one has. Referring to the famous passage in the *Mishna*, "Who is rich? He who is happy with his portion" (Pirkei Avot 4:1), Maimonides contended that kindness, generosity, honesty, modesty, humility, and satisfaction with very little are the dimensions of richness. Thus, concerning the answers to questions as to whether stuttering affects life satisfaction, communication, or quality of life, it is most probable that the UO PWS's perspective is different from and more positive than that of ST PWS.

It is interesting to note that the UO scores with regard to the impact of stuttering on quality of life are more positive, despite the finding that on average, they rated their stuttering as more severe than the ST PWS did. We offer a possible explanation for this combination of findings. Stuttering severity was rated by answering the question, "How severe is your stuttering, on a scale of 1 to 10?" Since the question concerned a "physical" condition, namely, the severity of stuttering, the participant might have perceived the response to be straightforward and devoid of the involvement of other philosophical or subconscious processes. Therefore, the UO responded in a direct and honest manner. On the other hand, the questions concerning quality of life – for example, "How much is your overall quality of life negatively affected by your stuttering?" or "Overall, how much does stuttering interfere with your sense of enthusiasm for life?" – were asked in an explicit manner. The explicitness of the questions might result in responses reflecting the philosophy of

being happy with what one has. In other words, the perception of the physical function of speech is separate from the way it projects on quality of life.

On the other hand, UO responses as regards the impact of stuttering on quality of life may have been influenced by the social desirability factor, perhaps in order to justify or defend the sector to which they belong. Rier et al. (2008) suggested the possibility that the participants might have wished to depict a positive image of their subgroup, given the problematic positioning of the UO in the Israeli society (Efron, 2003). Consequently, is it possible that the quality of life was depicted as more positive than it actually was (the participants were aware that this study was being conducted among several Israeli social subgroups).

A regression analysis performed for each group separately revealed that within the ST group, quality of life was predicted first by the perceived stuttering severity, and second by the perception of the role played by speech in personal success. In contrast, no prediction was obtained from the UO participants. The divergent results for the two groups may suggest that the underlying mechanisms that determine quality of life are associated with cultural background. The ST group was affected by the actual difficulty of stuttering (as perceived by them) and their resulting worry, which stemmed from perceiving speech as important for personal success. In contrast, the case of the UO group was different- no predictions for quality of life were obtained.

Once again, the difference in these findings might be explained by the different way of life of each group. Whereas the ST participant is exposed to a variety of speech situations at work and in his private life (including leisure time), thus facing the challenges stuttering poses for communicating with various surroundings, the UO participant is mostly devoted to a routine of study in a permanent setting, which was likely to serve as a shelter from the expectations of the "outside world". Therefore, he

does not have to face the work and social challenges in the same manner as the ST PWS does. On the other hand, there are other demands in the Yeshiva, for example, competition among students with regard to knowledge and level of study, as well as communal roles that require the PWS's participation. Further research should provide more data regarding the manner in which the UO manage the experience of stuttering.

With respect to the relation between the perceived stuttering severity and the measures of the experience of stuttering, two different consistent patterns were found in each group. Among the UO participants, no correlations were found between the measures of stuttering severity and of the experience of stuttering. In contrast, among the ST participants, correlations were present for all measures, indicating that the more severe the stuttering was, the more negative the feelings and attitudes were, the more difficult communication was perceived to be, there was more avoidance, life satisfaction decreased, and quality of life was more impacted.

The different patterns of both groups again exemplify the fact that cultural background is associated with different experiences of stuttering. While the pattern of ST participants seemed familiar from clinical experience and research, the UO presented a different perspective, namely, an absence of correlation between perceived stuttering severity and the various behavioral, cognitive, and emotional dimensions of stuttering, as measured in the present study. It is possible that according to the UO philosophy, life with its gifts and difficulties all belong to God's deliberate plan (Ivry et al., 2011), and you should accept the life you have because it is what God wished for you. Thus, the lack of association between stuttering and the measures of the experience of stuttering –for example, feelings and attitudes and quality of life, may be a result of a total acceptance of the UO point of view.

Alternatively, it is possible that the UO tend to focus on studying and are taught to overcome their individual emotions. It could be cautiously suggested that discussing emotions becomes irrelevant because it focuses on the individual's needs in a society that wishes to promote its collectivity rather than draw attention to individual differences. The collectivity is enhanced by the set of UO values that are disseminated and sanctioned by rabbinic authority, thereby superseding individual autonomy. UO Jews set great store by the place of rabbis as spiritual guides and as mentors of personal matters as well (Huppert, Siev, & Kushner, 2007). Possibly, the fact that the decision is made for them leaves less room for individual idiosyncratic thoughts, actions, and feelings. As a result, the familiar, common pattern of a correlation between the stuttering severity and the other measures was not evident within the UO group.

As stated previously, the different pattern of results may serve as an example of the role played by socio-cultural background in facing and coping with an impairment. In the case of this study, the background differences may include significantly different levels of religiosity and their prospective impact on coping with challenges. It should also be mentioned that there is a difference between the everyday reality of UO men and that of ST men. Most UO men do not work, but spend the whole day at the Yeshiva studying Torah and Talmud, which is their most significant objective. It may be possible for a UO PWS to choose the communal roles in which he is called upon to speak in public. As long as his studying is intact and remains at a high level, he may be able to adhere to his routine without having to face speech challenges and demands. In other words, the Yeshiva may serve as a greenhouse, or a refuge, in which feelings and attitudes, avoidance, difficulties, quality of life, and satisfaction do not depend on stuttering severity. As Bilu and

Witztum (1993) maintain, the structured environment of the Yeshiva and the exemption granted by the latter from many everyday chores may be extremely beneficial to students who are not particularly well-adjusted, despite the self-discipline this setting usually demands.

The situation is different in the ST culture since over 90% of ST men work (in contrast to 52% of UO men, who work mainly in part-time jobs; CBS, 2010), and that constitutes their principal occupation during the week. Among the general Israeli population (which consists mostly of ST people), work and career are perceived to be highly important for advancement and self-fulfillment (Feldman, Masalha, & Nadam, 2001). ST PWS have reported that stuttering affects negatively on communication at work, general communication, and ultimately affects self-esteem (Bricker-Katz, Lincoln, & Cumming, 2013). Thus, the result that the severity of stuttering among the ST is linked to avoidance, feelings and attitudes, life satisfaction, and quality of life, seems reasonable.

When we explored the relation between the self-perception of stuttering and the perception of significance of speech for personal success, we failed to find any correlations in either group. However, when we explored the relation between self-perceived stuttering severity and the perception of speech significance in general speech situations (i.e., situations that are relevant to both the UO and the ST cultures), our results showed that the more significant speech is perceived to be, the more severe stuttering is perceived to be. These results may demonstrate that the ST group perceived stuttering severity and the significance of speech to be linked, while the UO did not. This link may represent a bi-directional relationship: if speech is perceived to be more significant for the ST PWS, his desire to speak fluently could in fact result in higher rates of stuttering severity since he is more sensitive to and critical of his

speech. Alternatively, the significance of speech may be emphasized by the ST PWS as a result of his stuttering severity. Stuttering may foreground the role of speech and its significance, particularly because PWS do not master it well. Perhaps the fact that stuttering occurs mostly within a dialogue rather than when the person speaks to himself constitutes the basis of that perception, since "the real unit of language that is implemented in speech [...] is not the individual, isolated, monologic utterance, but the interaction of at least two utterances – in a word, dialogue" (Voloshinov, 1973, pp. 116-117).

### **1.6 The link between the experience of stuttering and gender**

The question of whether gender is associated with the experience of stuttering has been discussed to a limited extent. The reason for this probably lies in the fact that the prevalence of stuttering differs substantially between genders, with adult males who stutter far outnumbering adult females who stutter. In a relatively recent study, Van Borsel et al. (2006) reported a male:female ratio of 4.6:1 for a school population of up to age 20. Within the minor studies regarding males and females who stutter, a few focused on attitudes toward the two genders. In Burley and Rinaldi's (1986) study, in which fluent listeners rated male and female PWS, males were rated more negatively than females. In contrast, at Patterson & Pring's (1991) study, similar attributions to male and female PWS were given by listeners. Silverman (1982) explored attitudes of SLTs and university students toward males and females who stutter, who were either children or adults. While all stutterers were associated with stereotypes of a negative nature, the therapists' most negative stereotype was of girls who stutter, whereas the students' most negative stereotype was of men who stutter.

With respect to the PWS themselves, Silverman and Zimmer (1979) explored the possible association between gender, speech symptoms and stuttering related personality characteristics. They compared 10 adult females who stuttered with control groups of stuttering males and normally fluent females by means of the California Test of Personality (CTP), a self-concept questionnaire, and speech samples. Females who stuttered showed higher levels of self-esteem than the other two groups and did not consider themselves handicapped. Furthermore, their speech included less revisions and greater variability with respect to their total stuttering frequency. Additional supporting research was provided by Silverman (1980) and Silverman and Zimmer (1982). Based on these reports, the gender ratio (Van Borsel et al., 2006), and the natural recovery differences between genders (Yairi & Ambrose, 1999), Yairi (2007) suggested that the classification of stuttering into subtypes may be based on gender as well. That said, the limited number of studies, do not make it yet possible to reach a definite conclusion regarding the existence of different stuttering experiences for males and females who stutter.

In our study, we compared adult males and females who stutter (regardless of religious views, but excluding UO for sampling circumstances) using the multi-dimensional aspects of the experience of stuttering: the overall stuttering experience (OASES), which included items concerning the perception of stuttering, the reaction to stuttering, the burden of stuttering, and the impact of stuttering on quality of life. We also compared the perceived self-rated stuttering severity, avoidance levels, and general life satisfaction. The comparisons yielded no differences between groups. These results suggest that the gender factor is not associated with the experience of stuttering or life satisfaction.

We further explored the relationship between the perceived stuttering severity and the rest of the experience of stuttering variables. Correlations were found among both males and females, indicating that the perceived stuttering severity is associated with the level of feelings and attitudes, the difficulty and burden of stuttering in daily situations, quality of life, life satisfaction, and avoidance. The relationship between these variables has been discussed in a previous section; the significant correlations found are not surprising and match the result obtained, namely, that no difference exists between the groups.

It seems that the males and females who stutter in our study underwent similar experiences. However, it was interesting to note that the correlation between stuttering severity and the burden of stuttering in the past was detected only for males, whereas no such correlation existed for females. Thus, it is possible that when rating stuttering severity, women take into account the present experience only, whereas men carry the burdensome past into the present and rate their stuttering severity accordingly. This may suggest that although no differences were found between groups with regard to the level of stuttering disturbance both in the present and in the past, men who stutter are more vulnerable to past negative experiences related to their stuttering than women who stutter.

As mentioned earlier, it has been proposed by Yairi (2007) that gender be viewed as a classifying factor of stuttering subtypes. Thus, on the one hand, our last finding may stem from underlying differences between the stuttering subtypes. On the other, this finding could serve as exemplify a possible difference between subtypes in relation to the perception of stuttering severity and the perception of past memories. Since we could not trace similar previous findings to support our preliminary findings, the latter should be duplicated and analyzed in future research.

## **2. Study II**

The primary purpose of this study was to further explore the possible impact of socio-cultural background on PWS, focusing on the two extremes of Israeli Jewish society – the ultra-Orthodox and the secular sectors. Following our first study, in which various measures of the holistic experience of stuttering were compared by means of a quantitative analysis, we sought to enhance our understanding of the experience of stuttering in the socio-cultural context – but from the PWS's perspective. Bearing the latter objective in mind, we conducted semi-structured interviews with PWS from the UO and the ST sectors, targeting our questions so as to obtain responses that would help us accomplish our research goals. Once the interviews were concluded, we applied grounded theory methods (Strauss & Corbin, 1990) in order to identify dimensions, categories, and subcategories, in which the similarities and differences between the interviewees of the two groups could be observed. The following discussion is divided into the three main dimensions.

### **2.1 The experience of stuttering throughout the life span.**

Descriptions of stuttering-related experiences were furnished by all interviewees ( $N=8$ ), starting from their first memories of stuttering and ending with present-day experiences as adults who attend daily Yeshiva (the UO interviewees), or go to work (the ST interviewees). There seems to be a resemblance among the interviewees' life journeys with stuttering –for example, their feeling of being tagged, the stuttering-related stress and difficulties that speaking involves, and the expectations from their environment that they participate in oral activities such as classroom activities or giving a presentation. The interviewees reported a feeling of being trapped by the wish to talk, but without stuttering and its perceived

consequences. This theme is expressed indirectly in all of the PWS's experiences, particularly at the stage of looking for a spouse.

In the subcategories, the resemblance among the interviewees once again serves as a reminder of the universality of the stuttering experience, which changes in context from culture to culture but remains similar for the PWS. Nevertheless, the narratives can teach us about specific culture-bound characteristics that distinguish among the diverse experiences of stuttering of interviewees from the UO and ST sectors.

The descriptions of the UO PWS's elementary-school years revealed great suffering, loss of control, and a sense of hopelessness and helplessness. The highly emotional topic was reflected in the use of linguistic means such as switching from the first person to the second and third person – perhaps in order to protect the speaker from reliving the story in the present. The repetition of the word "remember" also contributed to the understanding that childhood memories were extremely vivid and their impact had not been forgotten. The PWS underwent traumatic experiences as a result of being trapped by their stuttering and their wish to talk. The absence of any formal support from formal authoritative figures who were demanding, powerful, and meaningful to the child and the environment, exacerbated this trapped feeling and was liable to lead to long-term painful consequences.

In the UO sector, the elementary-school years are dedicated to learning, particularly classroom learning, which is managed by the *Rebbe*, the male class teacher. The Rebbe, who is attributed very high status by the children and their parents, is considered to be the ultimate authority, and his words carry great significance. According to a Halachic rule, the children are obliged to respect their Rebbe, and this creates a certain distance between the Rebbe and the child. The young

student would never address the Rebbe by his first name, nor would he address him in the second person ("you"), but rather in the third person ("he") out of respect. For the same reason, the child would never argue with the Rebbe. In the past, the Rebbes were not required to undergo educational training, and would rely on their intuition and experience in order to teach (Roz, Alper, & Almog, 2011). It is possible that due to the lack of professional training and knowledge, the Rebbe's attitude toward young CWS was less supportive than it should have been; this can be attributed to his lofty status, which engendered a less personal relationship with the pupils.

It is also possible that the vivid description of emotions provided by the UO interviewees with respect to their elementary-school years can be explained by the fact that these are the years that precede the Bar Mitzvah ceremony, which takes place at age 13. The Bar Mitzvah is a Jewish life ritual that symbolizes the transition from childhood to adulthood. Before the boy reaches Bar Mitzvah, his parents are responsible for his actions. According to the Halacha (Jewish law), after this age, the boy is responsible for upholding Jewish ritual law, tradition, and ethics, and is permitted to participate in most areas of Jewish community life.

It should be clarified that although ST adolescents also celebrate the Bar Mitzvah, it usually does not imply the undertaking of any further religious responsibilities. This may explain why the expression of emotions among the UO sector is more acceptable during childhood: the emotional world is less restricted and hence more legitimate. Since pre-Bar Mitzvah boys are not subjected to the pressures of social circumstances and obligations, they are permitted to feel and act like individuals (albeit in the UO context). From their Bar Mitzvah onward, their feelings are put to one side as a result of the obligation to join the collective, and they are

taught to adopt the values of overcoming their urges and being satisfied with their lot, as discussed earlier.

The negative experiences of stress, identified particularly among the UO PWS's memories of elementary school (the *Talmud Torah*), may result from the factors mentioned above. The wish to succeed and become the recipient of the Rebbe's approval and pride stood in stark contrast to the experience of stuttering and its fearful implications, namely, the young student's inability to express and defend his knowledge as well as his feeling that his stuttering was unacceptable or misunderstood.

Among the ST, the descriptions were less emotional and related to the social tag of being a CWS and the difficulties associated with speaking in class. While the ST interviewees described the difficulties caused by stuttering, they did so in a more moderate manner than the UO. For example, one ST interviewee said, "On the one hand, I did mind talking, but on the other, I felt loved even when I manifested all sorts of behaviors, so I didn't mind talking to anyone." In contrast, an UO interviewee said, "I didn't speak at all. I knew I had no choice, I wasn't able to talk. When I was twelve, I had a clear vision that my life had no future. It was clear to me, really, that that's what I've been carrying inside me ever since." This dissimilarity may be explained by the fact that unlike the UO culture, the ST culture allows for emotional experiences and encourages psychotherapy, self-revelation, self-expression, and so on. Perhaps because the expression of emotions in the ST world is acceptable and common at any age and at any time with no specific restrictions, emotional topics are discussed more moderately during the interviews.

Conversely, it is possible that the UO interviewees recounted such powerful emotional memories during the interviews since they had never had the opportunity

to process their memories by sharing them with friends, family or a therapist. While modern Western culture favors self-exploration and attentiveness to one's inner voice and feelings, UO culture promotes the internalization of traditions, leaders, and great rabbis, all of which emanate from outside of the individual himself (Goodman, 2003).

At the high-school/Yeshiva stage, environmental expectations were depicted by both UO and ST interviewees when they described various idiosyncratic circumstances. The ST described the expectation that they talk and present in class, whereas the UO described the religious communal roles, for example, leading the prayers or delivering short lectures ("dvar torah"). While authority figures were present in both groups, they played different roles. The rabbis of the UO interviewees were described as awesome figures who were perceived as being intolerant of stuttering ("I could tell he hated my stuttering"), possibly as a result of stuttering-related taboos and stigmas. The ST, on the other hand, depicted encouraging figures.

Among the UO, we find descriptions characterized by extreme distress, probably as a result of the expectations of and lack of support from authority figures. The distress at that point was so evident that it did not yet lead to any active coping strategies. In contrast, among the ST, active behavioral coping strategies began to develop, either by avoiding a situation or by developing speech strategies that facilitated fluency. The distress mentioned by the ST interviewees seemed to be more proportional to the situation and promoted coping. The extreme distress expressed in the UO interviewees' experiences may have been so great that it was generalized rather than being coped with successfully.

After finishing high school, the ST and the UO interviewees went on to pursue advanced studies – the ST at university and the UO at the *Yeshiva Gdola*. While the UO continued to experience stuttering-related difficulties and stress, which was not

present in the ST narratives, both groups of interviewees described active coping with stuttering. This consisted of coping strategies that they had developed spontaneously over the years, even though the interviewees had only become aware of them as young adults. It also seems that, at this stage, both groups were experiencing stuttering in a more moderate manner, which could be a result of habituation or desensitization.

The work stage differs between the UO and the ST sectors, since the former usually hold part-time jobs – if they work at all – while the latter customarily hold full-time jobs. In the present study, it was noted that for both the UO and the ST interviewees, relatively more positive experiences with stuttering were described in comparison to previous years. The UO narratives regarding work demonstrated the transition from a sheltered reality into a world in which the individual could view himself and his stuttering in a new external context, thereby receiving a new opportunity to handle stuttering differently. The use of linguistically positive expressions stressed the fact that this stage was generally viewed as a more positive one in contrast to previous years.

The ST described coping with the expected stuttering-related difficulties in speech situations at work (e.g., giving a lecture) with fewer descriptions of transition or coping, perhaps because they had already been coping with their stuttering by that point, as was evidenced in their post-high-school years. They also used linguistically positive expressions that exemplified the relatively positive perception of the experience of stuttering at the work stage.

In the ST interviewees' descriptions of the search for a spouse, they regarded stuttering as a factor that could affect the possibility of inviting a girl out or marrying her, and influence his destiny with regard to whom he would marry. The UO

interviewees, on the other hand, discussed stuttering in the greater socio-cultural context. The involvement of matchmakers is an indispensable part of this process, as is their opinion of the PWS, which may represent society's mind-set or the demands of the young girls' families.

Further subcategories consisted of the interaction among a problem such as stuttering, the attendant social stigma, and the consequences of stuttering as regards the person's "market value". These all led to negative emotional experiences among the UO interviewees, characterized by great distress as a result of the desire to conceal their stuttering. The discouraging advice and the social reality of the matchmaking process culminated in the interviewees engaging in frenetic practice of speech techniques prior to meeting the girl; their expressions of disappointment and rejection were recounted after the meeting (It should be noted that none of the four UO interviewees was married. Two were younger and had not yet begun the matchmaking process; the narratives were recounted by the two other interviewees, both bachelors of over 35).

The narrative of the ST interviewees, who were also dealing with their stuttering in the context of dating and marriage, was somewhat different. These individuals described more practical problems such as booking tickets for a concert and so on. In addition, while the UO viewed their stuttering as problematic specifically within the social context, the ST described it –in relation to looking for a spouse – in a more individual manner, in which stuttering was a factor that determined who he could marry. This may have resulted in lower expectations that originated from the PWS himself rather than from social circumstances. In such a case, any therapy undergone by the PWS should target his inner narrative, namely, the negative self-judgment and the underlying process in which he considers whom he

would aspire to marry. This would enable him to re-access his own identity and wishes rather than be dictated to by the fears and unhelpful thoughts associated with stuttering and a lack of self-confidence. The experience of being trapped as well as diminished self-esteem were common to both the ST and the UO interviewees and reflected their inner feelings.

## **2.2 Coping strategies.**

In the present study, we identified three main coping strategies: (1) emotion-based strategies, which aim to express the PWS's feelings; (2) cognitive-based strategies, which aim to alter the role of stuttering in the individual's life and promote fluency and communication; and (3) behavior-based strategies, which represent the PWS's behavioral change or decision to take action.

The first type of strategy, the emotion-based coping strategy, was identified only among the UO interviewees when they expressed their despair at their stuttering. This might have been a consequence of a secondary appraisal (Lazarus & Folkman, 1984) process in which the person's evaluation of the situation stated that he had neither the resources nor the ability to control or change the way stuttering affected his life. When any of the UO interviewees described or expressed their feelings, it was in connection with the elementary-school years, as discussed earlier. It should be noted that the UO were the ones who mentioned their feelings and impulsive emotional reactions, and not the ST.

In the context of the UO interviewees' social background, the expression of feelings, even despair, can be perceived as courageous, given the tendency of the UO to trust and accept God's wishes regarding His people. Interestingly, these experiences and their recounting related to the period of childhood prior to assuming the role of an

adult in the UO community. In contrast, it may be surmised that the ST, who did not discuss their emotions in detail during their interviews, may have been accustomed to discussing their feelings and thoughts in a general manner, and therefore did not describe specific feelings in detail. The reason for this may be that since those feelings were obvious, or had been processed previously, there was no need to recount them yet again.

The second type of strategy, cognitive-based coping strategies, may be viewed as coping efforts whose aim is to change the way the person appraises the stressful situation. Both groups of interviewees described positive stuttering-related insights, which constitute a way of changing the perspective regarding stuttering by moving away from considering it a totally negative impairment to viewing it as an impairment with some value or profit. Such a strategy may promote acceptance and serenity, since it helps to minimize the dimensions of the disturbance and permits the PWS to espouse a more beneficial interpretation of their life with stuttering (Plexico et al., 2009b). This idea follows Ezrati-Vinacour and Weinstein's (2011) argument offering that stuttering can be regarded in more positive manner, by admitting its contribution and approaching it as something to be proud of. In their article, they mention Benny Ravid, the founder of the Israeli Stuttering Association, who recognized that stuttering imbued him with a sense of a very important mission and pride.

In addition, both groups of interviewees expressed the realization that they were responsible for changing their speech, efficacy of communication, and quality of life. The act of assuming responsibility has an essential role in the coping process of stuttering, as exemplified by the following reports. Plexico et al. (2009b) report on interviewees who related that they had assumed responsibility for their speech management, i.e. use of speech and communication strategies, which led to increased

self-confidence and self-understanding. According to Craig (1998), self-effort, self-responsibility, motivation and self-awareness are of cardinal importance in reaching the personally targeted goals. Consequently, the client's self-responsibility is constantly emphasized in treatments who are known to be successful, so that he does not become dependent on anyone but himself. By doing so, the client is expected to be able to control and manage future situations, thereby reducing risks of fluency relapse (Craig, 1998).

Despite the similarities, we were also able to identify specific cognitive-based strategies for each group of interviewees separately. Among the UO interviewees, cognitive strategies of internal coping are more evident; these included augmenting knowledge, expanding perspectives, eliminating guilt, devaluing stuttering, and increasing self-empowerment. The need for these strategies arises from the tendency of stressful experiences to "lead to cognitive constriction, whereby the problem occupies the individual's entire mental world and prevents him from producing ideas that will help him view the situation from a less threatening perspective" (Gilat & Rosenau, 2011, p. 332). Thus, it could be speculated that these cognitive-based strategies reflect the attempt to reframe their view on stuttering in order to minimize its significance. Such strategies were also identified by Plexico et al. (2009b) and were reported to result in self-assurance.

In contrast to the internal coping strategies, the ST interviewees described somewhat different narratives in the sense that the latter were oriented toward action and not merely toward internal "self-comforting". Examples of this include the internal narrative leading to self-motivation for speaking, the avoidance of being positioned as a PWS, and the external dialogue with a speech therapist about the stuttering (confrontation). The different strategies identified among the interviewees

suggest that the UO was accustomed or brought up to avoid revealing his difficulties to other people – in other words, "not to wash his dirty laundry in public". This might be a result of the fear, which was pertinent to the UO interviewees, that externalizing stuttering and the attendant feelings and thoughts would produce a negative outcome. Taking into account the work of the speech therapist with an UO client, it would be valuable to consider building a more active narrative of the client, in order to effect behavioral changes.

In short, while some cognitive-based strategies were shared by both groups of interviewees, there were specific strategies of internal coping that were identified among the UO interviewees, whereas the cognitive-based strategies of the ST interviewees were characterized by a more active direction.

The third type of strategy consists of the behavior-based coping strategies, that is, the actual behaviors employed by the interviewee in order to cope with stuttering and its perceived implications. Despite the differences between the cognitive-based strategies utilized by the two groups, the behavior-based strategies employed at the point of action are similar and include avoidance, speaking in spite of the difficulties, seeking help, creating easier circumstances to talk, and utilizing speech techniques. These strategies are familiar to us from our clinical experience. Most strategies were of approach and were implemented by the interviewees in order to intentionally alter their speech characteristics, manipulate their communication at given situations, and fulfill their necessities and wishes.

In the study of Plexico et al. (2009b), interviewees who described similar active strategies reported many positive results. Physically, they recounted an increased sense of control over their speech, including better management of their speech strategies, and decreased muscle tension during moments of stuttering. In the

feelings and attitudes dimension, they reported on improved feelings of self-confidence and well-being. In the social dimension, the interviewees described more participation in verbal interactions, including work related conversations, and making choices that matched their best interest.

In contrast, the strategy of avoidance is different in that it is oriented toward self-protection. According to Lazarus and Folkman (1984), avoidance is an immediate, logical, and frequent response to situations which are perceived as threatening and uncontrollable. Such a strategy may afford immediate relief from the threat of stuttering as well as a reduced threat of listener reactions. However, it often fails to provide long-term relief from stuttering (Plexico et al., 2009b) since it has a negative impact on the quality of life due to depression or reduced self-esteem (Plexico et al., 2009a). Moreover, it may result in frustration and a restriction of verbal circumstances, sometimes reaching to total self-deprivation of communicational settings (ibid.).

The avoidance of speech situations or particular words can also limit the search for alternative ways of coping with stuttering and perpetuate speech-associated anxiety. The latter is the result of missing opportunities to reconsider or actually experiment with the accuracy of the unhelpful thoughts associated with the appraisal of the threat of stuttering. As mentioned previously, the avoidance strategy is different than the approach strategies since its results are counterproductive to the PWS. It should be noted that the image depicted by the interviewees of both groups revealed that as time passed and they matured, the approach strategies evolved and the avoidance strategies decreased.

A further behavior-based strategy was identified for both groups, namely, the externalization of stuttering. Among the UO, it was the wish to actually stutter and

stop avoiding it or struggling for fluency ("my dream was to be able to stutter and communicate with people"). Among the ST, it was the disclosure of stuttering prior to engaging in a natural conversation. For both, it seems that the externalization of stuttering was a helpful step, one that made a more dramatic difference than the avoidance strategy. Plexico et al. (2009b) added that PWS reported that letting the listener hear his stuttering or know about it ahead of time may relieve the self-imposed pressure to be fluent, reduce the surprise for the listener and promote his supportive behavior (ibid.).

Overall, the coping strategies identified among both groups of interviewees are partly comparable to the "stages of change" model (Prochaska & DiClemente, 1986). According to this model, people who are in a change undergo several universal stages. These stages reflect the evolution in the person's willingness to start a change and truly implement it, including taking steps in order to preserve such a change. This model consists of the following stages: pre-contemplation – in which the need for a change is not yet perceived; contemplation – in which thoughts about the need for a change begin to occur; preparation – a stage in which a definite motivation for effecting a change is evident, and practical moves are performed; action – the actual stage of change; maintenance – a step oriented toward preserving the accomplishments and preventing relapse (ibid.).

In the case of our interviewees, although the specific desire for change varied among them, it is evident that most interviewees wished to feel better about themselves as speakers, either by changing their speech and their attitudes and feelings toward it or by reducing their avoidance of it. The cognitive-based strategies may represent the contemplation and preparation stages in which both groups of interviewees began to view stuttering from a different perspective, enabling them to

be empowered to feel better, to go to therapy, or, principally, to take action. The action stage (ibid.) can be identified in the behavior-based coping strategies. For example, both groups manifested such strategies as seeking help, using speech techniques, and externalizing the stuttering.

### **2.3 Therapy.**

In the therapy dimension, narratives dealing with the experience of therapy, the contribution of therapy, and criticism of therapy were identified.

The experience of therapy revealed similarities between the narratives of the UO and ST interviewees. Memories of therapy causing awareness of stuttering (or that something was wrong) were recounted. This experience was depicted in a rather negative fashion: the interviewees described a realization that something was wrong, and marked it as the beginning of a long journey with stuttering or simply as something that diminished their self-confidence.

The notion that becoming aware of stuttering should be avoided or postponed may be consistent with the popular idea and former therapeutic approach of not directing attention to it so as not to raise the child's awareness of it, for fear that this may exacerbate the problem (Johnson, 1955; Rustin & Cook, 1995; Starkweather, Gottwald, & Halfond, 1990). The current pediatric therapeutic perspective is however, different. At present, the most prominent therapeutic approaches for CWS, namely, the Parent Child Interaction Therapy (PCI) (Kelman & Nicholas, 2008) and the Lidcombe Program (Onslow et al., 2003), suggest otherwise, their dissimilar rationales notwithstanding. The PCI instructs parents to be open about stuttering with their children and acknowledge it in order to participate in the children's discomfort and convey the idea that it is not taboo. The Lidcombe Program presents a very

different approach, in which parents are instructed to acknowledge both stuttered and fluent speech in order to improve fluency.

In addition, both groups of interviewees described the experience of having undergone multiple treatments for their stuttering. This experience is ubiquitous and familiar in the clinical setting, and has been reported and discussed repeatedly. For example, in a report on the experiences of 71 PWS who belonged to the National Stuttering Association (Yaruss et al., 2002), over 65 percent reported that so far they had undergone at least two speech therapy programs. This may stem from the fact that stuttering is still an enigmatic disorder, whose ultimate cure has not yet been discovered. Thus, the objective of the treatments is to improve fluency and communication skills as well as the attitudes toward stuttering, in order to assure optimal quality of life despite chronic stuttering. Generally speaking, the multiple treatments may either stem from the PWS's (or their parents') desire to ultimately cure their stuttering (despite the above mentioned), their lack of confidence in the therapist, or the changing circumstances of speech and communication throughout their lives.

The UO interviewees concluded that no treatment was helpful. In contrast, the ST interviewees reached the realization that there is no cure for stuttering. Both groups of interviewees described the complicated and stubborn phenomena that constitute stuttering. However, in our opinion, such narratives also seem to differ slightly. While the ST interviewees realized that stuttering is not curable, the UO seemed to "blame" the treatments.

Specifically, the ST interviewees not only described the experience of group therapy, but did so in a negative manner, mainly because of the discomfort of seeing other PWS. Such an experience may be unendurable for some individuals because it entails an unpleasant confrontation with stuttering. From a therapeutic perspective,

group therapy can be beneficial in many ways, and has proven to be an adequate setting for treating individuals who stutter (e.g., Boberg, 1976; Cook & Fry, 2006; Langevin, Kully, Teshima, Hagler, & Narasimha Prasad, 2010). The fact that one of the ST interviewees described the group experience as appalling may have demonstrated his coping level. If the confrontation with stuttering provoked such a negative experience, it may suggest that the PWS had not yet come to terms with his stuttering and felt victimized by it; and at the time when the group therapy took place, he was still not ready for a change.

Regarding the contribution of therapy, both the ST and the UO interviewees depicted the benefit of the therapy in a similar manner. Some found the speech fluency techniques more useful; others reported that therapies focusing on feelings and attitudes were more helpful. Since there were varying opinions as to which therapy was the most helpful, it is interesting to note Bloodstein and Bernstein Ratner's (2008) summary of the best evidence-based therapy programs from 1953 to 2008, which concluded that “substantial improvement, as defined by these studies, typically occurs as a result of almost any kind of therapy in about 60–80 per cent of cases” (p. 380). According to Botterill (2011), at the moment, there has not been enough indication that a specific treatment approach is more beneficial than the other, and in case there was such, it would yet remain unclear which therapy factor made the difference.

Yaruss and Quesal (2004) argued that no specific treatment can be helpful to all PWS because the latter own different speech symptoms and different coping responses to their stuttering. Additionally, it is also because people vary in their treatment expectations and goals. Clearly, therapy should be tailored and

individualized to the client's needs, and the individual himself is encouraged to take an active and centric role in therapy (Botterill, 2011) in order to promote his goals.

Other UO interviewees suggested the combination of both types of treatments – (1) fluency shaping or stuttering modification, and (2) changing the cognitive sets and reducing anxiety—to be the most helpful. This narrative is consistent with the current therapy approaches for adults that stress the need for a combined approach. For example, the ISTAR Comprehensive Stuttering Program is a program for adolescents and adults that combines fluency-shaping techniques, stuttering modification skills, and cognitive-behavioral tools and has been found to be evidence-based (Boberg & Kully, 1985; Langevin et al., 2010). The integrated approach stems from the understanding that a reduction of speech anxiety is not sufficiently helpful for the speech symptoms (Menzies et al., 2008), and that the acquisition of fluency techniques alone is more difficult to preserve over time if the cognitive and emotional aspects are not treated (Iverach, Jones, et al., 2009; Menzies et al., 2008).

Some of the ST interviewees concluded that any timely treatment could be helpful. Their conclusion seems to reflect a mature attitude toward stuttering and its treatment, including, possibly, a realistic expectation from therapy, the realization that there is neither a single solution nor an ultimate therapist, and the understanding that any client may learn of any therapist he is working with, as long as it is the right moment to make a change. According to the transtheoretical model for change (Prochaska & DiClemente, 1986), it is essential to evaluate the client's motivation for change and to adapt the therapeutic plan appropriately. Moreover, Hubble, Duncan, and Miller (1999) summarized four factors that contribute to the success of therapy – factors that permit a different perspective on the therapist's responsibility over the success of the therapy.

The first factor is *the client/extra-therapeutic factor*, which refers to the client's state of affairs, including his personal assets, family and communal support, endurance, belief, a supportive relative, participating in religious settings, personal responsibility, and so on. According to Lambert (1992, cited in Hubble et al., 1999), this factor leads to 40 percent of outcomes.

The second factor is *the relationship factor*, which refers to nurturing, rapport, warmth, approval, bilateral affirmation, and so on. According to Lambert (ibid.), the therapist-client relationship accounts for 30 percent of outcomes.

The third factor consists of "*placebo factors*" (p. 9), a group of therapeutic factors that refers to the clients' understanding of being under treatment and their evaluation of the therapy's rationale and methods' validity. In addition, it represents the belief of both client and therapist in the efficacy of the treatment. According to Lambert (ibid.), this factor is responsible for 15 percent of outcomes.

The fourth factor, *model/technique*, refers to the techniques and methods employed in the specific therapy. According to Lambert (ibid.), this factor also accounts for 15 percent of outcomes.

Taking these factors into consideration, the ST interviewee's narrative claiming that any timely treatment can be helpful makes sense not only intuitively. If 40 percent of the success of the therapy depends on the client's factors, then the right timing for therapy, which is included in these factors, is indeed crucial for successful treatment. In any event, this narrative states that any treatment could work, and coincides with the 15 percent proportion of improvement attributed to the therapeutic techniques. Bearing in mind that this study focuses on the role of socio-cultural factors, the client's environment belongs to the client factors. While there was no mention of environment in the context of therapy, clearly the demands of each of the

interviewees' environment, either UO or ST, should be taken into account in therapy, especially given the significance attributed to the client's factors in the success of therapy.

The third and last subcategory in the dimension of therapy was the criticism of previous therapies. The fact that stuttering therapy provokes criticism is well-known. Yaruss et al. (2002) reported on several features of treatment that were troublesome to the participants of his study, for example, the fact that they were unable to preserve the gained fluency once the treatment was over (no matter which method was employed), and that they were unable to achieve the same fluency in real life as they did in the treatment room. Others felt that the new speaking pattern was awkward or unnatural, and that the treatment did not address their feelings regarding their speech.

In the case of the present study, the UO seemed to be more critical of previous therapies when they argued that therapy raises awareness of stuttering, that fluency methods are nonsense, that there are many therapists who are charlatans, and that therapists do not understand stuttering and are not attentive to the client's needs.

Although less criticism was expressed by the ST interviewees, it is nevertheless significant and valuable. According to them, the unsatisfactory aspects of speech therapy reside in the fact that it tags you as a child who stutters, that it does not help, that it is not organized well enough, and that there should be more accompaniment of the transference and maintenance stages of therapy on the part of the SLT. The negative opinion with respect to speech therapy that is reflected in the narratives of both the UO and the ST interviewees demonstrate yet again the similarities between the PWS, regardless of their socio-cultural background. It is the stuttering itself and the difficulty involved in managing it that may cause both groups of participants to express a negative opinion of therapy. It should be also noted that in

no case did any of the interviewees refer to their personal responsibility in the failure of or dissatisfaction with therapy, that is, the extent of their cooperation. Moreover, none of them referred to the nature of the problem facing them, namely, a problem that is extremely difficult to overcome and solve.

Despite the similarities, there are differing opinions between the groups that may be viewed as stronger dissatisfaction with therapy on the part of the UO interviewees, as evidenced by the words "nonsense" and "charlatanism" – in other words, they considered the SLT to be incompetent. Taking into account the reason for such a finding, we can speculate that the UO PWS had different expectations of speech therapy, perhaps due to unrealistic expectations that it would eliminate stuttering. The source of these expectations might be a combination of the need for the UO PWS not to stutter given the socio-cultural context, or a strong expectation for a different outcome on the one hand and misinformation on the other. It is also possible that the speech therapist was considered to be less competent from the outset, since the Rabbi was still viewed as the ultimate individual with whom to consult. In other words, if the SLT were compared unconsciously to the Rabbi, she would probably be given less credit, given her gender (conversations between strangers of the opposite sex are not regular occurrences in UO society), or she may simply have been seen as possessing a lower level of spirituality and knowledge of the Torah.

To sum up the results, the impact of the socio-cultural context on the PWS is reflected in several ways. First, it is reflected in the different speech roles or tasks that are associated with each individual society. For example, the UO PWS wish, or are expected, to recite blessings aloud, deliver short speeches, and study with a partner by means of dialogue and discussion. The ST PWS are confronted with other circumstances at school, at work, and within the family.

Second, the search for a spouse differs between cultures, and this factor, too, has a different impact on the experience of stuttering. Young UO adults employ matchmakers in order to find a marriage partner, and any problem that exists must be resolved or concealed in order for them to be awarded a high grade. This causes a great deal of stress and anxiety for the UO PWS, who are also expected to marry in their early twenties, if not before. ST PWS meet their spouses more spontaneously, and the burden of stuttering is experienced at the practical level – for example, asking a girl out or booking tickets for a concert.

Third, the UO interviewees described their experiences in an emotional narrative as opposed to the ST interviewees, who depicted their experiences more moderately.

Fourth, the diverse socio-cultural contexts are evident in some of the differences between UO and ST coping strategies. For example, the UO interviewees used cognitive-based strategies that consisted of internal talk, whereas the ST interviewees employed cognitive-based strategies that were more action-driven.

Nevertheless, once again, the findings of this study reveal common themes across the narratives. These were observed, for example, in the impact of stuttering on self-image and the sense of social tagging that was mentioned by both groups of interviewees. Common themes were also found with respect to the coping strategies, which eventually constituted of a similar process, namely, cognitive-based strategies that prepared the individual for behavior-based strategies. In addition, the interviewees' experiences of therapy, the fact that they had undergone multiple treatments, the experience of several types of therapeutic approaches, and their feeling that nothing was helpful enough, were shared by both groups. The similarities between groups demonstrate that regardless of socio-cultural background, stuttering is

a universal phenomenon that impacts the individual at similar junctures of personal, social, and professional development.

### **3. General Discussion**

This study was conducted for the purpose of exploring the experience of stuttering in the socio-cultural context by investigating PWS from the UO and ST sectors in Israel. In order to obtain broad and in-depth information, this research was carried out using combined approaches, namely, a quantitative design and a qualitative design. This is also referred to as methodological triangulation, specifically across-method triangulation.

In accordance with this design, both qualitative and quantitative data collection methods are employed for the same study (Denzin & Lincoln, 2005; Mitchell, 1986). Elliott (1995) argued that quantitative methods intend to examine the relationship between variables which consist of association or causality. Additionally they aim to test the reliability, validity, and psychometric properties of measures, and calculate the extent of generalizability that can be achieved across samples. Therefore, the advantage of a quantitative approach is the ability to draw conclusions from a sample that represents the population of UO and ST PWS by utilizing recognized and reliable measurements and statistical comparisons. The measurements in the quantitative research were obtained by means of questionnaires.

The disadvantage of the quantitative approach lies in the fact that it may limit the possibility of reaching the multiple complexities of the various phenomena, since precise numeric measures cannot always depict the details of a complex phenomenon. They may omit the multiple dimensions and processes of the authentic circumstances (Tetnowski & Daminco, 2001). For that reason, we also employed a qualitative design, which consisted of interviewing PWS from both social sectors and analyzing their responses in accordance with the grounded theory (Strauss & Corbin, 1990). Elliott (1995) posited that qualitative research provides the framework in which

participants' points of view can be heard, thus being able to define the investigated phenomena on the basis of the meanings and process attributed to the participants, thereby constructing a theory based on field work. Consequently, we were able to plumb deeper layers of understanding by questioning the participants directly in their own language and encouraging free expression.

It has been argued, that using the scheme of triangulation (or combined methods) enables the researcher to compensate for the imperfections of one method by benefiting from the advantages of the other (Mitchell, 1986). Accordingly, we found that the combination of both approaches yielded a more detailed exploration of the PWS's experience –specifically, their experience from a socio-cultural perspective.

Following the line of methodology described above, the main objective of this chapter was to integrate the results obtained by both the quantitative (QUAN) and the qualitative (QUAL) studies.

As mentioned previously, the primary goal of this study was to explore the experience of stuttering and coping with it in conjunction with the socio-cultural context. Thus, the QUAN study included measurements that would possibly account for the "experience of stuttering". These characteristics were (1) self-perceived stuttering severity, cognitive and emotional responses (i.e., attitudes and feelings), (2) burden of stuttering (i.e., the perceived difficulty that stuttering imposes on communication, and on life in general), (3) quality of life and well-being, and (4) avoidance of speech and speech situations.

In addition to the QUAN measures, given that stuttering is experiential by nature, and this experience is idiosyncratic and heterogeneous, we investigated the experience of stuttering in a more open manner in order to perform an in-depth

analysis thereby accommodating individual experiences as well. Thus, the QUAL study targeted the same goal through interviews and content analysis, resulting in three main dimensions: (1) the experience of stuttering across the lifespan, (2) coping strategies, and (3) therapy.

The QUAN study yielded results suggesting that as a whole, although the UO perceived their stuttering more negatively than did the ST, their quality of life was less impacted by stuttering than that of the ST. The findings of a less-impacted quality of life among the UO may be elaborated on or explained by the findings of the QUAL study, in which cognitive coping strategies were identified. Among the UO group, these strategies were characterized by self-talk directed at inner coping (as opposed to the ST group's action-oriented behavior). According to the cognitive-behavior therapy model, cognition, that is, the interpretation of events or actions, defines the emotion that follows. For instance, if the self-talk is about viewing stuttering from a broader perspective (e.g., acknowledging that the person is successful in many fields despite the stuttering), it may explain the QUAN result showing a quality of life that is less impacted by stuttering. Thus, the QUAN quality of life result may be explained by the QUAL cognitive coping strategy.

It should be noted that in the QUAN study, we found no differences between groups in the measures of the cognitive (i.e., attitudes toward stuttering) and emotional (i.e., feelings about stuttering such as anxiety or shame) responses. It would have been expected that the same cognitive strategies narrated by the UO interviewees in the QUAL study would result in significant differences with regard to the "attitudes and feelings" subscales of the QUAN study. In our opinion, this can be explained in two ways. The first states that the measurements of the cognitive and emotional responses were limited in their items, and generally included items consisting of

negative views of stuttering and the shame and reduced confidence that it engenders, for example, "People's opinions of me are based primarily on my stuttering", or "I don't want people to know that I stutter". The measurements did not include items that viewed stuttering from a different perspective such as those reported by the UO. They aimed to measure the extent of the negative attitudes of the PWS but not to evaluate whether positive ones also exist. The QUAL methodology, which allows the interviewees to express themselves in their own words, enabled us to view a coping perspective that differs from the traditional negative attitudes toward stuttering and may be shared by both groups.

The second way states that it may be possible that while the UO and ST presented different cognitive coping strategies, both were oriented toward ultimately feeling better, either by changing the perspective or by planning actions that would ameliorate their status. Both types of cognitive strategies may have been helpful to the interviewees and resulted in similar feelings, as measured by the QUAN study. In addition, the QUAL study found that during childhood, especially the elementary-school years, the descriptions of the UO were characterized by a greater emotional load and the use of words expressing pain and suffering. Once again, these findings were not reflected in the QUAN measures, since they related mainly to the participant's present status. Thus, in contrast to the QUAL study, past experiences could not be specifically related.

Moreover, the QUAN study found that the sense of the burden of stuttering, the avoidance of speech and speech situations, and the participants' general well-being did not differ between groups. This finding implies that as a whole, UO and ST who stutter experienced the same burden of stuttering, avoided speech with the same frequency, and had similar levels of general well-being. As was previously stated, the

comparable measurements in both groups attest to the fact that stuttering is universal, and its various dimensions are present across cultures.

The QUAL study, on the other hand, enabled us to learn more about the experience of stuttering, above and beyond the specific items that were being compared. For instance, it demonstrated that the narratives of childhood memories shed light on UO children and adolescents who stutter, and whose anxiety is related either to the Rebbe and his reaction to stuttering or to the expectations of the Yeshiva that they give a lecture or recite blessings. The QUAL study also revealed a sense of loss of control that was not understood or supported by parents or teachers, as well as hopelessness as regards the possibility of succeeding in life despite the stuttering. Once again, the role of authoritative figures such as parents, teachers, and rabbis differs between the study groups. The ST narratives reveal a more supportive picture, whereas among the UO interviewees, descriptions of rejection, lack of support, and judgmental attitudes come to the fore.

The QUAL study also deepened our understanding of the experience of stuttering in relation to the search for a spouse. Since this issue was not addressed in the items of the QUAN measures, the interviews again completed our knowledge by enabling the interviewees to talk about a painful topic that was not addressed in the questionnaires. In the QUAL study, both groups of interviewees regarded this goal as difficult to accomplish due to their stuttering, producing similar narratives of being trapped by it. However, the UO participants believed that this difficulty was intensified when the social circumstances were such that the PWS was subjected to even more judgment and greater pressure. This was described as a consequence of the UO matchmaking process, which renders the PWS's rating less prestigious and causes the encounter with girls to be much more taxing.

The experience of therapy is mentioned in some items of the QUAN study in connection with the knowledge about stuttering that is acquired during therapy and the implementation of therapy techniques in everyday life. Once again, however, it is possible to elaborate on the broader picture of therapy within the QUAL study, where past experiences as well as the positive and negative aspects of therapy are described. The vast elaboration available as a result of the QUAL study notwithstanding, it should be noted that no major differences were identified with respect to therapy.

The QUAN study revealed that only among the ST groups was there an association between the perceived stuttering severity and all the other measurements of the experience of stuttering. Since this result was discussed earlier we will not elaborate on it again. We would like to comment, however, that such an interesting result could only be achieved by means of the QUAN methodology. The QUAL data, by their very nature, cannot provide information about correlations. That said, the narratives did not reflect such a possible association as this. Both the UO and the ST expressed their reactions to their stuttering and elaborated on attitudes, emotions, and previous experiences. These narratives did not relate directly to the extent to which the interviewees stuttered, nor were we able to match them to the QUAN results, which stated that among the ST group only, the perceived stuttering severity was associated with attitudes and feelings, a sense of the burden of stuttering, the impact of stuttering on communication, and quality of life.

We mentioned previously that avoidance is a behavior-based coping strategy. The QUAN study aimed to explore this behavior among both groups as an example of coping. However, there was a limitation to this exploration: it narrowed the search for coping differences to only one parameter, namely, that of avoidance. The QUAN research demonstrated no differences between the UO and the ST PWS with respect

to their avoidance levels. Conversely, the QUAL study enabled us to broaden our exploration with respect to the possible coping strategies, identifying three: emotion-based strategies, cognitive-based strategies, and behavior-based strategies. The findings of the QUAL study far exceed the precise measure of avoidance.

The fact that the UO participants found the impact of stuttering on quality of life to be less than the ST found it to be, as measured in the QUAN study, may be partially explained by the results of the QUAL study. Other possible explanations of this finding were examined thoroughly in the discussion chapter of the QUAN study and will therefore not be mentioned again.

The QUAL study identified cognitive-based strategies that differed between the two groups of interviewees. The UO PWS employed strategies of self-talk that were mostly characterized by comforting the self and viewing stuttering from a less harmful perspective. In contrast, the ST exhibited cognitive strategies that were action-driven. It is therefore possible that the UO strategies may have resulted in an easier experience of stuttering in the sense of a less negative impact on their quality of life.

In conclusion, the QUAN study has contributed to our understanding of the similarities and differences in general between the two study groups – the UO and ST PWS. We found that while these groups experienced most aspects of stuttering in a similar manner, they differed in their assessment of the impact of stuttering on their quality of life, the UO manifesting a less negative impact than the ST. In addition, the UO rated their stuttering as more severe, but as opposed to the ST participants, their attitudes, feelings, and behavioral responses of avoidance did not correlate with their rating of stuttering severity.

The QUAL study contributed to our understanding of the experience of stuttering in a considerably different reality, in which speech performed and perceived in very different circumstances. If the objective of the QUAL study was to delve deeper into the UO and ST reality, it was accomplished within the limitations of the study. The QUAL study contributed the details, images, and stories concerning living with stuttering, along with its challenges and consequences, in two opposing societies in Israel. We can conclude that although many of the results of the QUAN study revealed no differences between PWS of the two groups, thereby demonstrating the universal nature of stuttering, the QUAL study stressed the nuances of each society and the way the experience of stuttering is embedded in both of them.

#### **4. Clinical Implications**

Santos and Reese (1999, cited in Yairi & Seery, 2011) offered several suggestions as to how to promote treatments to culturally diverse populations. One of them was to learn thoroughly about the culture of the people who sought treatment. Finn and Cordes (1997) added that the role of speech in the client's culture should be considered, as should the role of the male in the client's culture. This study attempted to achieve that goal. We realize that among the UO boys and men who stutter, studying the Torah and the sacred Jewish texts is of cardinal importance, as is leading public prayer and taking an active role in both cases. Thus, speech therapy should focus primarily on enabling the CWS or PWS to participate in the above-mentioned activities, either by practicing speech techniques that target such activities or by changing attitudes and feelings toward stuttering in these circumstances.

We can learn from the UO participants, whose stuttering has less of an impact on their quality of life. While we would not suggest that our ST clients change their

beliefs or lifestyle, a shift in cognitive strategies could be effected by employing the technique of self-talk and viewing stuttering from a broader perspective rather than just self-talk, which is oriented toward active changes.

The UO narratives about the Rebbe's negative responses versus the encouraging responses of teachers and other authority figures in the ST narratives lead us to suggest that there should be more extensive propaganda and education about stuttering within UO society –specifically among rabbis and future rabbis. They should be informed about what stuttering really is and about the best way to support any future students who stutter.

Finally, since the UO reality obliges men to undergo the matchmaking process, we suggest that they invest time and effort in therapy in order to be prepared to face such situations, either by improving speech or reducing the level of speech-related anxiety.

## **5. Research Limitations and Suggestions for Future Study**

Given that the aim of this work was to understand the association/relation between the socio-cultural environment and the experience of stuttering, it would be worthwhile examining other cultures as well, according to geography, religion, and culture, and comparing the experience of stuttering of PWS from other cultures and subcultures worldwide.

As mentioned previously, UO society is heterogeneous, involving several kinds of classifications. For example, the UO can be classified according to region of origin (European Jews are Ashkenazi while North African and Asian Jews are Sephardic), general approach to Judaism (Lithuanian versus Hassidic), and affiliation to specific Hassidic courts (e.g., Belz, Gur, etc.). Expanding the UO sample in a

future QUAN study and subtyping the participants according to the above classifications may enhance our knowledge of UO PWS.

Furthermore, it would be interesting to focus on the association between religious background and level of religiosity on the one hand and the experience of stuttering on the other by comparing PWS among and within different religions (e.g., Judaism, Christianity, and Islam).

The recruitment process for participants in the QUAN study was based primarily on the referrals of SLTs and relied heavily on the enormous assistance of AMBI (Israeli Stuttering Association). Thus, it is possible that the sample for this study represents a certain type of PWS, namely, PWS who undergo therapy or PWS who are members of the stuttering association. The former may be influenced by the therapy process either by being more hopeful about the possibility of improving their speech or by realizing that stuttering plays a less harmful role in their lives as a result of the therapeutic process. They may also be more aware of their own feelings with respect to their stuttering, especially if the therapy involves changing cognitive responses. PWS who belong to AMBI are individuals who identify themselves as PWS. We have learned from our clinical experience that many PWS are not yet ready to take that step, mostly because acceptance of stuttering has still not been established and also because there is a reluctance to "go public" with their speech problem. Despite the great challenge, future research should aim to recruit participants who do not belong to any of the above groups.

Another limitation of the recruitment process was that the ST participants completed questionnaires online whereas the UO participants completed hard-copy questionnaires that were mailed back in pre-stamped envelopes. This strategy was necessary because it ensured anonymity, which encouraged participation. For that

reason, we felt that the ST participants would be recruited most effectively by means of an online platform, while the UO participants, who do not use the internet as a general rule, were recruited by regular mail. Although we could not measure the impact of the different modes of replying on the responses, the principal impact, in our opinion, resided in the possibility of skipping items in the hard-copy questionnaires and returning to previous items – an option that the ST participants did not have. However, we considered this to be a necessary strategy. In a future study, it would be advisable to devise a uniform mode of recruitment for all participants.

In addition, the QUAN study consisted of published and internationally accepted tools that are valid and reliable for the general population of PWS. As mentioned previously, however, these tools do not include items that are specific to the UO lifestyle such as attending Yeshiva or participation in the Jewish rituals. On the contrary, they enquire about work or leisure activities such as buying cinema tickets or asking a girl out, which are mostly irrelevant to the UO community. We addressed that problem partially by asking the participants to rate the importance of speech in Yeshiva activities and received the response that the speech required when studying in *chavruta* was far and away the most important. However, since the aforementioned items do not exist in ST society, we could not compare the UO and ST ratings.

A further complication arose when the questionnaires were returned to us and we noticed that the UO speak a different type of Hebrew. It is possible, therefore, that the precise original intention of some of the items on the questionnaires was not understood. Future researchers of this topic should consider adapting the language of the tools to the UO 'dialect'.

In the QUAN study, participants were asked to rate their perceived stuttering severity on a Likert scale. We decided to obtain only that measure in order to safeguard the participants' anonymity, thereby enhancing the number of participants for the study, since the recruitment of PWS, particularly of the UO participants, was not straightforward. In a future study, we suggest complementing the measurement of stuttering severity by rating the latter from an external point of view – that of a listener. Although stuttering severity could be rated by a SLT, it would be interesting to ask fluent UO and ST listeners to rate it as well. In that way, we could not only compare the professional perspective to that of the PWS himself, but also identify differences in rating that are associated with the *listeners'* social background. Similarities or differences between ratings would contribute to the understanding of how stuttering is viewed in diverse societies.

The individuals who participated in the QUAL study were selected out of a small group of participants who were willing to leave their names and phone numbers at the end of their completed questionnaires. It is possible that those who left their contact details had a more open attitude toward the topic (or sought to convey a message to society through their participation) than those who declined to leave such details. This may imply that the former's responses to our questions in the interview were affected by that fact. Although this is inevitable, future research should include a larger group of interviewees in order to provide more validity .

In addition, the QUAL study consisted mainly of in-depth interviews for the purpose of learning about the experience of the individual who stutters. In a future study, the possibility of observing the experience of the UO PWS from a different angle – for instance, by spending time inside the Yeshiva and collecting observations there (only possible for a male researcher), or by being with the family – should be

considered. It could also be significant to observe the performance of the PWS within the Yeshiva or home setting and to interview their Yeshiva peers, rabbis, and family members.

## References

Abdalla, F. A., & St Louis, K. O. (2012). Arab school teachers' knowledge, beliefs and reactions regarding stuttering. *Journal of Fluency Disorders*, 37(1), 54-69.

Abdalla, F., & Al-Saddah, A. (2009). *Stuttering and teachers in Kuwait: The story so far*. Paper presented at the 12th International Stuttering Awareness Day (ISAD) online conference. Retrieved from [www.mnsu.edu/comdis/isad12/papers/abdalla12.html](http://www.mnsu.edu/comdis/isad12/papers/abdalla12.html)

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.

Alm, P. A. (2005). *On the causal mechanisms of stuttering*. Retrieved from <http://lup.lub.lu.se/record/544324>

Alm, P. A. (2014). Stuttering in relation to anxiety, temperament, and personality: Review and analysis with focus on causality. *Journal of Fluency Disorders*, 40(1), 5-21.

American Speech-Language-Hearing Association. (1999). *Terminology pertaining to fluency and fluency disorders: Guidelines*. Retrieved from <http://www.asha.org/policy/GL1999-00063.htm>

Anderson, J. D., Pellowski, M. W., Conture, E. G., & Kelly, E. M. (2003). Temperamental characteristics of young children who stutter. *Journal of Speech, Language, and Hearing research*, 46(5), 1221.

Andrews, G., & Cutler, J. (1974). Stuttering therapy: The relation between changes in symptom level and attitudes. *Journal of Speech and Hearing Disorders*, 39(3), 312.

Andrews, G., Hoddinott, S., Craig, A., Howie, P., Feyer, A. M., & Neilson, M. (1983). Stuttering: A review of research findings and theories circa 1982. *Journal of Speech and Hearing Disorders*, 48(3), 226-246.

Ardila, A., Bateman, J., Niño, C. R., Pulido, E., Rivera, D. B., & Vanegas, C. J. (1994). An epidemiologic study of stuttering. *Journal of Communication Disorders*, 27(1), 37-48.

Arian, A. & Keissar-Sugarman, A. (2011). *A portrait of Israeli Jews: Beliefs, observance, and values of Israeli Jews 2009*. Retrieved from the Israel Democracy Institute website: <http://en.idi.org.il/analysis/idi-press/publications/english-books/a-portrait-of-israeli-jews-beliefs-observance-and-values-of-israeli-jews-2009/>

Aron, M. L. (1967). The relationships between measurements of stuttering behavior. *Journal of the South African Logopedic Society*, 14, 15-34.

Aukst-Margetić, B., Jakovljević, M., Margetić, B., Biščan, M., & Šamija, M. (2005). Religiosity, depression and pain in patients with breast cancer. *General Hospital Psychiatry*, 27(4), 250-255.

Ayalon, H., Ben-Rafael, E. & Sharot, S. (1989). Ethnicity, class and friendship: The case of Israel. *International Sociology*, 4(3). 293-310.

- Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, 37, 122-147.
- Barbara, D. A. (Ed.) (1965). *New directions in stuttering: Theory and practice*. Springfield, IL: Charles C. Thomas.
- Barzilay, S. (2003). Chaim kfulim: sipurei hamerakdim bein haolam hachiloni laolam hacharedi [A double life: the story of those between the secular and the ultra-orthodox worlds]. In K. Caplan & E. Sivan (Eds.). *Charedim Israelim: Hishtalvult lelo tmia?* [Israeli Haredim: Integration without assimilation?] (pp. 196-223). Tel Aviv, Israel: Van Leer Jerusalem Institute and Hakibutz Hameuchad Publishing House Ltd.
- Baum, N., Yedidya, T., Schwartz, C., & Aran, O. (2014). Women Pursuing Higher Education in Ultra-Orthodox Society. *Journal of Social Work Education*, 50(1), 164-175.
- Baumel, S.D. (2006). *Sacred speakers: Language and culture among the Haredim in Israel*. New York, NY: Berghahn Books.
- Beck, A.T. (1967). *Depression: Clinical experimental and theoretical aspects*. New York, NY: Harper & Row.
- Berk, L.E. (2000). *Child Development* (5th ed.) Boston: Allyn and Bacon.

Berman, E. (2000). Sect, subsidy, and sacrifice: an economist's view of ultra-orthodox Jews. *The Quarterly Journal of Economics*, 115(3), 905-953.

Berne, E. (1961). *Transactional analysis in psychotherapy*. New York, NY: Grove Press.

Berry, J.W. (1990). Psychology of acculturation: Understanding individuals moving between cultures. In R.W. Brislin (ed.), *Applied cross-cultural psychology: Cross-cultural research and methodology series* (pp. 232-253). Newbury Park, CA: Sage.

Bilenko, N., Yehiel, M., Inbar, Y., & Gazala, E. (2007). The association between anemia in infants, and maternal knowledge and adherence to iron supplementation in southern Israel. *Israeli Medical Association Journal*, 9(7), 521.

Bilu, Y., & Goodman, Y. C. (1997). What does the soul say?: Metaphysical uses of facilitated communication in the Jewish ultraorthodox community. *Ethos*, 25(4), 375-407.

Bilu, Y., & Witztum, E. (1993). Working with Jewish ultra-orthodox patients: Guidelines for a culturally sensitive therapy. *Culture, Medicine and Psychiatry*, 17(2), 197-233.

Bleek, B., Reuter, M., Yaruss, J. S., Cook, S., Faber, J., & Montag, C. (2012). Relationships between personality characteristics of people who stutter and the impact of stuttering on everyday life. *Journal of Fluency Disorders*, 37(4), 325-333.

Blood, G. W., & Blood, I. M. (2004). Bullying in adolescents who stutter: Communicative competence and self-esteem. *Contemporary Issues in Communication Science and Disorders*, 31(69-79).

Blood, G. W., & Blood, I. M. (2007). Preliminary study of self-reported experience of physical aggression and bullying of boys who stutter: Relation to increased anxiety. *Perceptual and Motor Skills*, 104(3c), 1060-1066.

Blood, G. W., Blood, I. M., Tellis, G. M., & Gabel, R. M. (2003). A preliminary study of self-esteem, stigma, and disclosure in adolescents who stutter. *Journal of Fluency Disorders*, 28(2), 143-159.

Blood, G. W., Blood, I. M., Tellis, G., & Gabel, R. M. (2001). Communication apprehension and self-perceived communication competence in adolescents who stutter. *Journal of Fluency Disorders*, 26(3), 161-178.

Bloodstein, O. (1958). Stuttering as an anticipatory struggle reaction. In J. Eisenson (Ed.), *Stuttering: A Symposium* (pp. 3-69). New York, NY: Harper and Row.

Bloodstein, O. (1975). Stuttering as tension and fragmentation. In J. Eisenson (Ed.), *Stuttering: A second symposium* (pp. 1-96). New York, NY: Harper and Row.

Bloodstein, O. (1995). *A handbook on stuttering*. San Diego, CA: Singular.

Bloodstein, O., & Bernstein-Ratner, N. (2008). *A Handbook on Stuttering* (6th ed.). New York, NY: Thomson-Delmar.

Blumgart, E., Tran, Y., & Craig, A. (2010). Social anxiety disorder in adults who stutter. *Depression and Anxiety, 27*(7), 687-692.

Boberg, E. (1976). Intensive group therapy program for stutterers. *Human Communication, 1*, 29-42.

Breitenfeldt, D. H., & Lorenz, D. R. (1989). *Successful stuttering management program (SSMP): For adolescent and adult stutterers*. School of Health Sciences, Eastern Washington University Press.

Bricker-Katz, G., Lincoln, M., & Cumming, S. (2013). Stuttering and work life: an interpretative phenomenological analysis. *Journal of Fluency Disorders, 38*(4), 342-355.

Bricker-Katz, G., Lincoln, M., & McCabe, P. (2010). Older people who stutter: Barriers to communication and perceptions of treatment needs. *International Journal of Language & Communication Disorders, 45*(1), 15-30.

Bricker-Katz, G., Lincoln, M., & McCabe, P., (2009). A life-time of stuttering: How emotional reactions to stuttering impact activities and participation in older people. *Disability and Rehabilitation, 31*, 646-658

Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by design and nature*. Cambridge, MA: Harvard university press.

Bronfenbrenner, U. (2009). *The ecology of human development: Experiments by nature and design*. Cambridge, MA: Harvard university press.

Brown, B (2000). Orthodox Judaism. In J. Neusner & A.J. Avery-Peck (Eds.). *The Blackwell companion for Judaism* (pp. 311-333). Malden, MA: Blackwell.

Bruner, J. (1983). The acquisition of pragmatic commitments. In R. Golinkoff (Ed.), *The transition from prelinguistic to linguistic communication* (pp. 27-42). Hillsdale, NJ: Erlbaum.

Brutten, E. J., & Shoemaker, D. J. (1967). *The modification of stuttering*. Englewood Cliffs, NJ: Prentice Hall.

Brutten, G. J. (1973). Behavior assessment and the strategy of therapy. In Y. Lebrun & R. Hoops (Eds.), *Neurolinguistic approaches to stuttering*. The Hague, The Netherlands: Mouton.

Brutten, G. J. (1975). Stuttering: Topography, assessment and behavior change strategies. In J. Eisenson (Ed.), *Stuttering: A second symposium* (pp. 199-262). New York, NY: Harper and Row.

Burley, P. M., & Rinaldi, W. (1986). Effects of sex of listener and of stutterer on ratings of stuttering speakers. *Journal of Fluency Disorders*, 11(4), 329-333.

Campbell, A., Coverse, P. E., & Rodgers, W.L. (1976). *The Quality of American Life: Perceptions, Evaluations and Satisfaction*. New York, NY: Russel Sage Foundation.

Campbell, D. (2000). Special considerations for fluency Services with African-American and Hispanic students. *ADVANCE* . Retrieved from <http://speech-language-pathology-audiology.advancweb.com/Article/Multicultural-Issues.aspx>

Central Bureau of Statistics (2010). *Social Survey 2009 - Religiosity in Israel - Characteristics of Different Groups*. Retrieved from [http://www.cbs.gov.il/hodaot2010n/19\\_10\\_101b.pdf](http://www.cbs.gov.il/hodaot2010n/19_10_101b.pdf)

Central Bureau of Statistics (2012). The social survey. Retrieved from <http://www.cbs.gov.il/statistical/seker-chevrati-h123.pdf>

Central Bureau of Statistics (2013). Report on Israel's Demographics. Retrieved from [http://www.cbs.gov.il/population/demo\\_skira.pdf](http://www.cbs.gov.il/population/demo_skira.pdf)

Central Bureau of Statistics (2014). *Monthly Bulletin of Statistics: Population (September 2014)*. Retrieved from <http://www.cbs.gov.il/publications14/yarhon0914/pdf/b1.pdf>.

Chibnall, J. T., & Tait, R. C. (1990). The quality of life scale: A preliminary study with chronic pain patients. *Psychology and Health, 4*(4), 283-292.

Clark, D. M., & Wells, A. (1995). A cognitive model of social phobia. In R.

Heimberg, M. Liebowitz, D. A. Hope, & F. R. Schneier (Eds.), *Social phobia: Diagnosis, assessment, and treatment* (pp. 69–93). New York, NY: Guilford Press.

Cohen, A. B. (2002). The importance of spirituality in well-being for Jews and Christians. *Journal of Happiness Studies, 3*(3), 287-310.

Cohen, A., & Zisser, B. (2003). *Mehashlama le'haslama* [From accommodation to escalation: the secular-religious divide at the outset of the 21st century]. Tel Aviv, Israel: Schocken Publishing House.

Coleman, K. (2007). Researching hard-to-access, culturally insular populations: Methodological and ethical challenges. *Journal of Health, Social and environmental issues, 8*(1), 11-18. Retrieved from [http://www.entermentalhealth.net/emilia/Middlesexjournalvol8\\_no1.pdf](http://www.entermentalhealth.net/emilia/Middlesexjournalvol8_no1.pdf)

Collins, C. R., & Blood, G. W. (1990). Acknowledgment and severity of stuttering as factors influencing nonstutterers' perceptions of stutterers. *Journal of Speech and Hearing Disorders, 55*(1), 75-81.

Connally, E. L., Ward, D., Howell, P., & Watkins, K. E. (2014). Disrupted white matter in language and motor tracts in developmental stuttering. *Brain and Language, 131*, 25-35.

Couture, E. (1982). *Stuttering*. Englewood Cliffs, NJ : Prentice-Hall.

Cook, F., & Fry, J. (2006). Connecting stuttering measurement and management: III. Accountable therapy. *International Journal of Language & Communication Disorders, 41*(4), 379-394.

Cooper, E.B. (1976). Personalized fluency control therapy: An integrated behaviour and relationship therapy for stutterers. Austin, TX: Learning Concepts, Inc.

Corcoran, J. A., & Stewart, M. (1998). Stories of stuttering: A qualitative analysis of interview narratives. *Journal of Fluency Disorders, 23*(4), 247-264.

Craig, A. (1990). An investigation into the relationship between anxiety and stuttering. *Journal of Speech and Hearing Disorders, 55*(2), 290-294.

Craig, A. (1998). Relapse following treatment for stuttering: A critical review and correlative data. *Journal of Fluency Disorders, 23*(1), 1-30.

Craig, A. (2000). The developmental nature and effective treatment of stuttering in children and adolescents. *Journal of Developmental and Physical Disabilities, 12*(3), 173-186.

Craig, A. R., & Calver, P. (1991). Following up on treated stutterers: Studies of perceptions of fluency and job status. *Journal of Speech, Language, and Hearing Research, 34*(2), 279-284.

Craig, A., & Tran, Y. (2006). Fear of speaking: Chronic anxiety and stuttering. *Advances in Psychiatric Treatment, 12*, 6.

Craig, A., & Tran, Y. (2014). Trait and social anxiety in adults with chronic stuttering: Conclusions following meta-analysis. *Journal of Fluency Disorders, 40*(1), 35-43.

Craig, A., Blumgart, E., & Tran, Y. (2009). The impact of stuttering on the quality of life in adults who stutter. *Journal of Fluency Disorders, 34*(2), 61-71.

Craig, A., Hancock, K., Tran, Y., & Craig, M. (2003). Anxiety levels in people who stutter: a randomized population study. *Journal of Speech, Language & Hearing Research, 46*(5).

Craig, A., Hancock, K., Tran, Y., Craig, M., & Peters, K. (2002). Epidemiology of stuttering in the community across the entire life span. *Journal of Speech, Language, and Hearing Research, 45*(6), 1097.

Cream, A., Onslow, M., Packman, A., & Llewellyn, G. (2003). Protection from harm: the experience of adults after therapy with prolonged-speech. *International Journal of Language & Communication Disorders, 38*(4), 379-395.

Crichton-Smith, I. (2002). Communicating in the real world: Accounts from people who stammer. *Journal of Fluency Disorders*, 27(4), 333-352.

Cummings, S. M., Neff, J. A., & Husaini, B. A. (2003). Functional impairment as a predictor of depressive symptomatology: the role of race, religiosity, and social support. *Health & Social Work*, 28(1), 23-32.

Davey, G. C., Burgess, I., & Rashes, R. (1995). Coping strategies and phobias: The relationship between fears, phobias and methods of coping with stressors. *British Journal of Clinical Psychology*, 34(3), 423-434.

Davis, S., Howell, P., & Cooke, F. (2002). Sociodynamic relationships between children who stutter and their non-stuttering classmates. *Journal of Child Psychology and Psychiatry*, 43(7), 939-947.

Davis, S., Shisca, D., & Howell, P. (2007). Anxiety in speakers who persist and recover from stuttering. *Journal of Communication Disorders*, 40(5), 398-417.

De Nil, L. F., Kroll, R. M., Kapur, S., & Houle, S. (2000). A positron emission tomography study of silent and oral single word reading in stuttering and nonstuttering adults. *Journal of Speech, Language, and Hearing Research*, 43(4), 1038.

Denzin, N.K. & Lincoln, Y.S. (2005). Introduction: The discipline and practice of qualitative research. In N. K. Denzin, & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative research* (3rd ed., pp. 1-32). Thousand Oaks, CA: Sage.

Doody, I., Kalinowski, J., Armson, J., & Stuart, A. (1993). Stereotypes of stutterers and nonstutterers in three rural communities in Newfoundland. *Journal of Fluency Disorders*, 18(4), 363-373.

Driedger, L. (2000). *Mennonites in the global village*. Toronto: The University of Toronto Press.

Durkheim, E. (1969). *The Elementary forms of the religious life*. New York, NY: Free Press.

Efron, N. J. (2003). *Real Jews: Secular versus ultra-orthodox and the struggle for Jewish identity in Israel*. New York, NY: Basic Books.

Eggers, K., De Nil, L. F., & Van den Bergh, B. R. (2010). Temperament dimensions in stuttering and typically developing children. *Journal of Fluency Disorders*, 35(4), 355-372.

Elliott, R. (1995). Therapy process research and clinical practice: Practical strategies. In M. Aveline & D. A. Shapiro (Eds.), *Research foundations for psychotherapy practice*, (pp. 49-72). Chichester: Wiley.

Ellison, C. G., Gay, D. A., & Glass, T. A. (1989). Does religious commitment contribute to individual life satisfaction?. *Social Forces*, 68(1), 100-123.

El-Or, T. (1992) *Maskilot veburot: meolman shel nashim charediyot* [Educated and Ignorant: Ultra-Orthodox Jewish Women and Their World]. Tel Aviv, Israel: Am Oved.

Eran, G. (2003). Guf haredi: prakim meetnografia behachana [Haredi body: Chapters of prepared ethnography]. In K. Caplan & E. Sivan (Eds.). *Charedim Israelim: Hishtalvult lelo tmia?* [Israeli Haredim: Integration without assimilation?] (pp. 99-133). Tel Aviv, Israel: Van Leer Jerusalem Institute and Hakibutz Hameuchad Publishing House Ltd.

Ezrati-Vinacour, R., & Levin, I. (2004). The relationship between anxiety and stuttering: a multidimensional approach. *Journal of Fluency Disorders*, 29(2), 135-148.

Ezrati-Vinacour, R., & Weinstein, N. (2011). A dialogue among various cultures and its manifestation in stuttering therapy. *Journal of Fluency Disorders*, 36(3), 174-185.

Ezrati-Vinacour, R., Platzky, R., & Yairi, E. (2001). The young child's awareness of stuttering-like disfluency. *Journal of Speech, Language, and Hearing Research*, 44(2), 368-380.

Faden, R., & Leplège, A. (1992). Assessing Quality of Life: Moral Implications for Clinical Practice. *Medical Care*, 30(5), MS166-MS175.

Feinson, M. C., & Meir, A. (2014). Is Religiosity Related to Reduced Abuse in Childhood? A Community Study of Ultra-Orthodox and Secular Jewish Women. *Advances in Gender Research*, 18, 99-123.

Feldman, R., Masalha, S., & Nadam, R. (2001). Cultural perspective on work and family: Dual-earner Israeli Jewish and Arab families at the transition to parenthood. *Journal of Family Psychology*, 15(3), 492-509.

Fenichel, O. (1945). *The psychoanalytic theory of neurosis*. New York, NY: Norton.

Fibiger, S., Peters, H. F., Euler, H. A., & Neumann, K. (2008). Health and human services for persons who stutter and education of logopedists in East-European countries. *Journal of Fluency Disorders*, 33(1), 66-71.

Fingerman, K. L., & Bermann, E. (2000). Applications of family systems theory to the study of adulthood. *International Journal of Aging and Human Development*, 51(1), 5-30.

Finn, P., & Cordes, A. K. (1997). Multicultural identification and treatment of stuttering: A continuing need for research. *Journal of Fluency Disorders*, 22(3), 219-236.

Freud, S. (1923). *The ego and the id*. New York, NY: Norton.

Friedman, M. (1991). *Hachevra hacharedit: mekorot, megamot vetahalichim* [The Haredi ultra-orthodox society: Sources trends and processes]. Jerusalem, Israel: The Jerusalem Institute for Israel Studies.

Gilat, I., & Rosenau, S. (2011). Volunteers' perspective of effective interactions with helpline callers: qualitative study. *British Journal of Guidance & Counselling*, 39(4), 325-337.

Glauber, I. P. (1958). The psychoanalysis of stuttering. In J. Eisenson (Ed.), *Stuttering: A Symposium* (pp. 71-119). New York, NY: Harper & Brothers

Gonen, A. (2001). *Mehayeshiva la'avoda: Hanisayon ha'amerikani velekachim le'Israel* [From yeshiva to work: The American experience and lessons for Israel]. Jerusalem, Israel: Floersheimer Institute for Policy Studies.

Goodman, Y. (2001). Dynamics of inclusion and exclusion: Comparing mental illness narratives of Haredi male patients and their rabbis. *Culture, Medicine and Psychiatry*, 25(2), 169-194.

Goodman, Y. C. (2003). Kolot misfinat hashotim: maavakei zehut bemisgarot tipul charediyot [Voices of the "fools' boat": identity struggles in ultra-orthodox treatment centers]. In K. Caplan & E. Sivan (Eds.). *Charedim Israelim: Hishtalvult lelo tmia?*

[Israeli Haredim: Integration without assimilation?] (pp. 134-170). Tel Aviv, Israel: Van Leer Jerusalem Institute and Hakibutz Hameuchad Publishing House Ltd.

Goodman, Y. C. (2009). "You Look, Thank God, Quite Good on the Outside": Imitating the Ideal Self in a Jewish Ultra-Orthodox Rehabilitation Site. *Medical Anthropology Quarterly*, 23(2), 122-141.

Greenberg, D., & Witztum, E. (1994). The influence of cultural factors on obsessive compulsive disorder: Religious symptoms in a religious society. *Israel Journal of Psychiatry and Related Sciences*, 31, 211–220.

Greenberg, D., Stravynski, A., & Bilu, Y. (2004). Social phobia in ultra-orthodox Jewish males: culture-bound syndrome or virtue?. *Mental Health, Religion & Culture*, 7(4), 289-305.

Gregory, H. (1991). *Stuttering therapy: Workshop for specialists*. Northwestern University: The Speech Foundation of America.

Guitar, B. (1976). Pretreatment factors associated with the outcome of stuttering therapy. *Journal of Speech, Language, and Hearing Research*, 19(3), 590-600.

Guitar, B. (2006). *Stuttering: An integrated approach to its nature and management* (3<sup>rd</sup> ed.). Baltimore, MD: Lippincott, Williams & Wilkins.

Guntupalli, V. K., Kalinowski, J., & Saltuklaroglu, T. (2006). The need for self-report data in the assessment of stuttering therapy efficacy: Repetitions and prolongations of speech. The stuttering syndrome. *International Journal of Language & Communication Disorders*, 41(1), 1-18.

Gurovich, N., & Cohen-Kastro, E. (2004) Ultra-Orthodox Jews Geographic Distribution and Demographic, Social and Economic Characteristics of the Ultra-Orthodox Jewish Population in Israel 1996-2001. Working Paper Series (No. 5). Jerusalem, Israel: Central Bureau of Statistics. Retrieved from [http://www.cbs.gov.il/publications/int\\_ulor.pdf](http://www.cbs.gov.il/publications/int_ulor.pdf)

Hasson-Ohayon, I., Braun, M., Galinsky, D., & Baider, L. (2009). Religiosity and hope: A path for women coping with a diagnosis of breast cancer. *Psychosomatics*, 50(5), 525-533.

Hechter, M. (1983). A theory of group solidarity. In M. Hechter (Ed.), *The microfoundations of macrosociology* (pp. 17-55). Philadelphia: Temple University Press.

Hechter, M. (1987). *Principles of group solidarity*. California: University of California Press.

Heilman, S. C., & Witztum, E. (2000). All in faith: Religion as the idiom and means of coping with distress. *Mental Health, Religion & Culture*, 3(2), 115-124.

Heilman, S.C. (1992). *Defenders of the faith: Inside ultra-orthodox Jewry*. New York, NY: Schocken Books.

Hill, P.C., & Pargament, K.I. (2003). Advances in the conceptualization and measurement of religion and spirituality: Implications for physical and mental health research. *American Psychologist*, 58, 64–74.

Hobfoll, S. E. (1998). *Stress, culture, and community: The psychology and philosophy of stress*. New York, NY: Plenum.

Hobfoll, S. E. (2001). The influence of culture, community, and the nested-self in the stress process: advancing conservation of resources theory. *Applied Psychology*, 50(3), 337-421.

Holahan, C. J., & Moos, R. H. (1991). Life stressors, personal and social resources, and depression: A 4-year structural model. *Journal of abnormal psychology*, 100(1), 31.

Holdstock, T. L. (1979). Indigenous healing in South Africa: A neglected potential. *South African Journal of Psychology*, 9(3-4), 118-124.

Hostetler, J.A. (1993). *Amish society*. Baltimore and London: the Johns Hopkins University Press.

Hubble, M. A., Duncan, B. L., & Miller, S. D. (1999). Introduction. In M.A. Hubble, B.L. Duncan, and S.D. Miller (Eds). *The Heart and Soul of Change: What Works in Therapy* (pp. 1-32). Washington, D.C.: APA press.

Hughes, S., Gabel, R., Irani, F., & Schlagheck, A. (2010). University students' explanations for their descriptions of people who stutter: An exploratory mixed model study. *Journal of Fluency Disorders*, 35(3), 280-298.

Hugh-Jones, S., & Smith, P. K. (1999). Self-reports of short-and long-term effects of bullying on children who stammer. *British Journal of Educational Psychology*, 69(2), 141-158.

Huppert, J. D., Siev, J., & Kushner, E. S. (2007). When religion and obsessive–compulsive disorder collide: Treating scrupulosity in ultra-orthodox Jews. *Journal of Clinical Psychology*, 63(10), 925-941.

Hurst, M. A., & Cooper, E. B. (1983). Vocational rehabilitation counselors' attitudes toward stuttering. *Journal of Fluency Disorders*, 8(1), 13-27.

Hwang, M. J., & Lee, E. J. (2014). A Qualitative Study on the Experience and the Perception of Adults Who Stutter in their Twenties. *Communication Sciences & Disorders*, 18(4), 435-446.

Ingham, R. J. (1984). *Stuttering and behavior therapy: Current status and experimental foundations*. San Diego, CA: College-Hill Press.

Ingham, R. J., & Cordes, A. K. (1997). Self-measurement and evaluating stuttering treatment efficacy. *Nature and treatment of stuttering: New directions*, 2, 413-437.

Ip, M. L., St. Louis, K. O., Myers, F. L., & Xue, S. A. (2012). Stuttering attitudes in Hong Kong and adjacent Mainland China. *International Journal of Speech-Language Pathology*, 14(6), 543-556.

Irani, F., Abdalla, F., & Gabel, R. (2012). Arab and American teachers' attitudes toward people who stutter: A comparative study. *Contemporary Issues in Communication Science and Disorders*, 39, 12-20.

Iverach, L., Jones, M., O'Brian, S., Block, S., Lincoln, M., Harrison, E., ... & Onslow, M. (2009). The relationship between mental health disorders and treatment outcomes among adults who stutter. *Journal of Fluency Disorders*, 34(1), 29-43.

Iverach, L., Menzies, R. G., Jones, M., O'Brian, S., Packman, A., & Onslow, M. (2011). Further development and validation of the Unhelpful Thoughts and Beliefs About Stuttering (UTBAS) scales: relationship to anxiety and social phobia among adults who stutter. *International Journal of Language & Communication Disorders*, 46(3), 286-299.

Iverach, L., Menzies, R. G., O'Brian, S., Packman, A., & Onslow, M. (2011). Anxiety and stuttering: Continuing to explore a complex relationship. *American Journal of Speech-Language Pathology*, 20(3), 221-232.

Iverach, L., O'Brian, S., Jones, M., Block, S., Lincoln, M., Harrison, E., ... & Onslow, M. (2009). Prevalence of anxiety disorders among adults seeking speech therapy for stuttering. *Journal of Anxiety Disorders*, 23(7), 928-934.

Ivry, T., Teman, E., & Frumkin, A. (2011). God-sent ordeals and their discontents: Ultra-orthodox Jewish women negotiate prenatal testing. *Social Science & Medicine*, 72(9), 1527-1533.

Janssen, P., & Kraaimaat, F. (1980). Disfluency and anxiety in stuttering and non-stuttering adolescents. *Behavioural Analysis and Modification*, 4(2), 116-126.

Jobani, Y., & Perez, N. (2014). Toleration and illiberal groups in context: Israel's ultra-orthodox 'society of learners'. *Journal of Political Ideologies*, 19(1), 78-98.

Johnson, W. (1930). *Because I stutter*. New York, NY: D. Appleton and Co.

Johnson, W. (1942). A study of the onset and development of stuttering. *Journal of Speech Disorders*, 7(3), 251-257.

Johnson, W. (1955). The time, the place and the problem. In W. Johnson & R. Leutenegger (Eds.), *Stuttering in children and adults*. Minneapolis: University of Minnesota Press.

Kalinowski, J., Guntupalli, V. K., Stuart, A., & Saltuklaroglu, T. (2004). Self-reported efficacy of an ear-level prosthetic device that delivers altered auditory

feedback for the management of stuttering. *International Journal of Rehabilitation Research*, 27(2), 167-170.

Kang, C., Riazuddin, S., Mundorff, J., Krasnewich, D., Friedman, P., Mullikin, J. C., & Drayna, D. (2010). Mutations in the lysosomal enzyme–targeting pathway and persistent stuttering. *New England Journal of Medicine*, 362(8), 677-685.

Karola, A. M. (2002). *Developing appropriate child-rearing practices within the Arab World to assist with integrating traditional culture with the need to accommodate the cultural shifts required for living within the twenty-first century*. Unpublished doctoral dissertation, Union Institute and University, Ohio.

Karrass, J., Walden, T. A., Conture, E. G., Graham, C. G., Arnold, H. S., Hartfield, K. N., & Schwenk, K. A. (2006). Relation of emotional reactivity and regulation to childhood stuttering. *Journal of Communication Disorders*, 39(6), 402-423.

Katz-Bernstein, N. (1994). Psychological, emotional, and verbal aspects of speech disfluency: A multidimensional method of treating stuttering and cluttering children. *Journal of Fluency Disorders*, 19(3), 185.

Katz-Bernstein, N. (2000). *Yeladim lekuyei shetef- gisha lebniyat tikshoreit* [Disfluent children—An approach for building communication]. Tel Aviv, Israel: Dionon Publishers.

Keim, A.N. (1993). Military service and conscription. In D.B. Kraybill (Ed.), *The Amish and the state* (pp. 43-64). Baltimore and London: the Johns Hopkins University Press.

Kelly, E. M., & Conture, E. G. (1992). Speaking rates, response time latencies, and interrupting behaviors of young stutterers, nonstutterers, and their mothers. *Journal of Speech, Language, and Hearing Research, 35*(6), 1256-1267.

Kelman, E., & Nicholas, A. (2008). *Practical intervention for early childhood stammering: Palin PCI approach*. Milton Keynes, UK: Speechmark.

Kent, R. D. (1984). Stuttering as a temporal programming disorder. In R. F. Curlee & W. H. Perkins (Eds.), *Nature and treatment of stuttering: New directions* (pp. 283-301). College-Hill Press, San Diego.

King, K. B., Porter, L. A., Norsen, L. H., & Reis, H. T. (1992). Patient perceptions of quality of life after coronary artery surgery: was it worth it?. *Research in Nursing & Health, 15*(5), 327-334.

Klassen, T. R. (2002). Social distance and the negative stereotype of people who stutter. *Journal of Speech Language Pathology and Audiology, 26*(2), 90-99.

Klein, J. F., & Hood, S. B. (2004). The impact of stuttering on employment opportunities and job performance. *Journal of Fluency Disorders, 29*(4), 255-273.

Klompas, M., & Ross, E. (2004). Life experiences of people who stutter, and the perceived impact of stuttering on quality of life: Personal accounts of South African individuals. *Journal of Fluency Disorders*, 29(4), 275-305.

Koedoot, C., Bouwmans, C., Franken, M. C., & Stolk, E. (2011). Quality of life in adults who stutter. *Journal of communication disorders*, 44(4), 429-443.

Kortt, M. A., Dollery, B., & Grant, B. (2014). Religion and life satisfaction down under. *Journal of Happiness Studies*, 1-17.

Kraaimaat, F. W., Vanryckeghem, M., & Van Dam-Baggen, R. (2002). Stuttering and social anxiety. *Journal of Fluency Disorders*, 27(4), 319-331.

Kraaimaat, F., Janssen, P., & Brutten, G. J. (1988). The relationship between stutterers' cognitive and autonomic anxiety and therapy outcome. *Journal of Fluency Disorders*, 13(2), 107-113.

Kraft, S. J., & Yairi, E. (2011). Genetic bases of stuttering: The state of the art. *Folia Phoniatrica et Logopaedica*, 64(1), 34-47.

Krause, N. (2011). Religion and health: Making sense of a disheveled literature. *Journal of Religion and Health*, 50(1), 20-35.

Krause, R. (1982). A social psychological approach to the study of stuttering. In C. Fraser & K. Scherer (Eds.), *Advances in the Social Psychology of Language* (pp.77-123). Cambridge, United Kingdom: Cambridge University Press.

Langevin, M., & Boberg, E. (1993). Results of an intensive stuttering therapy program. *Journal of Speech-Language Pathology and Audiology, 17*(3), 158-166.

Langevin, M., Bortnick, K., Hammer, T., & Wiebe, E. (1998). Teasing/bullying experienced by children who stutter: Toward development of a questionnaire. *Contemporary Issues in Communication Science and Disorders, 25*(12-24).

Langevin, M., Kully, D., Teshima, S., Hagler, P., & Narasimha Prasad, N. G. (2010). Five-year longitudinal treatment outcomes of the ISTAR Comprehensive Stuttering Program. *Journal of Fluency Disorders, 35*(2), 123-140.

Langevin, M., Packman, A., & Onslow, M. (2009). Peer responses to stuttering in the preschool setting. *American Journal of Speech-Language Pathology, 18*(3), 264-276.

Lavrič, M., & Flere, S. (2008). The role of culture in the relationship between religiosity and psychological well-being. *Journal of Religion and Health, 47*(2), 164-175.

Lazarus, R. S. (1991). *Emotion and adaptation*. New York, NY: Oxford University Press.

Lazarus, R.S. & Folkman, S. (1984). *Stress, appraisal and coping*. New York, NY: Springer.

Lee, W. & Tse, D. (1994). Changing media consumption in a new home: Acculturation patterns among Hong Kong immigrants to Canada. *Journal of Advertising*, 23(1). 57-70.

Lehmann, D., & Siebzeher, B. (2009). Power, boundaries and institutions: marriage in ultra-Orthodox Judaism. *European Journal of Sociology*, 50(2), 273-308.

Lemert, E. M. (1952). Stuttering among the North Pacific Coastal Indians. *Southwestern Journal of Anthropology*, 8(4), 429-441.

Levi, S., Hana, L., & Katz, E. (2002). *A portrait of Israeli Jewry: Beliefs, observances and values among Israeli Jews 2000*. *Jewish Israelis: Portrait*. Jerusalem, Israel: The Israel Democracy Institute and The Avi Chai Foundation. Retrieved from <http://en.idi.org.il/media/1352689/PortraitofIsraeliJewry.pdf>

Levin, J. (2012). Religion and positive well-being among Israeli and diaspora Jews: Findings from the World Values Survey. *Mental Health, Religion & Culture*, 15(7), 709-720.

Levin, J. (2013). Religious Observance and Well-Being among Israeli Jewish Adults: Findings from the Israel Social Survey. *Religions*, 4(4), 469-484.

Logan, K. J., & Conture, E. G. (1995). Length, grammatical complexity, and rate differences in stuttered and fluent conversational utterances of children who stutter. *Journal of Fluency Disorders*, 20(1), 35-61.

Lu, C., Peng, D., Chen, C., Ning, N., Ding, G., Li, K., ... & Lin, C. (2010). Altered effective connectivity and anomalous anatomy in the basal ganglia-thalamocortical circuit of stuttering speakers. *Cortex*, 46(1), 49-67.

Lyons R.F., Mickelson K.D., Sullivan M.J., Coyne J.C. (1998). Coping as a communal process. *Journal of Social and Personal Relationships*, 15(5), 579– 605.

Madnick, H. (2006). *The relationship of attachment, parent-child relationship, anxiety and avoidance of speech situations among stutterers* (Unpublished master's thesis). Tel Aviv University, Tel Aviv.

Magnusson, O. (1982). Situational determinants of stress: An interactional perspective. In L. Goldenberger & S. Breznitz (Eds.), *Handbook of stress, theoretical and clinical aspects* (pp. 231-253). New York, NY: Free Press.

Malchin, Y. (2000). *Bema maaminin yehudim chiloniim?* [What do secular Jews believe in?]. Tel Aviv, Israel: Sifriat Poalim.

Manning, W. H., Dailey, D., & Wallace, S. (1984). Attitude and personality characteristics of older stutterers. *Journal of Fluency Disorders*, 9(3), 207-215.

Manor-Binyamini, I. (2012). Parental coping with developmental disorders in adolescents within the ultraorthodox Jewish community in Israel. *Journal of Autism and Developmental Disorders*, 42(5), 815-826.

Mark, N. & Roberts, L. (1994). Ethnosensitive techniques in the treatment of the Hasidic cancer patient. *Cancer Practice*, 2(3), 202-208.

Marx, T. (1993). Ambiguity in the Halachic status of the handicapped. *Proceedings of the World Congress of Jewish Studies*, 1(c) 41-48.

Maselko, J., Hughes, C., & Cheney, R. (2011). Religious social capital: Its measurement and utility in the study of the social determinants of health. *Social Science & Medicine*, 73(5), 759-767.

McCullough, M. E., & Willoughby, B. L. (2009). Religion, self-regulation, and self-control: Associations, explanations, and implications. *Psychological bulletin*, 135(1), 69.

Menzies, R. G., O'Brian, S., Onslow, M., Packman, A., St Clare, T., & Block, S. (2008). An experimental clinical trial of a cognitive-behavior therapy package for chronic stuttering. *Journal of Speech, Language, and Hearing Research*, 51(6), 1451-1464.

Menzies, R. G., Onslow, M., & Packman, A. (1999). Anxiety and stuttering: Exploring a complex relationship. *American Journal of Speech-Language Pathology*, 8(1), 3.

Menzies, R. G., Onslow, M., Packman, A., & O'Brian, S. (2009). Cognitive behavior therapy for adults who stutter: A tutorial for speech-language pathologists. *Journal of Fluency Disorders*, 34(3), 187-200.

Meredith, G., Packman, A., & Marks, G. (2012). Stuttering, disability and the higher education sector in Australia. *International Journal of Speech-Language Pathology*, 14(4), 370-376.

Messenger, M., Onslow, M., Packman, A., & Menzies, R. (2004). Social anxiety in stuttering: measuring negative social expectancies. *Journal of Fluency Disorders*, 29(3), 201-212.

Meyers, S. C., & Freeman, F. J. (1985a). Interruptions as a variable in stuttering and disfluency. *Journal of Speech, Language, and Hearing Research*, 28(3), 428-435.

Meyers, S. C., & Freeman, F. J. (1985b). Mother and child speech rates as a variable in stuttering and disfluency. *Journal of Speech, Language, and Hearing Research*, 28(3), 436-444.

- Meyers, S. C., & Woodford, L. L. (1992). *The Fluency Development System for Young Children*. Buffalo, NY: United Educational Services.
- Millard, S. K., Edwards, S., & Cook, F. M. (2009). Parent-child interaction therapy: Adding to the evidence. *International Journal of Speech-Language Pathology, 11*(1), 61-76.
- Miller, S., & Watson, B. C. (1992). The relationship between communication attitude, anxiety, and depression in stutterers and nonstutterers. *Journal of Speech and Hearing Research, 35*(4), 789-798.
- Miller, T. (2009). *Mapping the global Muslim population: A report on the size and distribution of the world's Muslim population*. Washington, DC: Pew Research Center.
- Mitchell, E. S. (1986). Multiple triangulation: a methodology for nursing science. *Advances in Nursing Science, 8*(3), 18-26.
- Moore, S. E., & Perkins, W. H. (1990). Validity and reliability of judgments of authentic and simulated stuttering. *Journal of Speech and Hearing Disorders, 55*(3), 383-391.
- Mulcahy, K., Hennessey, N., Beilby, J., & Byrnes, M. (2008). Social anxiety and the severity and typography of stuttering in adolescents. *Journal of Fluency Disorders, 33*(4), 306-319.

Naylor, R. V. (1953). A comparative study of methods of estimating the severity of stuttering. *Journal of Speech and Hearing Disorders, 18*, 30–37.

Nelson, C. L. (1985). My Language, your culture: whose communicative competence?. *World Englishes, 4*(2), 243-250.

Neria- Ben Shachar, R. (2008). *Ultra orthodox women and the general media in Israel: thinking patterns and reading patterns*. Unpublished doctoral dissertation. The Hebrew University.

O'Brian, S., Jones, M., Packman, A., Menzies, R., & Onslow, M. (2011). Stuttering severity and educational attainment. *Journal of Fluency Disorders, 36*(2), 86-92.

O'Brian, S., Packman, A., & Onslow, M. (2004). Self-Rating of Stuttering Severity as a Clinical Tool. *American Journal of Speech-Language Pathology, 13*(3), 219-226.

Okasha, A., Bishrey, Z., Kamel, M., & Hassan, A. H. (1974). Psychosocial study of stammering in Egyptian children. *British Journal of Psychiatry, 124*, 531–533.

Ollendick, T. H., & Hirshfeld-Becker, D. R. (2002). The developmental psychopathology of social anxiety disorder. *Biological Psychiatry, 51*(1), 44-58.

Olsen, L. T., Steelman, M. L., Buffalo, M. D., & Montague, J. (1999). Preliminary information on stuttering characteristics contrasted between African American and white children. *Journal of Communication Disorders, 32*(2), 97-108.

Onslow, M., Packman, A., & Harrison, E. (2003). *The Lidcombe Program of early stuttering intervention: A clinician's guide*. Austin, TX: Pro-ed.

Opp, K. L., Hayden, P. A., & Cottrell, G. T. (1997). Stuttering and employment: A survey report. *Annual Convention of the American Speech, Language, and Hearing Association*. Boston, MA.

Orbe, M. (1998) *Constructing co-culture theory: An explanation of culture, power and communication*. Thousand Oaks, Ca: Sage.

Özdemir, R. S., St Louis, K. O., & Topbaş, S. (2011). Stuttering attitudes among Turkish family generations and neighbors from representative samples. *Journal of Fluency Disorders, 36*(4), 318-333.

Parkes, K. R. (1986). Coping in stressful episodes: The role of individual differences, environmental factors, and situational characteristics. *Journal of personality and social psychology, 51*(6), 1277.

Patterson, J., & Pring, T. (1991). Listeners' attitudes to stuttering speakers: No evidence for a gender difference. *Journal of Fluency Disorders, 16*(4), 201-205.

Perkins, W. H. (1983). The problem of definition: Commentary on "stuttering".  
*Journal of Speech and Hearing Disorders, 48*, 246-248.

Perkins, W. H. (1984). Stuttering as a categorical event barking up the wrong tree.  
*Journal of Speech, Language, and Hearing Disorders, 49*, 431-433.

Perkins, W. H. (1990). What is stuttering?. *Journal of Speech and Hearing Disorders, 55*(3), 370-382.

Perkins, W. H., Kent, R. D., & Curlee, R. F. (1991). A theory of neuropsycholinguistic function in stuttering. *Journal of Speech, Language, and Hearing Research, 34*(4), 734-752.

Peters, H. F., & Hulstijn, W. (1984). Stuttering and anxiety: The difference between stutterers and nonstutterers in verbal apprehension and physiologic arousal during the anticipation of speech and non-speech tasks. *Journal of Fluency Disorders, 9*(1), 67-84.

Platzky, R. & Girson, J. (1993). Indigenous healers and stuttering. *South African Journal of Communication Disorders, 30*, 43- 47.

Plexico, L. W., & Burrus, E. (2012). Coping with a child who stutters: A phenomenological analysis. *Journal of Fluency Disorders, 37*(4), 275-288.

Plexico, L. W., Manning, W. H., & Levitt, H. (2009a). Coping responses by adults who stutter: Part I. Protecting the self and others. *Journal of Fluency Disorders*, 34(2), 87-107.

Plexico, L. W., Manning, W. H., & Levitt, H. (2009b). Coping responses by adults who stutter: Part II. Approaching the problem and achieving agency. *Journal of Fluency Disorders*, 34(2), 108-126.

Postma, A., & Kolk, H. (1993). The covert repair hypothesis: Prearticulatory repair processes in normal and stuttered disfluencies. *Journal of Speech, Language, and Hearing Research*, 36(3), 472-487.

Prochaska, J. O., & DiClemente, C. C. (1986). Toward a comprehensive model of change. In W. R. Miller & N. Heather (Eds.), *Treating addictive behaviors: Processes of change* (pp. 3–27). New York, NY: Plenum Press.

Proctor, A., Yairi, E., Duff, M. C., & Zhang, J. (2008). Prevalence of stuttering in African American preschoolers. *Journal of Speech, Language, and Hearing Research*, 51(6), 1465-1479.

Rapee, R. M., & Spence, S. H. (2004). The etiology of social phobia: Empirical evidence and an initial model. *Clinical psychology review*, 24(7), 737-767.

Rice, M., & Kroll, R. (1997). Workplace experiences of people who stutter. *Journal of Fluency Disorders*, 22(2), 140.

Rier, D. A., Schwartzbaum, A., & Heller, C. (2008). Methodological issues in studying an insular, traditional population: A women's health survey among Israeli Haredi (Ultra-Orthodox) Jews. *Women & health, 48*(4), 363-381.

Riley, G. (2009). Stuttering severity instrument (4<sup>th</sup> ed.). Austin, TX: Pro-ed.

Riley, J., Riley, G., & Maguire, G. (2004). Subjective screening of stuttering severity, locus of control and avoidance: Research edition. *Journal of Fluency Disorders, 29*(1), 51-62.

Robinson, T.L. Jr. (2012). Cultural diversity and fluency disorders. In D.E. Battle. *Communication Disorders in Multicultural Populations* (4<sup>th</sup> ed.). St. Louis, Missouri: Elsevier Health Sciences.

Rosenberg, S., & Curtiss, J. (1954). The effect of stuttering on the behavior of the listener. *The Journal of Abnormal and Social Psychology, 49*(3), 355.

Roz, R., Alper, H., & Almog, T. (2011). The development of the Talmud Torah/ the Cheider. *People Israel- your guide to Israeli society*. Retrieved from <http://www.peopleil.org/details.aspx?itemID=7404>.

Rule, S. (2007). Religiosity and quality of life in South Africa. *Social Indicators Research, 81*(2), 417-434.

Rustin, L., & Cook, F. (1995). Parental involvement in the treatment of stuttering. *Language, Speech, and Hearing Services in Schools, 26*(2), 127-137.

Rustin, L., Botterill, W., & Kelman, E. (1996). *Assessment and therapy for young dysfluent children: Family interaction*. London: Whurr Publishers.

Ryan, B. (1979). Stuttering therapy in a framework of operant conditioning and programmed learning. In H. Gregory (Ed.), *Controversies about stuttering therapy* (pp. 129-173). Baltimore, MD: University Park Press.

Sagi, R., Ezer, H., Gilat, Y., & Reuveni, T. (2009). *Help seeking and use of psychoactive substances (drugs and/or alcohol): Attitudes of students, teachers, and educational counselors*. Research Report, submitted to the Israeli National Authority for Drugs and Alcohol. Levinsky College for Education, Tel Aviv, Israel.

Santrock, J.W. (2007). *A Topical Approach to Human Life-span Development* (3rd ed.). St. Louis, MO: McGraw-Hill.

Schreier, M. (2012). *Qualitative content analysis in practice*. London, United Kingdom: Sage.

Schwartz, F. (2011). The Jewish Stuttering Association: Mercaz Kvad Peh. *Hamodia*. Retrieved from <http://www.jstutter.org/wp-content/uploads/2011/03/Hamodia-Magazine.pdf>

Schwarzer, R. (2001). Stress, resources, and proactive coping. *Applied Psychology: An International Review*, 50(3), 400-407

Shaked, M. (2001). *Cultural construction of disorder: Autism in ultra-orthodox society in Israel*. Unpublished doctoral dissertation. Jerusalem, Israel: The Hebrew University.

Shaked, M. (2005). The social trajectory of illness: Autism in the ultraorthodox community in Israel. *Social Science & Medicine*, 61(10), 2190-2200.

Shames, G.H. (1969). Verbal reinforcement during therapy interviews. In B.B. Gray, & G. England (Eds.), *Stuttering and the conditioning therapies* (pp. 99–114). Monterey, CA: Monterey Institute of Speech and Hearing.

Shames, G.H. (1989). Stuttering: An RFP for a cultural perspective. *Journal of Fluency Disorders*, 14(1), 67-77.

Sheehan, J. G. (1958). Conflict theory of stuttering. In J. Eisenson (Ed.), *Stuttering: A symposium* (pp. 121-166). New York, NY: Harper & Row.

Sheehan, J.G. (1953). Theory and treatment of stuttering as an approach-avoidance conflict. *The Journal of Psychology*, 36(1), 27-49.

Sheehan, J.G. (1970). *Stuttering: Research and therapy*. New York, NY: Harper and Row.

Sheehan, J.G. (1975). Conflict theory and avoidance-reduction therapy. In J. Eisenson, *Stuttering: A second symposium* (pp. 97-198). New York, NY: Harper & Row.

Sheleg, Y. (2000). *Hadatiim hachadashim: Mabat achshavi al hachevra hadatit beIsrael* [The new religious Jews: Recent developments among observant Jews in Israel]. Jerusalem, Israel: Keter.

Sheleg, Y. (2010). *The Jewish Renaissance in Israeli Society: The Emergence of a New Jew* [English abstract]. Jerusalem, Israel: The Israeli Democracy Institute. Retrieved from [http://www.idi.org.il/media/238973/ENGLISH\\_ABSTRACT.pdf](http://www.idi.org.il/media/238973/ENGLISH_ABSTRACT.pdf)

Sherman, D. (1952). Clinical and experimental use of the Iowa scale of severity of stuttering. *Journal of Speech & Hearing Disorders*, 17(3), 316-20.

Shilav, Y. (1997). *Minhal umimshal ba'ir hacharedit* [Governance in an ultra-orthodox city]. Jerusalem, Israel: Floresheimer Institute

Shturch, N., Shershevsky, Y., Bidani-Aurbach, A., Lachman, M., Shaviv, N. and

Zahavi, T. (2007). *Stigma, haflaya vebriut hanefesh beisrael: stigma klapei anashim shechalu bemachala psichiatriit ve klapei tipul nafshi*. [Stigma in mental health: Stands, experiences and coping of the parents of people who cope with a psychiatric illness]. Jerusalem, Israel: Myers–JDC–Brookdale Institute. Retrieved from [http://brookdaleheb.jdc.org.il/\\_Uploads/PublicationsFiles/478-07-stigma2-REP-HEB.pdf](http://brookdaleheb.jdc.org.il/_Uploads/PublicationsFiles/478-07-stigma2-REP-HEB.pdf)

Silverman, E. M. (1980). Communication attitudes of women who stutter. *Journal of Speech and Hearing Disorders*, 45(4), 533-539.

Silverman, E. M. (1982). Speech—Language clinicians' and university students' impressions of women and girls who stutter. *Journal of Fluency Disorders*, 7(4), 469-478.

Silverman, E. M., & Zimmer, C. H. (1979). Women who stutter: Personality and speech characteristics. *Journal of Speech, Language, and Hearing Research*, 22(3), 553-564.

Silverman, E. M., & Zimmer, C. H. (1982). Demographic characteristics and treatment experiences of women and men who stutter. *Journal of Fluency Disorders*, 7(2), 273-285.

Simon, A. M. (2011). A Survey on Traditional Treatment Practices for Stuttering in Sub-Saharan Africa. In P. Howell & J. Van Borsel (Eds.), *Multilingual aspects of fluency disorders* (pp. 232-246). Bristol: St. Nicolas House.

Sivan, E. (1995) The enclave culture. In M. Marty (Ed.), *Fundamentalism Comprehended* (pp.11-68). Chicago: University of Chicago Press.

Sivan, E. (1995). The enclave culture. *Fundamentalisms comprehended*, 5, 11-68.

Smith, A., & Kelly, E. (1997). Stuttering: A dynamic, multifactorial model. In R. Curlee & G. Siegel (Eds.), *Nature and treatment of stuttering: New directions* (2<sup>nd</sup> ed.) (pp. 204-217). Boston: Allyn & Bacon.

- Spencer, E., Packman, A., Onslow, M., & Ferguson, A. (2009). The effect of stuttering on communication: A preliminary investigation. *Clinical Linguistics & Phonetics*, 23(7), 473-488.
- Spielberger, C.D., Gorsuch, R.L., Lushene, R., Vagg, P.R., & Jacobs, G.A. (1983). *Manual for the State-Trait Anxiety Inventory*. Palo Alto, CA: Consulting Psychologists Press.
- St Louis, K. O., & Roberts, P. M. (2010). Measuring attitudes toward stuttering: English-to-French translations in Canada and Cameroon. *Journal of Communication Disorders*, 43(5), 361-377.
- Stadler, N. (2004). Taboos, Dreams and Desires: Haredi & Conceptions of Militarism and the Military. *Israeli Sociology*, 6(1), 69-90.
- Starkweather, C. W. (1987). *Fluency and stuttering*. Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Starkweather, C. W., Gottwald, S. R., & Halfond, M. M. (1990). *Stuttering prevention: A clinical method*. Englewood Cliffs, NJ: Prentice Hall.
- Stefanek, M., McDonald, P. G., & Hess, S. A. (2005). Religion, spirituality and cancer: current status and methodological challenges. *Psycho-Oncology*, 14(6), 450-463.

Strauss, A., & Corbin, J. M. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park, CA: Sage Publications, Inc.

Teesson, K., Packman, A., & Onslow, M. (2003). The Lidcombe behavioral data language of stuttering. *Journal of Speech, Language, and Hearing Research, 46*(4), 1009-1015.

Terrell, S. L., & Jackson, R. S. (2002). African Americans in the Americas. In D. E. Battle (Ed.), *Communication disorders in multicultural populations* (3rd ed., pp. 33-70). Boston, MA: Butterworth-Heinemann.

Tetnowski, J. A., & Daminco, J. S. (2001). A demonstration of the advantages of qualitative methodologies in stuttering research. *Journal of Fluency Disorders, 26*(1), 17-42.

The Pew Research Center (2008). *U.S religious landscape survey. Religious affiliation: diverse and dynamic*. Retrieved from <http://www.pewforum.org/2008/02/01/u-s-religious-landscape-survey-religious-affiliation/>

Thune-Boyle, I. C., Stygall, J. A., Keshtgar, M. R., & Newman, S. P. (2006). Do religious/spiritual coping strategies affect illness adjustment in patients with cancer? A systematic review of the literature. *Social Science & Medicine, 63*(1), 151-164.

Tomasello, M. (2009). *Constructing a language: A usage-based theory of language acquisition*. Harvard University Press.

Toyoda, B. (1959). A statistical report. *Clinical Paediatrica*, 12, 788.

Travis, L. E. (1931). *Speech pathology*. New York, NY: Appleton-Century-Crofts.

Van Borsel, J., Brepoels, M., & De Coene, J. (2011). Stuttering, attractiveness and romantic relationships: The perception of adolescents and young adults. *Journal of Fluency Disorders*, 36(1), 41-50.

Van Borsel, J., Moeyaert, J., Mostaert, C., Rosseel, R., Van Loo, E., & Van Renterghem, T. (2006). Prevalence of stuttering in regular and special school populations in Belgium based on teacher perceptions. *Folia Phoniatica et Logopaedica*, 58(4), 289-302.

Van Riper, C. (1963). *Speech Correction: Principles and Methods*. Englewood Cliffs, NJ: Prentice-Hall.

Van Riper, C. (1973). *The treatment of stuttering*. Englewood Cliffs, NJ: Prentice-Hall.

Van Riper, C. (1982). *The nature of stuttering*. Englewood Cliffs, NJ: Prentice-Hall.

Vanryckeghem, M., & Brutten, G. J. (2011). The BigCAT: A normative and comparative investigation of the communication attitude of nonstuttering and stuttering adults. *Journal of Communication Disorders, 44*(2), 200-206.

Voloshinov, V.N. (1973). *Marxism and the philosophy of language*. New York, NY: Seminar Press.

Watson, J. B. (1995). Exploring the attitudes of adults who stutter. *Journal of Communication Disorders, 28*(2), 143-164.

Webster, R. L. (1980). Evolution of a target-based behavioral therapy for stuttering. *Journal of Fluency Disorders, 5*(3), 303-320.

Weil, L. (1990). *The phenomenology of mental disorders in ultra-orthodox population exposed to treatment in public service* (Unpublished doctoral dissertation). Hebrew University of Jerusalem, Jerusalem.

Whaley, B. B., & Parker, R. G. (2000). Expressing the experience of communicative disability: Metaphors of persons who stutter. *Communication Reports, 13*(2), 115-125.

Wingate, M. E. (1964). A standard definition of stuttering. *Journal of Speech and Hearing Disorders, 29*(4), 484-489.

Wingate, M. E. (1976). *Stuttering: Theory and treatment*. New York, NY: Irvington.

Wischner, G. J. (1969). Stuttering behavior, learning theory and behavior therapy: problems, issues and progress. In B. B. Gray and G. England (Eds.) *Stuttering and the conditioning therapies* (pp. 211-222). Monterey, CA: Monterey Institute of Speech and Hearing.

Wittke-Thompson, J. K., Ambrose, N., Yairi, E., Roe, C., Cook, E. H., Ober, C., & Cox, N. J. (2007). Genetic studies of stuttering in a founder population. *Journal of Fluency Disorders*, 32(1), 33-50.

Woods, C. L., & Williams, D. E. (1976). Traits attributed to stuttering and normally fluent males. *Journal of Speech, Language, and Hearing Research*, 19(2), 267-278.

World Health Organization. (2001). *The international classification of functioning, disability & health*. Geneva, Switzerland: World Health Organization.

Yafe, O. (2004). *Lihiyot yalda haredit: practicot hivrut, siach pedagogi vehavnayat haatsmi* [Being an ultra-orthodox girl: socialization practices, pedagogic discourse and self-construction]. (Unpublished doctoral dissertation). Jerusalem, Israel: Hebrew University of Jerusalem.

Yafe, O. (2009). Samchut pedagogit nashit vegvuloteha [Feminine pedagogic authority and its boundaries]. In K. Caplan & N. Stadler, *Leadership and authority in Israeli Haredi society*. (pp. 31-56). Tel Aviv: Hakibutz Hameuhad and the Van Leer Institute.

- Yairi, E. (2007). Subtyping stuttering I: A review. *Journal of Fluency Disorders*, 32(3), 165-196.
- Yairi, E., & Ambrose, N. (1992). Onset of stuttering in preschool children: Selected factors. *Journal of Speech and Hearing Research*, 35(4), 782.
- Yairi, E., & Ambrose, N. G. (1999). Early Childhood Stuttering I: Persistency and Recovery Rates. *Journal of Speech, Language, and Hearing Research*, 42(5), 1097-1112.
- Yairi, E., & Ambrose, N. G. (2005). *Early childhood stuttering for clinicians by clinicians*. Austin, TX: Pro Ed.
- Yairi, E., & Seery, C.H. (2011). *Stuttering: Foundations and clinical applications*. Upper Saddle River, NJ: Pearson Higher Ed.
- Yairi, E., & Williams, D. E. (1970). Speech clinician's stereotypes of elementary-school boys who stutter. *Journal of Communication Disorders*, 3(3), 161-170.
- Yairi, E., Ambrose, N., & Cox, N. (1996). Genetics of stuttering: A critical review. *Journal of Speech and Hearing Research*, 39(4), 771.
- Yaruss, J. S. (2010). Assessing quality of life in stuttering treatment outcomes research. *Journal of Fluency Disorders*, 35(3), 190-202.

Yaruss, J. S., & Quesal, R. W. (2004). Partnerships between clinicians, researchers, and people who stutter in the evaluation of stuttering treatment outcomes.

*Stammering Research, 1*, 1-15.

Yaruss, J. S., & Quesal, R. W. (2006). Overall Assessment of the Speaker's Experience of Stuttering (OASES): Documenting multiple outcomes in stuttering treatment. *Journal of Fluency Disorders, 31*(2), 90-115.

Yaruss, J. S., Quesal, R. W., Reeves, L., Molt, L. F., Kluetz, B., Caruso, A. J., ... & Lewis, F. (2002). Speech treatment and support group experiences of people who participate in the National Stuttering Association. *Journal of Fluency Disorders, 27*(2), 115-134.

Yuchtman-Yaar, E. (2005). Continuity and change in Israeli society: The test of the melting pot. *Israel studies, 10*(2), 91-128.

Zhang, J., & Kalinowski, J. (2012). Culture and listeners' gaze responses to stuttering. *International Journal of Language & Communication Disorders, 47*(4), 388-397.

Zhang, J., Saltuklaroglu, T., Hough, M., & Kalinowski, J. (2008). Jobs, sex, love and lifestyle: When nonstutterers assume the roles of stutterers. *Folia Phoniatica et Logopaedica, 61*(1), 18-23.

Zidki, S. (2013). Shas veyehadut hatora bahutz ze tov laharedim [Shas and Yehadut Hatora are out-it is good for the Haredi]. *Yediot Acharonot*. Retrieved from <http://www.ynet.co.il/articles/0,7340,L-4362163,00.html>.

Zimmermann, G., Liljeblad, S., Frank, A., & Cleeland, C. (1983). The Indians Have Many Terms for It: Stuttering among the Bannock-Shoshoni. *Journal of Speech, Language, and Hearing Research*, 26(2), 315-318.

## **Appendix**

1. Personal Information Questionnaire
2. The Students Life Satisfaction Scale (SLSS; Huebner, 1991).
3. Situation Avoidance Behavior Checklist (SABC; Cooper, 1976).
4. The Perception of Speech Significance in the Social Environment  
Questionnaire (PSSQ)
5. Semi-Structured Questionnaire (interview)

*Appendix 1: Personal Information Questionnaire*

Serial number \_\_\_\_\_

Date of birth \_\_\_\_\_

Country of birth \_\_\_\_\_; Year of immigration \_\_\_\_\_

Marital status: bachelor/ married/ divorced/ widowed

Number of children \_\_\_\_\_

Occupation: \_\_\_\_\_, position: \_\_\_\_\_ level: \_\_\_\_\_

- a. Unemployed
- b. Soldier
- c. Student
- d. Yeshiva student
- e. Employed
- f. Self employed
- g. Other: \_\_\_\_\_

Education

- a. Elementary school
- b. High-school
- c. Partial high school
- d. Tertiary
- e. B.A of university
- f. M.A of university

- g. Ph.D.
- h. High Yeshiva
- i. Kollel
- j. Smicha (Rabbinite)

#### Matriculation

- a. Academic
- b. Professional
- c. 5 unit level course
- d. I don't have a matriculation- ultra-Orthodox education
- e. I didn't take all/ some of the matriculation tests

#### Denomination

- a. Ultra-Orthodox
- b. Strict modern orthodox
- c. Modern orthodox
- d. Conservative
- e. Reform
- f. Traditionalist
- g. Secular
- h. Other

On a scale of 1 to 10, where 1 means: "not religious at all", and 10 means "very religious", what is your religious level?

1 -2- 3- 4- 5- 6- 7- 8- 9- 10

How many people live at the house you usually live in? \_\_\_\_\_

How many rooms are there in the house you usually live in (excluding kitchen and bathroom)? \_\_\_\_\_

Medical history:

Have you ever suffered a chronic or neurological disease? No/Yes (please describe  
\_\_\_\_\_)

Have you ever suffered a mental condition or illness? No/Yes (please describe  
\_\_\_\_\_)

Speech problems:

Are you a person who stutters? Yes/No (please describe  
\_\_\_\_\_)

In addition to your stuttering, do you experience any other speech or language  
problems? No/Yes (please describe \_\_\_\_\_)

Have you been in therapy for your speech problems?

No/Yes (please describe \_\_\_\_\_)

What kind of therapy did you undergo?

- a. Speech therapy
- b. Psychiatric therapy
- c. Biofeedback
- d. Hypnosis
- e. Alternative treatments (for example: acupuncture, Bach flowers)
- f. I was never treated
- g. Other: \_\_\_\_\_

In your family, are there any other relatives or people who stutter?

- a. No
- b. Yes (please specify who: \_\_\_\_\_)

When did you start to stutter?

- a. As I started speaking
- b. Before the age of 3
- c. Before the age of 6
- d. At elementary school
- e. At high school
- f. After high school

Your stuttering severity:

On a scale of 1 to 10 when 1 means no stuttering at all, and 10 means very severe stuttering, please circle the level of your stuttering severity, as you feel it

1 -2- 3- 4- 5- 6- 7- 8- 9- 10

Appendix 2: The Students Life Satisfaction scale (SLSS; Huebner, 1991)

Please mark *the column next to each statement that indicate the extent to which you agree or disagree with each statement*

	Strongly disagree	Mildly disagree	Mildly agree	Strongly agree
1 My life is going well				
2 My life is just right				
3 I would like to change many things in my life				
4 I wish I had a different kind of life.				
5 I have a good life				
6 I have what I want in life				
7 My life is better than most people				

**Appendix 3: Situation Avoidance Behavior Checklist (SABC; Cooper, 1976)**

To the left you will find speech situations. Please rate how much you avoid or would prefer to avoid each situation, because of your stuttering (if not applicable, please mark **NA**)

	Not at all	A little	Significantly	A lot	Very very much	NA
1. Using the telephone						
2. Ordering in a restaurant						
3. Making introductions						
4. Talking to a store clerk						
5. Meeting someone for the first time						
6. Talking with my mother						
7. Saying hello to friends						
8. Placing a long distance telephone call (or using an operator)						
9. Talking in a classroom situation						
10 Being interviewed for a job						
11 Answering roll call in class						
12 Giving directions						
13 Speaking to people who do not seem to be paying attention to you						
14 Making an apology						
15 Responding to a stranger's question						

16 Calling a friend on the telephone						
17 Talking with a teacher after class						
18 Giving my name over the telephone						
19 Presenting a prepared speech to an unfamiliar audience						
20 Telling a joke or funny story to strangers						
21 Giving a person a verbal message from someone else						
22 Dinner conversation with immediate family or close friends						
23 Telephoning to make an appointment						
24 Taking leave of hostess, date, friend, etc.						
25 Responding under time pressure						
26 Talking with my father						
27 Presenting a prepared speech to a familiar audience						
28 Talking to an animal						
29 Reading aloud in class						
30 Reading aloud to friends						
31 Being asked to repeat your answer						
32 Answering a specific question						

33 Talking to the barber or beautician						
34 Participating in a bull session						
35 Making appointment with a secretary						
36 Talking with a young child						
37 Speaking in a situation where you must raise your voice to be heard						
38 Discussing the possibility of a date						
39 Responding to criticism						
40 Talking about feelings with a close friend						
41 Being asked questions about your speech						
42 Going to door and asking for someone						
43 Telling a joke or funny story to friends						
44 Participating in parlor games requiring speech						
45 Participating in a committee meeting						
46 Dinner conversation with strangers						
47 Talking to people in authority						

48 Talking to other players during a game						
49 Asking instructor questions during a class						
50 Speaking in a situation where you must speak more softly than normal						

**Appendix 4: The Perception of Speech Significance in the Social Environment**

**Questionnaire (PSSQ)**

A. To what extent do you agree or disagree with the following statements?

I. In my social/cultural environment, it is considered important to..

	Strongly disagree	Somewhat disagree	Neutral	Somewhat agree	Strongly agree	Not applicable
1 Give a speech at meal						
2 Deliver a speech at a festive family gathering/occasion						
3 Take part in a conversation during a meal or a social gathering						
4 Express an opinion in an argument or discussion with friends						

5	Deliver a lecture/presentation						
6	Give a speech at a family gathering						
7	Give a dvar Torah during a Shabbat meal						
8	Take an active part with my chavruta (my learning partner)						
9	Give a d'rasha or shiur						
10	Be chazan (shaliach tsibbur)						
11	Be called up to the Torah						
12	Lein the parsha						
13	Make kiddush in front of other people						
14	Lead the zimun in birkat hamazon						

II. To what extent do you agree or disagree with the following statements?

	Strongly disagree	Somewhat disagree	Neutral	Somewhat agree	Strongly agree	Not applicable
15						
16						
17						

B. I. At the present, to what extent does the fact that you stutter bother you?

	Not at all	A little	Somewhat	Very much	Extremely
18					
19					

20	at Kollel/ Yeshiva					
21	at university					

II. In the past/during the teenage years, to what extent did the fact that you stutter bother you...

	Not at all	A little	Somewhat	Very much	Extremely
22	at home				
23	at school				
24	at work				
25	at Kollel/ Yeshiva				
26	at university				

### *Appendix 5: Semi-Structured Questionnaire*

1. When did you first notice, that you stutter?

Was it rather due to the reaction of others or did you notice it yourself?

Can you remember the event?

2. When did you start to stutter? Can you explain the development of your stutter in retroactive?

3. Can you remember 2 – 3 episodes concerning stuttering?

- In early childhood?
- At home?
- In kindergarten?
- At primary school?
- At secondary school?
- With other youth? Youth group? Peers?
- At high school?
- At university?
- At your professional training?
- Choice of profession?
- At work?
- At the anonymous situations (talking to strangers)?
- Close friendships?
- Talking over the phone?

4. How would you estimate the family's behavior toward your stuttering?

Choose one for each family member

- Helpful, understanding? In what way?    Father    Mother    Siblings
- Supportive? In what way?                    Father    Mother    Siblings

- Not very helpful? In what way?                      Father    Mother    Siblings
  - Annoying? In what way?                                Father    Mother    Siblings
  - Other relatives?
  - What would you have wished to be different in their behavior?
- Knowing the influence of their behavior, how would you have reacted to your stuttering son /daughter?

5. In what form did stuttering disturb the most, or less?

- Within the family?
- In spontaneous speech?
- Reading in front of people?
- Debating? Lecturing? Convincing? Explaining? Arguing?
- Intimate conversations? With male friends? With female friends?

6. Can you remember other meaningful situations in your life?

7. In what way do you think, stuttering influenced your life?

8. Do you think stuttering has made it harder for you to get into intimate relationships?

9. Did you experience bullying, or have you been laughed at because of your stuttering?

10. How much could you talk spontaneously without thinking about your speech..

- a. With your parents?
- b. With your teachers?
- c. With your friends?

11. Did you feel the need to hide your stuttering? Give me an example of such a situation.

12. What has helped you overcome your stuttering / what caused it to become chronic?
13. What therapy, help and support was most helpful, not helpful at all?
14. What is positive about your stuttering/ tell me anything good that has come out of it?
15. What have you learned about yourself as a result of being a person who stutters?
16. Do you think your life as a PWS would have been different had you been secular/ultra-orthodox? In what manner?

Thank you very much!