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**Attitudes towards mental illness and psychological help seeking
in Syria: an exploratory study**

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Attitudes towards Mental Illness and Psychological Help Seeking in Syria: An Exploratory Study.

Masa Al-kurdi

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List of Publications and Presentations

- April 2014** Young People in Syria's Attitudes towards Future Development and Success: An introspective study of young people's economic, social and personal struggles and needs pre-war, United Nations.
- April 2014** Young People's Support Systems and Mental Health Well-being, United Nations.
- December 2012** Assessing psychological needs and providing mental health support to Syrian children and families in Syria, Turkey and Jordan, Children and War Foundation.
- November 2012** Young People's Support Systems and Mental Health Well-being in Syria, United Nations.
- June 2012** Economic inclusion and civic engagement among Syrian youth.
- March 2012** What factors predict civic participation among Syrian youth?
- February 2012** The Exploratory Study: Young People in Syria's attitudes towards future development and success: An introspective study of young people's economic, social and personal struggles and needs, United Nations.
- February 2011** **Publication of short book** with Lambert Publishing Ltd., titled: "attitudes towards mental illness: a comparative study between Syria and the United Kingdom". 2011.
- March 2009** **Publication:** Attitudes towards mental illness: a comparative study between Syria and the United Kingdom, *Psychosomatic medicine*, **71**: 3, pg: A71.

Conferences, Associations and Steering Committees

- February 2013** **Foundering member** of the Syrian Mental Health Association.
- January 2013-Incubator and Project Manager** for the Syrian Teaching Recovering **Present** Techniques program in Jordan and Turkey; supported by the Children and War Foundation.
- November 2012** **Presenting two research papers** at the Pan Arab Psychiatric Conference 2012, Dubai UAE: "Mental health services and treatment in Syria: where are we now?" and "Young People's Support Systems and Mental Health Well-being in Syria"
- November 2012** **Fully-funded training by the ESRC** in the statistical program Structural Equation Modelling at the University of Southampton, United Kingdom.
- June 2012** **A joint conference presentation** with Dr Nader Kabbani at the 11th International Conference of the Middle East Economic Association Arab Spring Ramifications: "Causes and consequences, presenting a research paper: Economic Inclusion and Civic Engagement among Syrian Youth".
- November 2011** **Presenting at Syrian's Education Week:** "Syrian youth's transitions from education into the labour force: investigating the realities and consequences for unemployment in Syria".

- June 2011** Representative for Syria in the UNESCO steering committee for **“Youth Civic Engagement (YCE) initiatives in favour of an increased economic participation of young men and women in the Arab region”**. A committee, involving 18 different countries in the MENA region; aiming to share experience, lessons and policy recommendation for youth in the Arab region. Members included UNESCO, ACTIONAID, UNICEF, and many more.
- May 2011** Member of the steering committee for **"Young people’s Rights and Needs"**. A committee, involving all organisations (government and non-government) and charities; working on initiatives for young people in Syria. Members include, UNFPA, Syrian Commission for Family Affairs, State Planning Commission and Ministry of Labour and Social Affairs.
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Declaration

The work presented in this thesis is the work of the author Masa Al-kurdi. The scales used in the current thesis were part of data collection for the Youth Attitudes Survey project conducted by the Syrian Development Research Centre in Syria. Data collection was conducted by the author of the thesis with the help of the Central Bureau of Statistics Syria management and field team. Data analyses and write up for the current thesis were solely the work of the author.

List of Terms

- **Mental Illness / Mental Health:** Past research uses the terms 'mental' and 'psychological' interchangeably. For the purpose of the thesis the terms 'Mental illness' and 'Mental health' are used throughout to include meaning to psychological illness or health.
- **Psychological Help Seeking:** The term used in the current thesis refers to actively searching for professional psychological help from mental health facilitators.
- **Western / International Research:** Research reported as Western or International refers to research that has been conducted in North America and Europe and Australia.
- **Arab or Non-Western Countries / Region:** These terms refer to the Middle-east or developing non-western countries.
- **Cognitive Help-seeking Processes:** It is the cognitive (thinking) process involved in engaging in seeking for help. This process involves opinions and beliefs about seeking help, with a focus on recognizing the need to seek help in the future.
- **Person-related Barriers:** Factors related to the person that discourage the desire and openness to seek professional help, for example, fear of mental illness, preference for self-help, stigmatizing mental health attitudes, little sympathy for mental health suffers.

List of Abbreviations

AGFI	Adjusted Goodness of Fit Index
AMOS	Analysis of Moment Structures Program
CAMI	Community Attitudes towards Mental Illness
CBS	Central Bureau of Statistics
CFA	Confirmatory Factor Analysis
CFI	Comparative Fit Index
CLF	Common Latent Factor
CMB	Common Method Bias
CMHI	Community Mental Health Ideology
CMV	Common Method Variance
CS	Coping Style
DSM	Diagnostic System Manual
EFA	Exploratory Factor Analysis
GFI	Goodness of Fit Index
INGO	International Non-Government Organisations
OMI	Opinions on Mental Illness
OSPH	Opinions on Seeking Psychological Help
MI	Modification Indices
PCLOSE	P-values used to test null hypotheses
PTSD	Post-Traumatic Stress Disorder
RMSEA	Steiger-Lind root Mean Square Error of Approximation
SCS	Syrian Communication System
SDRC	Syrian Development Research Centre
SEM	Structural Equation Modelling
SPSS	Statistical Package for the Social Sciences
SRQ-20	Self-Reporting Questionnaire 20
SS1	Split Sample 1
SS2	Split Sample 2
TA	Thematic Analysis
UNICEF	United Nations International Children's Emergency Fund
UNFPA	United Nations Fund for Population Activities
UNHCR	United Nations High Commissioner for Refugees
YAS	Youth Attitudes Survey
χ^2	Chi-Square

Abstract

The overall aim of this thesis was to understand how mental health and seeking help for mental health problems were understood in Syria. The initial investigation began by examining whether or not Western mental health concepts and measures were applicable to the Syrian Arab culture.

Some earlier research had highlighted the important role of culture in conducting psychological research and identified the tension between taking an etic (universal approach) and an emic (indigenous) approach. In this thesis the initial approach is etic with Western measures, presumably universal, used to examine Syrian opinions on psychological help seeking and attitudes towards mental illness. In the light of the quantitative analysis an emic approach was adopted as the limitations of the etic concepts and measures became apparent. A further qualitative investigation was conducted to supplement the understanding of psychological help seeking in the Syrian context.

The thesis has three main aims. The first aim was to investigate the use of some of the most commonly used and validated scales related to psychological help seeking and investigate their applicability in a Syrian Arab context. Confirmatory Factor Analysis was used to investigate their validity. The second aim was to develop path analysis models to investigate the relationships between seeking psychological help, attitudes towards mental illness, coping styles, social support and mental well-being. The third ensuing aim was to qualitatively investigate real-life issues on mental health help seeking, attitudes towards mental illness and alternative sources of help.

To begin a cross-sectional survey design was employed with a stratified cluster sample of participants aged 15-29 years (N = 683) in Syria in 2011. Three scales developed in the USA and widely used in international research were used: Opinions on Seeking Psychological Help, Community Attitudes towards Mental Illness and Coping Style. CFA was used to assess the validity of these scales. Eight models were then constructed in order to investigate the relationship between variables of attitudes towards mental illness, psychological help seeking, coping styles, social support and mental well-being to the outcome variable recognition to seek psychological help using path analysis modelling. A final model was constructed to assess model fit when only significant pathways were included in the analysis.

The CFA findings showed that the adopted scales were of limited use in the Syrian context. Arguably the best option might have been to abandon these measures and design new measures from first principles. However, the Syrian war made further data collection impossible and the data set is relatively large and the measures have been used repeatedly in the literature so the decision was made to amend the measures for use in later analyses.

None of the hypothesized path analysis models were a good fit to the Syrian data. However, some variables of the models were found to significantly predict the outcome recognition of the need to seek psychological help. The main factors influencing cognitive psychological help seeking were: moral obligation to help those in need, community mental health ideology, fear of mental illness, the need for community help in order to cope, religious coping and mental health wellbeing. There were gender differences on tolerance to mental illness and on interpersonal openness to emotional problems.

The quantitative findings were used in the design of a qualitative investigation of mental health professionals understanding of psychological help seeking by Syrians during the time of war. This study used an online interviewing technique and provided an overview of experiences of mental health professionals working in the field. The relationship between the qualitative and quantitative research findings were further examined with the qualitative investigation showed that the quantitative findings of the thesis were still relevant to the current plight of Syrians seeking help today. These issues need further research and exploration in order to provide optimal mental health treatment and support to Syrians.

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Chapter 1: Introduction to the Thesis

1.1 Background

1.1.1 Culture and Mental Health

Until the 1960's cross-cultural studies (see Triandis and Brislin, 1984; Adler and Gielen, 2001) of mental health were generally viewed as an interesting addition to research in mainstream psychology (Spering, 2001). In his 1976 work *Communication and Cultural Domination*, Herbert Schiller put forward the notion of 'cultural domination' whereby institutions and products of Western countries were thought to direct the progress of the developing world such as the Arab states. Like other theorists (Pasquali, 1963; Beltran, 1976) Schiller suggested that some of the most influential theorists were Western, and the flow of information (through the media) between nations of the world was one-way because the structure and distribution of knowledge was controlled by other countries without reciprocation of influence. The same was true for cross-cultural psychology. Prestigious psychology journals were largely monopolized by research from North America and were culturally distinctive (Bond and Smith, 1996). As a result, knowledge of psychology, including that of mental health, did not in essence differ between societies in different cultures, and culture was not considered to be important.

More recently, studies reporting cultural differences in various areas have become widespread and have made fundamental challenges to how psychologists conceptualize a wide variety of domains (Matsumoto, 1999). However, cross-cultural research has uncovered many psychological processes that appear to be universal, for example emotional expression and perception. This has allowed psychologists to find commonalities between populations, so furthering the discipline (Spering, 2001). At the same time cross-cultural research has exposed important *cultural differences* in areas like cognitive and moral development (Moriguchi, Evans, Hiraki, Itakura and Lee, 2012; Helkama and Sortheix, 2015) confirming that culture plays an important role in shaping human perceptions and experiences and should be crucial to research.

In considering culture in the understanding, expression and communication of mental health it is useful to draw on the work of Pike (1967) who made an important distinction between two approaches to research: 1) Etic – cultural-universal phenomena, and 2) Emic – culture-

specific phenomena. In the realm of mental health this is useful because it allows us to acknowledge that there are both universal and culturally specific understandings and symptoms of mental health (Chun, Enomoto and Sue, 1996).

Uncovering both cultural similarities and differences in human beings is not only important in refining the theoretical understanding of human behaviour but also enables the appropriate application of psychological theories to the widest possible audience. Etic approaches to research are fundamentally important for mental health research on a global level. Emic approaches to research can further extend this research and provide viewpoints specifically appropriate and applicable to the cultural context.

1.1.2 Etic and Emic Approaches

In the past, research has used a global etic approach to understand Arab attitudes towards mental illness and opinions on psychological help seeking (Al-Krenawi et al., 2004; Al-Krenawi et al., 2009; Leshem, Haj-Yahia and Guterman, 2015; Natan, Drori and Hochman, 2005). Such research has made valuable contribution to knowledge on how Arabs conceptualize and deal with mental illness. Interestingly, however, the research surveys and tools used in such studies were developed and validated in the West and have been used globally in research; and it is important to note that the fundamental conceptualization was Western. While, scholarly contributions were made from these studies to understanding Arab viewpoints on mental illness and help seeking, an important question is raised on the global approach used in the research methodology to study an Arab population.

An example from another area of psychology that has employed measures developed using psychometric techniques brings out the tension between etic and emic approaches. The research approach to personality testing of the BIG 5 (Gosling, Rentfrow and Swann Jr., 2003; Rammstedt and John, 2007), developed a universal dimension to personality using a global scale measuring the personality sphere (an etic approach). To test the universal theory of personality, research investigated the translation of these measures in different cultural contexts. Finding that the global model of personality did not entirely translate well and an emic approach was needed (see Chapter 3 for more details). Similar to this approach, investigations in the current thesis focus on the extent to which Western theories, dimensions

and concepts on mental health attitudes and psychological help seeking are appropriate to the Syrian Arab culture.

The current thesis began by adopting an etic approach to understand psychological help seeking in Syria and to know how these relate to attitudes towards mental illness and coping styles. In light of the quantitative findings that showed that these global scales were not entirely a good fit in the Syrian context, the research goes on to adopt an emic approach to supplement the understanding of psychological help seeking for Syrians by utilizing a qualitative investigation. The argument for this approach is that in starting with an etic approach and adopting global scales, in the same way that past research has done, some limitations in the research were found. It was then necessary to supplement understanding on psychological help seeking using an emic approach. Qualitative investigations helped enhance the quantitative findings and conveyed understandings on psychological help seeking from a Syrian cultural perspective.

1.1.3 Cognitive Help Seeking

One of the key focuses of the thesis is investigating psychological help seeking. Research has found that (e.g. Saunders and Bowersox, 2007; Henshaw and Freedman-Doan, 2009) it is important to understand the cognitive processes involved that lead to actual help seeking. Opinions and attitudes about help seeking are key elements of the cognitive process that can lead to a person's recognition and intention to seek help prior to actual help seeking for mental health problems. Figure 1.1 below illustrates the hypothesised process involved in psychological help seeking.

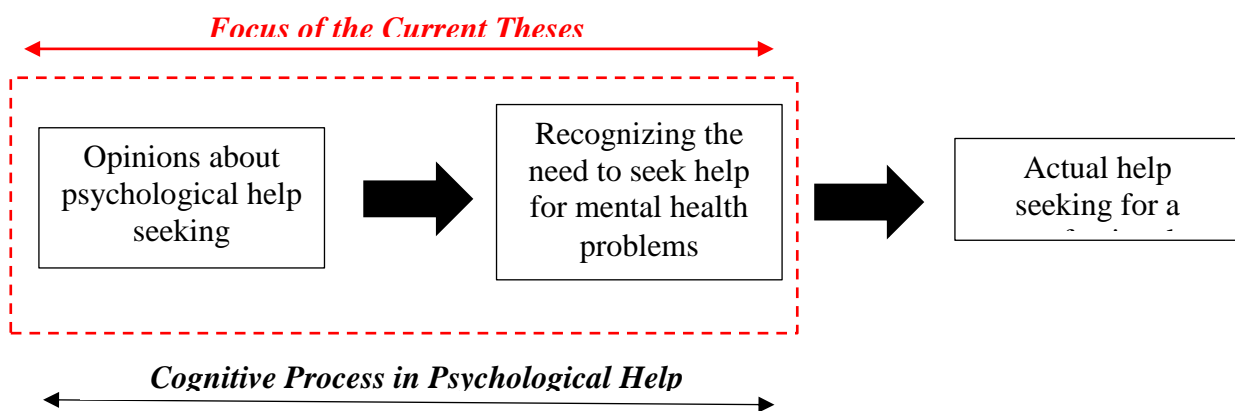


Figure 1.1: Hypothesised Processes in Psychological Help Seeking

Barriers to seeking psychological help can either promote or prevent the process illustrated in figure 1.1. Researcher's Pescosolido and Boyer (1999) categorise help seeking barriers as either person-related or treatment-related factors. Person-related factors are related to a person's *belief* or mind-set about help seeking. Whereas treatment-related factors are structural barriers that are out of the control of the person to seek help or not, and both often affect actual help seeking. The focus of the thesis is to investigate opinions about psychological help seeking and one's recognition to seeking professional help (i.e. the cognitive process – see the dashed red line in figure 1.1) and understand how different factors that relate to the person might relate to one another and influence the help seeking process for Syrians (please see figure 1.2 below for a hypothesised understanding of the study investigation).

Through the research it also becomes evident that the orientations to mental health and help seeking and the existence of alternative sources of help seeking – mainly coping styles and informal help – are utilized within Syrian cultural context. Etic and emic approaches enabled the research to develop recommendations for approaches to mental health, ones which are relevant in the Syrian Arab context.

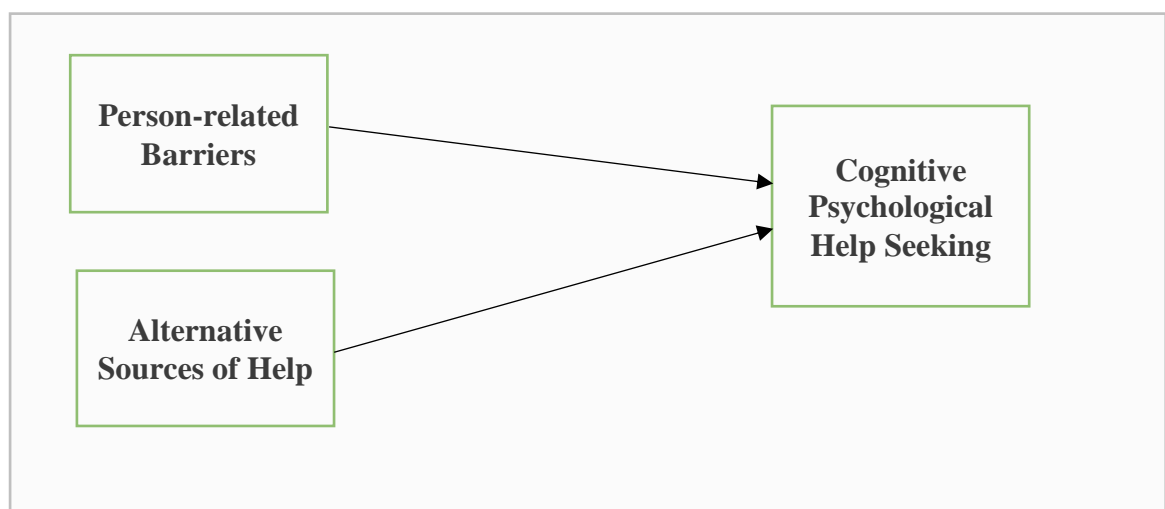


Figure 1.2: Hypothesised Relationship between Person-Related Barriers, Alternative Sources of Help and Cognitive Psychological Help Seeking

1.2 Syria and Mental Health

Like other countries in the Middle-east and North Africa, Syria has a diverse population, a number of religions and tribal origins, Arabic language with different dialects and varied geography. Since 2000, Syria has experienced a rapid process of urbanization that involved the development of a more modern and open society (Barakat, 2000), more akin to that in the West. Further, Syria has been experiencing over the last two decades a demographic transition, during which the proportion of young people (under the age of 30 years) make up 70% of the population (Central Bureau of Statistics, 2011).

By 2011, myriad economic, social and political changes affected the lives of young people in Syria, and the Middle-east overall. In Syria in March 2011, people, particularly young people, took to the streets at great personal risk to demonstrate for social and political change. After sustained efforts from the international community including the United Nations Organization to implement a ceasefire and generate a national dialogue, violence escalated and war erupted in the country that continues to the present day.

The mental health of Syrian youngsters was a grave cause for concern even prior to events of 2011 (Al-kurdi, 2011; Al-kurdi and Kabbani, 2012) and as expected these concerns grew as a result of the war. But understandably after the war began in Syria the mental health needs changed over time and more and more people were requiring treatment for war-related mental health problems like Post-Traumatic Stress Disorder (Abou-Saleh and Hughes, 2015). While it is important to address these problems in understanding the mental health needs of Syrians post-2011, for the purpose of the current thesis the focus will be on mental health in general. Rather than psychological trauma or war-related problems such as gender based violence or physical torture during imprisonment. Some discussions of mental health consequences of the war in Syria will be discussed in Chapter 10.

Research by Al-kurdi and Kabbani (2012) on the general mental health wellbeing of Syrian young people before the war found that as young people transitioned from school to work and family formation, they faced grave obstacles and it was feared that these problems were having a detrimental effect on the mental well-being of many. These concerns were raised by local agencies at the time (mainly the Syrian Psychiatric Association) and international organizations operating in Syria such as the United Nations. This led to calls at the time to

address the mental health needs of the population given the vast social and economic challenges.

Despite this clamour for mental health support, the availability of mental health services in Syria and neighbouring Arab countries were scarce and inadequate to serve the growing population (Okasha, 1999). Efforts were met with resistance from Syrians to engage in professional psychological treatment and mental health research and efforts remained to prioritize the treatment of physical disease (Okasha, Karam and Okasha, 2012). If there was a need to address Syrian mental health conceptualizations and needs for help seeking in Syrians who were raised pre-2011, and even prior to the Syrian war, there is an even greater need to do so post-2011.

1.3 Objective of the Current Research

The overall aim of the current thesis is to expand on existing research to describe and explain Syrian psychological help seeking and to discover how these relate to attitudes towards mental illness. A succeeding aim is to develop various recommendations for enhancing coping styles, social support and mental wellbeing. The recommendations serve as approaches to treating Syrian mental health; the aim is to use these to steer professionals towards the most appropriate ways to approach and engage Syrians in mental health improvement.

Three main aims dominate the thesis. Please see Figure 1.3 below for an outlined of the thesis in parts. Using an etic approach, the **first aim** is the research sets out to adopt validated scales developed in the United States and widely used in international research to investigate three key areas about mental health: opinions on seeking help, attitudes towards mental illness and coping styles. These three areas form the person-related factors in the current investigation to understand the (cognitive) process of psychological help seeking (see Figure 1.1). Before looking at the relationship between these variables, an investigation into the scales is made to determine whether these validated and widely used scales translate well when used in a different cultural context to the West, determining the ability to utilise these in global research. The aim is to investigate them for the first time in the Syrian Arab context to ascertain the extent to which they are culturally relevant and appropriate for Syria, and to

make them culturally appropriate and available in the Arabic language for future research. Please see Chapter 6-8 for further details.

The **second aim** is the study findings from the CFA investigations are utilised to develop path analysis models that investigate the relationships between seeking help, attitudes towards mental illness and coping styles and to further investigate the relationship with social support and mental well-being. The aim is to develop these path models to understand the relationship between these different person-related factors in the cognitive help seeking process, which may later influence the decision for actual help seeking. The outcomes of the models are designed to recommend the best ways to approach psychological help seeking for Syrians. Please see Chapter 9 for further details.

The **third ensuing aim** is to supplement the quantitative research and qualitatively investigate real-life case studies on psychological help seeking, attitudes towards mental illness and alternative sources of help. In an emic approach the research examines the extent to which the findings of the quantitative models extend and translate to real-life mental health issues for Syrians during the war. Please see Chapter 10 for further details. Figure 1.3 provides a summary of the main aspects of the thesis.

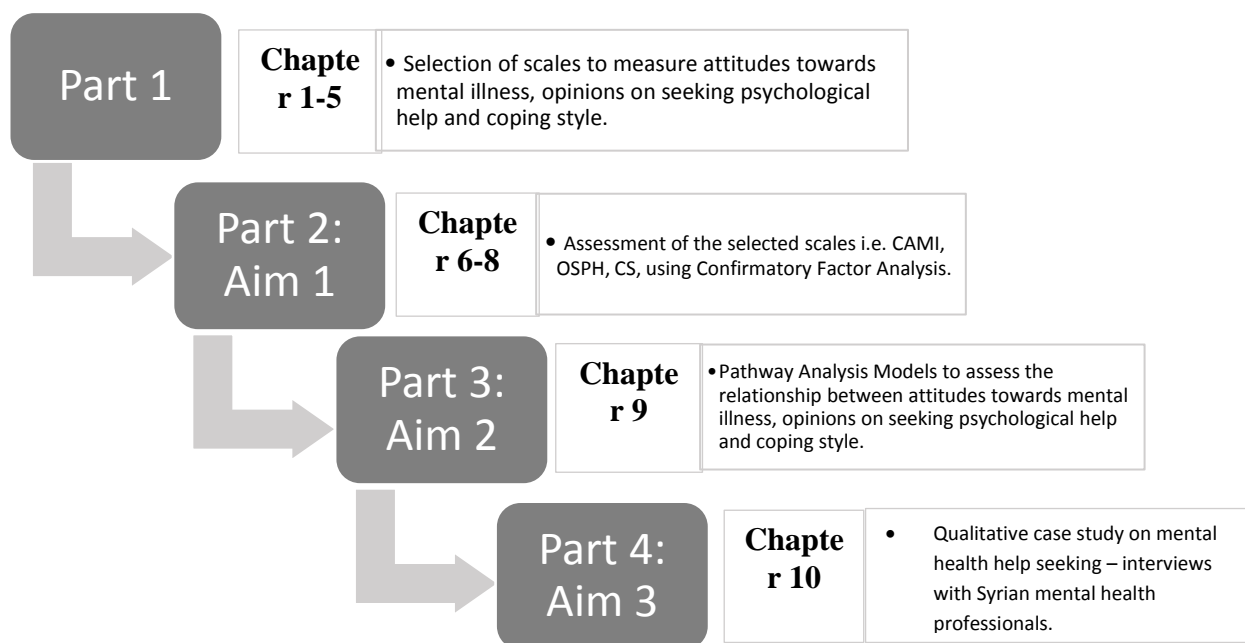


Figure 1.3: A Summary of the Thesis in Different Parts

As shown in Figure 1.3, part 1 of the thesis reviews available literature and sets out to select the scales to use in the research. Subsequently, each part of the thesis investigates the three main aims of the thesis. The following research hypotheses were developed for investigations for each research aim.

Aim 1: Selection of relevant validated scales, translation of them into Arab versions suitable for use in the Syrian Arab context and revalidation of these scales using Confirmatory Factor Analysis.

Hypotheses 1: There will not be a significant difference in model fit between the original model structure and the model fitted on the Syrian data for the translated and shortened CAMI scale.

Hypotheses 2: There will not be a significant difference in model fit between the original model structure and the model fitted on the Syrian data for the translated and shortened OSPH scale.

Hypotheses 3: There will not be a significant difference in model fit between the original model structure and the model fitted on the Syrian data for the translated and shortened Coping styles scale.

Aim 2: Run Path Analysis models to investigate the relationships between seeking psychological help, attitudes towards mental illness, coping styles, social support and mental well-being.

Hypothesised Model 1: Community attitudes towards mental illness and opinions on seeking professional help.

There will be a significant relationship between the predictor variables (Benevolence, Community, Tolerance, Confidence, Social Restrictiveness, Interpersonal) with the outcome variable 'Recognition' to seeking professional psychological help.

Hypothesised Model 2: Community attitudes towards mental illness, opinions on seeking professional help and social support.

There will be a significant relationship between the predictor variables (Benevolence, Community, Tolerance, Confidence, Social Restrictiveness, Interpersonal and

Social_Helpseek), with the outcome variable 'Recognition' to seeking professional psychological help.

Hypothesised Model 3: Community attitudes towards mental illness, opinions on seeking professional help and mental health wellbeing.

There will be a significant relationship between the predictor variables (Benevolence, Community, Tolerance, Confidence, Social Restrictiveness, Interpersonal and Wellbeing), with the outcome variable 'Recognition' to seeking professional psychological help.

Hypothesised Model 4: Community attitudes towards mental illness, opinions on seeking professional help, social support and mental health wellbeing.

There will be a significant relationship between the predictor variables (Benevolence, Community, Tolerance, Confidence, Social Restrictiveness, Interpersonal, Social_Helpseek and Wellbeing), with the outcome variable 'Recognition' to seeking professional psychological help.

Hypothesised Model 5: Community attitudes towards mental illness, opinions on seeking professional help and coping styles.

There will be a significant relationship between the predictor variables (Benevolence, Community, Tolerance, Confidence, Social Restrictiveness, Interpersonal, Self-directing coping style, Collaborative coping style and Surrender coping style), with the outcome variable 'Recognition' to seeking professional psychological help.

Hypothesised Model 6: Community attitudes towards mental illness, opinions on seeking professional help, coping styles and social support.

There will be a significant relationship between the predictor variables (Benevolence, Community, Tolerance, Confidence, Social Restrictiveness, Interpersonal, Self-directing coping style, Collaborative coping style, Surrender coping style and Social_Helpseek), with the outcome variable 'Recognition' to seeking professional psychological help.

Hypothesised Model 7: Community attitudes towards mental illness, opinions on seeking professional help, coping styles and mental health wellbeing.

There will be a significant relationship between the predictor variables (Benevolence, Community, Tolerance, Confidence, Social Restrictiveness, Interpersonal, Self-directing coping style, Collaborative coping style, Surrender coping style and Wellbeing), with the

outcome variable 'Recognition' to seeking professional psychological help. Wellbeing will also significantly mediate the relationship between 'Surrender' coping style and the outcome variable 'Recognition'.

Hypothesised Model 8: Community attitudes towards mental illness, opinions on seeking professional help, coping styles, social support and mental health wellbeing.

There will be a significant relationship between the predictor variables (Benevolence, Community, Tolerance, Confidence, Social Restrictiveness, Interpersonal, Self-directing coping style, Collaborative coping style, Surrender coping style, Social_Helpseek and Wellbeing), with the outcome variable 'Recognition' to seeking professional psychological help. Wellbeing will also significantly mediate the relationship between Surrender coping style and the outcome variable 'Recognition'.

Aim 3: Supplement quantitative findings with an emic approach, qualitatively investigate real-life issues on mental health help seeking, attitudes towards mental illness and alternative sources of help from a Syrian cultural perspective.

Research Question: What are the real-life experiences of mental health professionals working with Syrian refugees residing in Turkey?

1.4 Justification for the Research

Research on mental health issues in the Arab region is scarce, and even scarcer in Syria. It is unclear whether young people are open to seeking psychological help or what indeed are the nature of their attitudes towards mental illness. There is little information on the quality and scope of their support systems, such as family and social networks and the community. It is possible that coping styles rooted in Arab culture do address mental health solutions and that these coping styles may either inadequately substitute or complement or effectively replace professional psychological help seeking. The current research is intended to fill a gap in research and develop knowledge on Syrian mental health.

- The current research is put in the perspective of Western research to study the extent to which mental health theories there extend to the Syrian context. In extending research to Arab societies, like Syria, this research is conducted to uncover cross-cultural similarities and differences in mental health issues, and to help make clear the role of

mainstream Western psychology in approaches to mental health in Syria. The current research aims to **add to the literature on culture and mental health and identify key factors for addressing mental health problems in the Syrian Arab context.**

- The current research began by adopting an etic approach to understand psychological help seeking and to know how these relate to attitudes towards mental illness and coping styles in the Syrian context. The findings indicate there are some limitations in approaching the Syrian context with concepts developed in a Western culture and it was found necessary to supplement the research with an emic approach that takes into account the participants cultural understanding of concepts related to mental health. A qualitative investigation into psychological help seeking was conducted to supplement the quantitative research and explore the cultural understandings of psychological help seeking from the Syrian perspective for mental health needs today.
- The current research uses previously validated scales to measure opinions on seeking help, attitudes towards mental illness and coping styles that have been developed in the West, particularly in the United States. Some of these scales and their dimensions have already been adopted in Arab research (e.g. Al-Krenawi, Graham, Dean and Eltaiba, 2004; Al-kurdi, 2011) but they have not been assessed for validity on an Arab population like the Syrian one, and rarely have they been made available in the Arabic language. The choice to adopt these particular Western scales was because these scales have been widely used in international research as well as in some Arab research. Further, the methods used to construct the original survey dimensions used in the current study were of high standards and quality. Please see Chapter 6 to 8 for further details on each selected scale and background information on its development. The current study is **the first to attempt to assess these widely used scales in a Syrian Arab context, and also to be able make these scales available in the Arabic language for use in future research.** It must be noted that the original plan for the research was to conduct national data collection to assess and validate the current measures and subsequently amend or redesign them as needed and collect further data. However, due to the war in Syria it was not possible to carry on with the research as planned because the situation in the country rapidly deteriorated and any further data collection was potentially unsafe.

- The current research seeks to determine whether Syrian young people recognise the need to seek help from a professional for mental health problems, and whether there is a preferred desire to seek alternative sources of help – mainly coping styles and informal help – which may be affecting opinions on seeking psychological help. There is a pressing need to understand attitudes and conceptualisations of mental health to determine cultural approaches to mental health help seeking; especially at a crucial time when mental health support is much needed during the war in Syria. Through this research an investigation into the existence of and preference in seeking alternative sources of help – mainly coping styles and informal help – is made to better understand help seeking in the Syrian Arab context and see how it relates to conceptions of professional psychological help seeking. Knowing these would avoid needless expense and human resources in delivering mental health services that may be ineffective for the Syrian culture, and may be negated or supported by other traditional or cultural methods that do adequately support Syrian mental health. With that, the research aims to provide **recommendations to help direct approaches of professionals, agencies, organisations and policy-makers in advocating a continuum of culturally sensitive responses to Syrian mental health.**

1.5 Outline of the Thesis

The current chapter, *Chapter 1*, lays the foundation and introduces the thesis. *Chapter 2* provides an outline on Syria and gives brief information on the target group of young people and the mental health services in Syria. *Chapter 3* of the thesis identifies relevant theoretical frameworks of the study and reviews available academic literature on Arab mental health, with theories of seeking psychological help and attitudes towards mental illness. Chapter 3 also addresses relationships between Arab culture, barriers to psychological help seeking and alternative sources of help.

Chapter 4 describes the methodology used to make investigations in the thesis. The outline includes ethical considerations, sampling of participants and researchers as well as procedures for piloting and data collection. A brief outline of the measures used in data collection as well as information on data preparation for analyses is included. *Chapter 5* describes and explains the approach to statistics in the thesis. It outlines descriptive and

inferential data analyses, and the use of Structural Equation Modelling, particularly Confirmatory Factor Analysis (CFA) and path analysis modelling.

Chapter 6 outlines the CFA for the Community Attitudes towards Mental Illness (CAMI) scale. This chapter provides background understanding on the adopted scale, and outlines methodology in conducting this investigation and the process in which the scale was amended for the study. The final CFA model for the CAMI is presented and discussed in this chapter. The same method is used in *Chapter 7* and *Chapter 8* to examine the Opinions on Seeking Psychological Help (OSPH) scale and the Coping Styles (CS) scale respectively.

Chapter 9 makes use of the final CFA models derived from Chapters 6-8 in the path analysis models. In this chapter, variables used in the path analysis models were derived from the CFA models, where the mean scores of the variables were adopted in path analysis investigations. This chapter describes and explains the relationships between factors measuring psychological help seeking, attitudes towards mental illness, coping styles, social support and mental wellbeing. Discussion of culture is made relating to cognitive help seeking and person-related barriers to help seeking in the Syrian context, arriving at recommendations for approaches on Syrian mental health.

After examining the quantitative findings in previous chapters, *Chapter 10* supplements the research and explores the extent to which the quantitative findings of the thesis are consistent with real-life Syrian mental health issues. Chapter 10 examines the real-life issues experienced by mental health professionals when working with displaced Syrians. An outline of real-life mental health help seeking and attitudes in the Syrian context are provided, and links to the overall quantitative findings of the thesis are made. Finally, *Chapter 11* provides a summary of the key findings, conclusions and discussion points made from the thesis and reflections into the future of research and mental health.

Chapter 2: Syria in Context

2.1 Introduction

The current chapter seeks to provide an outline on Syria and give brief information on the target sample of young people and the mental health services in Syria. The Syrian Arab Republic with its capital Damascus is located in Western Asia in the Middle-east region. It shares borders with Turkey to the North, Lebanon and the Mediterranean to the West, Jordan and Palestine to the South, and Iraq to the East (Please see Figure 2.1) (Map of Syria with Governorates, 2012):



Figure 2.1: Map of Syria with Governorates 2012

Syria is geographically divided into fourteen governorates (administrative regions) called 'Muhafazat' as illustrated in Figure 2.1. Starting from North to South, these fourteen governorates are: Al Hasakah, Ar Raqqa, Aleppo, Idlib, Latakia, Hama, Dayr as Zawr (Deir ez-Zor), Tartus, Homs, Damascus, Rural Damascus, Quneitra, Dar'a (Daraa) and Al-Sweida.

The total area of the Syrian Arab Republic is approximately 18,518,000 hectares of which about 31% is cultivated land. A total of 77% of Syrian land is considered Agricultural (includes agricultural lands, meadows and pastures), 3% Forest, 4% Urban and 15% desert land. Its

natural geography is varied and includes coastal and mountainous regions, plains and deserts (CBS, 2011).

2.2 History and Culture

Home to some of the world's oldest ancient civilizations, such as the civilization of Ebla, founded in 3000 BC, and the Phoenicians in the second millennium BC who created the world's first alphabet, Syria, with its rich natural resources and strategic geographic trade location made it desirable in the eyes of many conquerors. The city of Damascus, the oldest continuously inhabited city in the world, was founded by the Arameans. Damascus later became the capital of the Islamic Umayyad Empire around 636 AD after the Romans were defeated by the Muslim Arab forces, bringing with them Islam, the Arabic language, and an empire that extended as far as Spain and India between 661 and 750 AD.

A number of government changes took place in Syria up until what is referred to as the 'Baath Revolution' that took place in March 1963 and The Arab Socialist Resurrection (Baath) Party, a secular, socialist, Arab nationalist party, took control of Syria. In 1970 the then Minister of Defence Lieutenant Hafiz Al Assad to assume power of the party, and to becoming President of Syria after being approved by popular referendum in 1971. A position he kept for the next 30 years ending following his death in 2000, only to be followed by his son Bashar Al Assad who was nominated by the Baath Party and elected as president in a popular referendum (The Nations Online Project, 2014).

Following the 2011 war in Syria, much attention has been given to the various religious factions and ethnicities that make up modern Syrian society. It is worth noting that these factions have in the past coexisted together on Syrian soil for hundreds of years. According to a census carried out in 1956 of religious sects and minorities, 75% of Syrians were classified as Sunni Muslims, 11% Alawite, 10% Christian, 3% Druze and 1% Jews (Khuri, 1991). Figures presented in a more recent 2008-2009 census show minor changes in these figures, mainly due to the existing ethnicities being further broken down into smaller groups in the research. It showed that the Syrian population is divided into 60% Sunni, 12% Alawite, 9% Christian, 9% Kurdish, 3% Druze, and other small percentages (0.5-1.3%) which include Ismaili, Turkoman, Assyrian, Circassian and others (The Levant Ethnic Composition, 2014).

2.3 Demographics

According to the Syrian Civil Affairs records in 2011, the total registered population of Syria was approximately 24.5 million, roughly equally distributed by gender. The figure for the actual numbers of people living in Syria was 20,866,000 at the beginning of 2011 just before the war began. The greatest population concentration was in the governorate of Aleppo (24%), followed by Damascus and Rural Damascus combined (15%), and then by Homs, Hama, Idlib, Hasakah, Deir el Zor which averaged at around 7-9% each, and with smaller proportions of people living in the governorates of Rakka, Tartus and Daraa (4-5%), followed finally by the smallest concentrations in Al Sweida (2%) and Al Quneitra (2%) (CBS, 2011).

Over the past thirty years, the Syrian population had continued to grow. According to national figures, in 1981 the total population was estimated at 9 million, 48% of which were under the age of 14 years. According to the last population census carried out in 2004, the percentage of the population of Syrians under the age of 30 was approximately 70%. As shown in Figure 2.2, the Syrian population was therefore a relatively young one. The population growth rate between the years 1981-1994 averaged around 3.3%. This average had fallen to 2.45% in the decade following the millennium (2000-2010), with 37% of the population under the age 14 or less according to mid-2011 estimates (CBS, 2011).

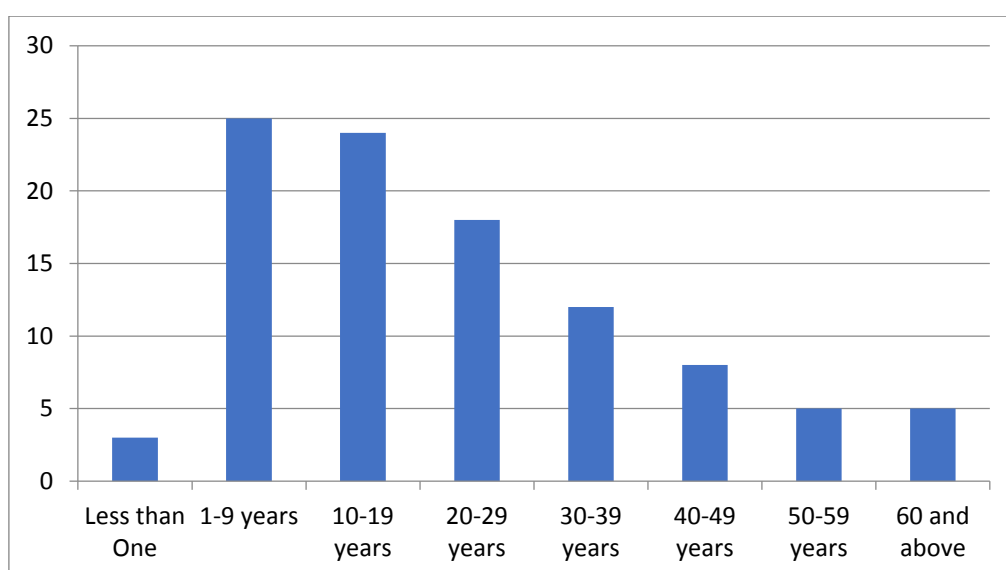


Figure 2.2: Population (%) by Age Group (2000-2010) – CBS Census 2004

Population Density in Syria was estimated at 120 people per square km of land in 2011, with approximately 56% of the population living in urban areas in 2011 (The World Bank, 2011).

The world average for population density is 54 people per square km of land; comparatively Syria's average was double this figure. If, however Syria's average is compared to other Lower middle-income countries such as Iraq it's found that its average is in line with their total average (122 people per square km of land) (The World Bank, 2011).

In addition to its own population, Syria has also traditionally been a refuge for Arab refugees in the region. According to CBS at the end of 2010 there was an estimated half a million Palestinian Refugees living in Syria (CBS, 2011). In a 2009 Family Health Survey by CBS of Iraqi Households in Syria, 11,482 Iraqi individuals were surveyed, although the UNHCR in Syria estimates their number to be around 44,000 in 2014 (UNHCR, 2014).

2.4 Youth in Syria

Youth in Syria made up the majority of the population (under the age of 30 years make up 70% population) and this large proportion of young people in Syria has often referred to as a 'Youth bulge' (Assad and Barsoum, 2007; Weber, 2013). Although this bulge was found to be declining in the annual population growth rate; falling to 2.4% from 3.4% in the early 1990s (Mehchy and Doko, 2010).

2.4.1 Education

Pre-2011 approximately 97% of primary age school children were enrolled in school, and Syria's literacy rates exceeded the regional average. In 2008, the national illiteracy rate was 5.5% according to CBS figures (7% among females and 4% among males); which was quite high in comparison to neighbouring Lebanon and Jordan literacy rates of around 1% (The World Bank, 2007) and considering that primary education in Syria was compulsory (CBS, 2008).

The Primary completion rate or the total number of new entrants in the last grade of primary education expressed as percentage of the total population of that age group was 97% in 2012. The ratio of female to male primary enrolment was 97% in 2012, while the ratio of female to male secondary enrolment was 104% in 2012 (The World Bank, 2012). Further, according to Ministry of Education estimates, the net enrolment rate through grade six reached 97% in 2009 and 94% through grade 9. The gender gap in basic school enrolment declined during the period of 2005-2009 from 85% among males and 78% among females in 2005 to 95% among males and 92% among females in 2008 (The World Bank, 2011).

The Ministry of Higher Education estimated that university enrolment had increased over the past decade, pre-2011, doubling from 11% for 18-23 year olds in 2000, to 23% in 2008. In 2008, the percentage of university students enrolled in private universities was only 6% (The World Bank, 2011).

Public spending on education was estimated at 18% for the years 2000-2008 (The World Bank, 2011). Despite compulsory education up to the 9th grade, many young people remained to have relatively low education levels (Buckner and Saba, 2010). According to the UNFPA and SCFA survey in 2008, poverty was a major factor that determined whether or not children went to school; over three quarters of children that were never enrolled in school come from poor households (Buckner and Saba, 2010). In addition, national statistics for the number of students enrolled in the first grade in 2001 showed that only 44% of them graduated from Basic Education nine years later indicating a high drop-out rate (CBS, 2011).

2.4.2 Economic Development

According to the World Bank, The Syrian Arab Republic was classified as a Lower middle-income country with a total Gross Domestic Product (GDP) of \$73.67 billion US dollars (2012) and a Gross National Income (GNI) per Capita of \$2,610 in 2010 (calculated using the Atlas Method in Current US dollars, 2014). This figure had gone up from \$1.52 in 1995, reflecting the growth of the Syrian economy, and although it was classified as a Lower middle-income country, the GNI per Capita for 2010 for Syria was almost a \$1000 greater than the average for Lower middle-income countries for the same year (\$1,567). Compared to neighbouring Arab countries, Syria's GNI per Capita was comparable to Egypt's (2,550 USD) but significantly lower than Lebanon's (8,360 USD), Jordan's (4,140 USD) and Iraq's (4,480 USD) for 2010.

According to the UNDP, in 2012 the percentage of the population living in multidimensional poverty was 6%, and those living below \$1.25 Purchasing Power Parity (PPP) per day 2%. The percentages of people living under the poverty \$1.25 PPP per day in Syria was comparable to the percentage in Egypt (2%), higher than neighbouring Jordan (0.1%) and lower than Iraq (3%) and Yemen (18%) (UNDP, 2012). The last published reports on poverty in Syria pre-war found in the UNDP's 'Poverty and Inequality in Syria (1997-2007)' that between the years 2004 and 2007 the upper poverty line (UPL) or 'overall poverty' increased from 30% to 34%,

while the lower poverty line (LPL) or 'extreme poverty' increased from 11% to 12% showing that poverty was increasing during that period (UNDP, 2012).

2.4.3 Youth Employment

Although the Syrian economy witnessed steady growth rates of about 6% over the last decade, pre-2011 the economic growth was not matched with significant increases in the number of people employed. In fact, the labour force growth rate actually declined especially among females. For the period 2001-2010, the overall labour force participation rate fell from 52% to 43%. The female participation rate fell from 21% to 13% over the same period, becoming one of the lowest rates in the world, while the male participation rate also fell from 81% to 72%. In 2010, the overall employment rate was 39%, dropping from 48% in 2001. The main decrease in employment age group shares for this period occurred among youth aged 15 to 24 years and individuals aged 60 years and above (Nasser and Mehchy, 2011).

Youth make up the bulk of the unemployed as the ratio of unemployment rate among youth to unemployment rate among adults was near 4:1, one of the highest in the region (Kabbani and Kothari, 2005). With additional youth entering the job market every year, the lack of availability of suitable employment for them brought with it a number of social and mental health problems that result from unemployment (Al-kurdi and Kabbani, 2012). As research has pointed out, employment not only provides financial security for individuals, it also allows people to derive various psychosocial functions from their work (Harpaz, Honig and Coetsier, 2003).

According to a 2010 Gallup survey of Syrian youth (aged 15-29 years) only 29% were employed full time and 31% were not in the workforce. In 2008 youth aged 15-29 years constituted about 26% of the Syrian labour force (CBS, 2008). Kabbani and Kothari (2005) estimated that the youth unemployment rate (aged 15-24 years) in 2005 was 26%, with first-time job seekers constituting 78% of the unemployed in Syria for that year. High unemployment among youth persists in almost all the MENA region which has the highest average in the world of over 25% (The World Bank, 2007). Although growth rates have improved in the region, MENA countries have not been able to create jobs fast enough to absorb large youth cohorts entering the workforce (The World Bank, 2007).

2.4.4 Health

According to the World Bank Syria's health expenditure per capita in 2011 was 101 USD (measured in USD exchange rate in 2011). Comparatively, Syria's average was higher than average for other lower middle-income countries (79 USD) but much lower than the world average of 952 USD for the same year. In 2011, life expectancy in Syria was 75 years. Again this figure was higher than the average for the Middle-east and North Africa for the same year (71 years) and 9 years greater than the average for Low Income Countries (The World Bank, 2011).

Taking a closer look at the health of Syrian youth, the majority (84%) believed that they enjoyed good health and only 2% reported to being in bad health (UNICEF, 2007). As for youth's engagement in unhealthy behaviours, such as smoking or drug abuse around 20% of youth reported to smoking cigarettes and 33% to smoking water-pipe. Only 0.8% of youth reported that they drank regularly and 3% said they drank occasionally. Similarly, only 0.4% of youth reported using drugs regularly and 0.9% that they used them occasionally (Buckner and Saba 2010). Medicines obtained from pharmacies or dealers were the most common type of drugs used (UNICEF, 2007) but data on these occurrences is not available.

2.5 Mental Health

Research related to mental health in Syria remains limited. The same can be said for mental health research in the Arab World in general, a deficiency which needs to be addressed especially in the aftermath of the Arab Spring and recent outbreaks of violence and instability in the Arab region (Please see Chapter 10 for further details).

The Syrian government first put in place legislation related to mental health in 1965. Substance abuse polices were then added in 1993, and in 2001 the government created a national mental health program. Its mental health resources however, remained scarce even before the war. According to CBS figures, there were 96 registered psychiatrists in Syria in 2010 (CBS, 2011). This number had gone up from 69 in 2007. Okasha, Karam and Okasha (2012) estimate in Syria there are 8 psychiatric beds per 100,000, 0.5 psychiatrists for 100,000 population, 0.5 psychiatric nurses per 100,000, and zero psychologists. This they compare to Lebanon, Kuwait and Bahrain where it is estimated that there are 30 psychiatric beds per 100,000 and have between 2 to 5 psychiatrists per 100,000 people. In comparison, the USA

has an estimated 13 psychiatrists per 100,000 and approximately 59 psychiatric beds available per 100,000 (WHO, 2014).

2.5.1 Mental Health Service Providers

In the Public Sector, the Ministry of Health, Ministry of Defence and Ministry of Higher Education (Damascus University) provided psychiatric hospitals and services to Syrians. The main hospitals included: Ibn Sina Hospital in Damascus (800 beds) and Ibn Khaldoun Hospital, in Aleppo (400 beds); both of which still operating like psychiatric asylums and the infrastructure was outdated. The Ministry of Health also operated psychiatric outpatient clinics in most cities in Syria, with 4 clinics in Damascus. They were operated by trained psychiatrists and provided consultations and medical interventions but did not provide any psychological services. The Ministry of Defence operated two hospitals with mental health departments, the largest of which was Tishreen Hospital with only 40 beds in its mental health department. The Ministry of Higher Education through Damascus University Hospital (Al-Moassat) also had a psychiatric ward (12 beds) for under and postgraduate training.

In addition, a number of foundations and non-governmental entities associated with the Ministry of Work and Social Affairs provided treatment and rehabilitation for patients and families under supervision of licensed psychiatrists and psychologists in a variety of areas including child learning disability, autism and other behavioural disorders.

Private sector mental health providers were limited, and as the use of health insurance was also limited, patients had to pay out of their own income to access them and these services were too expensive and seen as a luxury for the rich. In 2011, only two private hospitals were available providing mental health services such as acute admission, long stay and outpatient clinics that offered medical treatment and some forms of psychotherapy. Both hospitals were located in Damascus, the largest was Al-Basheer Hospital (50 beds). In addition, there were an estimated of 65 private clinics in Syria that specialized mainly in general adult psychiatry (there were only two child and adolescent psychiatrists in Syria). The majority of these clinics (45 clinics) were located in Damascus, Aleppo (10 clinics) and the remaining 10 clinics scattered in other major cities like Homs.

The Syrian Psychiatric Association played an important role in education and training, the organization of conferences, lectures and participating in international conferences.

Established in 1996, its members included most registered Syrian psychiatrists (Assalman, Alkhalil and Curtice, 2008); most of whom have since lost their lives in the ongoing Syrian conflict, have been detained or have fled Syria.

Following the onset of the conflict in Syria a number of non-governmental organizations had attempted to address the ever increasing gap in mental health service provision. One such example was the joint project between UNHCR and UNFPA, implemented by Syrian Arab Red Crescent, which began in April 2013 and provides all levels of Mental Health and Psycho-Social Support to Syrians. But since the war in Syria (post-2011), the UNHCR reports that there are 24 agencies that are currently providing mental health and psychological support to Syrian refugees (UNHCR, 2014), and in addition to these there are a handful of Syrian NGO's also offering mental health services (the exact number is unclear). The type of intervention varies across agencies and organisations and in an effort to standardise and regulate mental health services for Syrians some agencies like the Inter-Agency Standing Committee (IASC) and the World Health Organisation published standardised guidelines for mental health service provisions. However, the demand for mental health services, coupled with limited resources for interventions, has left many Syrians with no means for mental health support or sporadic psychosocial initiatives here and there.

2.5.2 Youth Mental Health

Using assessment tools developed by the World Health Organization to screen for common mental disorder Shebiba (2006) showed that a large percentage of youth in Syria seemed to suffer from some kind of mental health problem. It was found that approximately 13% of youth suffered from some kind of psychological disorder (15% of females; 9% of males), 45% suffered from stress or worry (51% of females; 37% of males), 20% from an inability to adapt socially (24% of females; 17% of males) and 36% from difficulty to make decisions (43% of females; 28% of males) (Buckner and Saba, 2010).

Almost 70% of the adolescents from the UNICEF 2007 study reported to knowing at least two other adolescents that suffered from some kind of mental health problem including: fear, anxiety, introversion, loneliness, depression, hyperactivity or restlessness, lack of confidence, and relationship problems with the opposite sex. Many adolescents tended to blame family for these problems, and confide in friends, parents or relatives for help instead of school

counsellors who they think are not trustworthy and unable to give practical help (UNICEF, 2007).

Chapter 3: A Literature Review on Mental Health in Western and Arab Cultures

3.1 Introduction

The current chapter identifies relevant theoretical frameworks and reviews available academic literature on Arab mental health, opinions about seeking psychological help and attitudes towards mental illness. This chapter also reviews Arab culture, and addresses barriers to professional psychological help seeking such as social support and religious coping.

3.1.1 Defining Mental Health and Mental illness in Psychology

The concepts of mental health and mental illness have long and complex histories which go back further than the relatively modern understandings employed by contemporary psychologists and psychiatrists. For example, Foucault's *Madness and Civilization* (Foucault, 1964) traces the concept of madness from the middle ages to the end of the 19th Century and describes how Enlightenment ideas about reason changed the way in which madness was understood. To fully understand mental health, mental illness and the role of psychology in the Arab world, needs, perhaps, such a historical perspective and is doubly difficult because the language and context of modern psychiatry and psychology is, for the most part, European and American. This language is still changing – see for example the debates on diagnostic criteria and the use of the DSM (e.g. Pickersgill, 2014; Spitzer, 2009). The issue of the treatment of mental illness is just as complicated with new approaches to treatment being developed and older approaches abandoned. It is beyond the scope of this thesis to provide a full history of these concepts but in the next section a brief overview relevant to the Arab and Syrian context is provided.

3.1.2 Mental Health in Arab History

Mental illness has been documented as far as the time of the Pharos (Ebbell, 1937), with diagnoses of what would be recognised today as hysteria, depression and suicide (Ghaliongui, 1963). Mental health is acknowledged and is spoken of in the Holy Scripture of the Qur'an (Okasha, 1999) as necessary for living a full and well-rounded life (Haque, 2004). In Islamic culture great play is made of balancing body and soul. The Prophet Muhammad (PBUH) was reported to have said "*down a cure even as He has sent down the disease.*" (Sabry and Vohra, 2013). Islam encourages Muslims to look after their health and to seek treatment when needed, as health is a gift from God and thus should be cherished.

This acknowledgement of the importance of mental health in the Qur'an resulted in the establishment of the first hospitals which addressed the treatment of mental illness. It is reported that as early as the eighth century CE, hospitals were established in the Islamic kingdom to provide what today would be recognised as dedicated mental health care. The first known Islamic hospital was built in Damascus, Syria in 706 CE (Rassool, 2000; Watt, 1994). Later in Baghdad, Iraq, two hospitals were built to care for those suffering from mental illness, one in 750 CE and then in 830 CE (Watt, 1994). In Cairo, Egypt, the first hospital to care of mental illnesses was developed in 872 CE and later one of the largest hospitals in the region was built in 1284 CE. It is interesting to note that hospitals facilitating and teaching mental health care were not practised in Europe until 1550 CE (Rassool, 2000). The first hospital to provide treatment for mental illness in Europe was established in Spain following the Arab invasion in 900 CE (Okasha, 1999).

Clearly the issue of mental health and the formation of institutions to treat mental illness have been long established in Arab culture and Arab societies. However, although Arabs might have set a precedent for mental healthcare, over time the inclusion and use of mental health treatment in the Middle-east has become less common and less available. In recent decades, the West have taken a lead on mental health development both academically and in practice; starting with the development of the mental health diagnostic and treatment system (DSM) in the USA in 1952. All Arab countries, including Syria, have adopted the USA validated DSM for mental health treatment.

It is, therefore, useful to distinguish between the historical and cultural understanding of mental health and illness and the medical/psychological understanding of mental health and illness as they are not identical. This chapter will provide an overview of mental health problems in Arab countries today and then discuss Arab conceptions of mental health, mental health wellbeing and discuss how they are related to barriers to seeking psychological help. References are made to mental health in the West to highlight the role of culture in mental health and understand cultural barriers of seeking help.

3.1.3 Mental Health Problems in Arab Countries today

The World Health Organization (2010) defines mental health as the positive foundation for individual well-being and the effective functioning of a community (Khatib, Bhui, and

Stansfeld, 2013; Ridner, 2004). Surveys of mental health in the Arab world report an increase in the incidence of mental ill health (Zayed and Lotfi, 1993). This has been understood by some culture conservatives to be a consequence of modern developments such as adopting non-traditional clothing style and use of English language instead of the Arabic language (Zakariya, 1999). These non-traditional cultural changes have caused great parental concern as they appear to challenge sociocultural norms and traditions threatening the social fabric of family and society. These concerns have sometimes resulted in the enforcement of more restrictions on inter-personal behaviours, such as stricter curfews or forbidding social interactions outside the family home, as a way to control and regulate behaviour susceptible to temptations from the external environment (Zayed and Lotfi, 1993).

It is difficult to accurately estimate the prevalence of mental illness in Syria as there is no up to date national data which can be drawn upon. Only two out of the twenty-two Middle-east countries, Iraq and Lebanon, have conducted nation-wide studies to document prevalence of mental illness. However, some research, which is rather piecemeal, exists on the lifetime prevalence of specific mental illnesses in the Middle-east region. In Jordan, prevalence of any anxiety disorder is reported at approximately 28 percent of the population, and co-morbidity of panic disorder and depression at approximately 26 percent (Takriti and Ahmad, 1992). It has been reported that approximately 17 percent of people in Lebanon experience anxiety disorder, with 14 percent experiencing anxiety disorder in Iraq. The highest prevalence rate of major depression was found in Morocco at approximately 27 percent of the adult population. Reports of the prevalence of any mood disorder in Lebanon at around 13 percent followed by Iraq at 8 percent (Okasha, Karam and Okasha, 2012).

One area which has seen an increase in research across the world is post-traumatic stress disorder (PTSD). Research has found that more than half of young people, particularly children, exposed to war will face PTSD (Cao, McFarlane, and Klimidis, 2003; Heptinstall, Sethna, and Taylor, 2004). Severe anxiety disorders that can develop after exposure to traumatic events (e.g. war) and cause significant disruptions to one or more important areas of life function.

In the Middle-east there is widespread conflict and war which makes research in to PTSD highly relevant. Khamis (2005) reported that around 34 percent of children between the ages

of 12 and 16 years suffer from PTSD in Palestine. In a study of over 3,000 young adults aged 26-32 years 37 percent of Algerians and 14 percent of Palestinians were found to suffer from some kind of anxiety disorder (De Jong, Komproe and Van Ommeren, 2003). In Kuwait following the Gulf war, Nader et al. (1993) found that 70 percent of children and youth (aged 8-21 years) displayed moderate to severe trauma reactions; and 98 percent reported at least one symptom of grief. In a study in Iraq following the Gulf war, children who had witnessed bombings resulting in deaths showed significant and lasting signs of grief (Dyregrov and Raundalen, 1992).

However, the prevalence of some of these common mental health problems seen in Arabs in the Middle-east has been linked to social factors which are not related to conflict serious though it is (Maier, Gansicke, Gatar, Rezaki, Tiements and Urzua, 1999). For women the main cause for that is reported is gender-based violence and discrimination (WHO, 2000). In the Arab region there is more prevalence of mental illness amongst females living in urban areas than those living in rural areas, with males displaying opposite patterns to females (Abu Baker, 1997). People in the Arab world are constantly being exposed to socioeconomic transitions and to conflicts and wars. Exposure to dire and chaotic circumstances are believed to contribute to the onset and incidence of mental illness (Miller and Rasmussen, 2010). Also to the limited capacity and resources to document and report figures on the prevalence of mental illness.

3.2 Culture and Mental Health

In the previous section the argument was made that concepts related to mental health need to be understood in an historical and cultural context. However, theorizing culture and understanding its link to mental health is no easy matter. Culture is a term that has been defined in numerous ways. There is an emerging consensus by some academics and professional disciplines of the definition and distinct characteristics of culture (Schim and Doorenbos, 2010): 1) culture is formed through processes of human interaction and communication (Cole, 1996). 2) Culture comprises of shared elements (Triandis, 2007; Barnouw, 1985). 3) Culture transmits across time and generations (Cohen, 2009). The thesis draws on these conceptualizations of culture and acknowledges that culture is only one primary influence of an individual's attitude and behaviour (Griswold, 2012).

3.2.1 Arab Culture: Norms and Socialisation

To accurately evaluate and understand the mental health issues of Arab populations in the Middle-east, one must take into account Arab culture, together with its geographic and historical background (see Chapter 2), and social influence and norms. Arab culture comprises shared languages, shared belief systems, for the most part a common religion and shared geographical location. Arabs live in 22 different countries throughout the Middle-east and North Africa, they share many common standards and values that result in shared attitudes and behaviours – the foundations of an Arab culture. Religion is important in understanding Arab culture with 85-90% of Arabs being Muslim which makes up 20% of the Muslim population worldwide (Feghali, 1997; The Future of the Global Muslim Population, 2011). It is worth reiterating that 15-20% of Arabs are not Muslim and that the term Arab is not coterminous with Muslim.

In the Middle-east, Arabs live in societies where they are required to abide by traditional laws governed by norms of the immediate and extended family. Successful functioning in the Arab society is dependent upon the relationship with the family, in that the family is the main source of economic, social and emotional support and deviation from these results in socioeconomic rejection and punishment in the community (Dwairy and Abu Baker, 1992). Several values have particular significance in Arab societies: endurance, loyalty, dignity, hospitality, generosity, pride and rivalry (Patai, 1983; Nydell, 1983). One common value ascribed to Arabs in literature is collectivism or interdependence (Feghali, 1997). This value serves to ensure cohesion and group functioning in families and communities in the Arab world.

Communities are found within societies and emerge as groups of people with diverse characteristics but are linked by social ties, common perspectives and engage in joint activities in similar geographical locations (MacQueen et al., 2001; Barakat, 2003). The concept of community is similar across the world, but the differences between Middle-eastern and Western communities are marked by people's interactions with one another and how they perceive their individual role within their community. Theories to explain differences between Western and non-Western (particularly Arab) communities have been proposed around the dimension independent-interdependent communities and this linked to culture (e.g. Markus and Kitayama, 1991; Markus, Kitayama and Heiman, 1996).

This dimension can be seen to affect customs, norms and practices in society (Kitayama and Markus, 1994). It is argued that Western culture commonly found in North America and Europe emphasises the core cultural idea of independence or individualism (Spering, 2001; Hofstede, 2010). There is an expectation in the West that it is important to look after one's self while expressing individual thoughts and behaviours and choosing own goals and plans. In contrast, people in interdependent or collective cultures frame the self as part of an in-group and attune with the standards, expectations and duties of fellow members of their group.

In the Middle-east, where interdependence is strongly valued, the family (immediate and extended) is seen as more important than the individual, where independence and self-actualisation are discouraged and are regarded as a sort of selfish egoism (Achoui, 2003). Dwairy and Menshar (2006) find that Arabs live in a more authoritarian and collective cultural system than those that live in Western countries like the United Kingdom. And unlike the West, Arab psychological individuation of adolescents is not achieved and individual identity continues to be enmeshed in the collective one into adulthood (Al-Mahroos, 2001).

Conforming to social norms can be seen as an adaptive response to authority, especially when individuals require the support from families. An unspoken agreement emerges which keeps individuals submissive and obedient to the will of the family (Dwairy and Thickle, 1996). Over time personal desires and expression are sacrificed for the sake of the family and as a result become repressed. Arabs often maintain an external locus of control: crucial decisions are almost always dependent on the family, and independent decision making skills are inhibited as decisions are determined by others, and personal responsibility and self-efficacy become unlearnt (Dwairy, 1997). Feghali (1997) theorizes that collectivist values are almost inevitable in Arab societies given the Middle-eastern history of continued hardship. He argues that for centuries Arabs have had to be dependent on the assistance of family, neighbours and neighbouring communities during migration and displacement and / or for protection from invaders and oppressors in times of conflict, war and invasion (Feghali, 1997).

However, in the last few decades Arab nations have been undergoing rapid processes of modernisation and urbanisation (Tolba and Saab, 2008). As a consequence, Arab societies are being exposed to a more Western-individualist culture (Barakat, 2000) and while the

exposure varies from one Arab country to another, all Arab societies are thought to be influenced by Arab-Muslim-authoritarian-collectivist culture and Western-liberal-individualist culture. This dual influence is thought to be having a great impact on Arab mental health. Understandings into cultural similarities and differences need to be further developed in light of the Syrian Arab context.

3.2.2 Etic and Emic Approaches to Mental Health

To make sense of the research in the current thesis it is necessary to think about the relationship between culture and mental health. While there is no single definition of Arab culture, it can be argued that to be an Arab is the result of sharing some but not necessarily all of a set of religious beliefs, cultural norm and shared socialization (Barakat, 1993). Shared beliefs and attitudes extend to conceptions of mental health, mental illness and their treatment. This leads to the question of how deeply these cultural conceptions are constructed. When it comes to understanding mental health and mental illness how different are the medical models employed in the West and the shared understanding in traditional Arab societies? One way of addressing this problem is to draw on the work of Kenneth Pike who in 1967, suggested that there are two ways to approach cultural systems. Deriving the terms from linguistic anthropology, Pike coined the two terms 'Etic' from the word phonetic pertaining to the universal meaning of sounds within a language regardless of their meaning; and 'Emic' from the word phonemic concerned with the acoustics and subjective meaning of sounds and words.

In applying his work on human behaviour, Pike (1967) proposed that the etic approach examines the extrinsic universal concepts meaningful to the scientific observer regardless of specific culture. It is the extrinsic concepts and categories observed by and meaningful to scientists. The emic approach focuses on cultural distinctions meaningful to a given society, where only members of that culture can judge and accurately identify meaning. With this approach a focus on cultural distinctions, concepts are meaningful to and are judged by persons within that culture. Researchers often use the terms etic and emic to refer to culture-general (universal) and culture-specific approaches (e.g. Morris and Fu, 2001; Headland, Pike and Harris, 1990).

The etic approach has been referred to as a nomothetic approach in the sense that with this approach there is an effort to make generalisations to explain objective phenomena. The adoption of this approach has often led to applications of American and European theories and the use of psychometric instruments in research in other cultural settings (Segall, Lerner and Berry, 1998) with the assumption that they can be employed without question. Much research on attitudes toward mental illness and opinions on professional psychological help seeking have applied Western theories and adopted Western-validated psychometric tests to research Arab populations such as: Al-Krenawi et al. (2004); Al-Krenawi et al. (2009); Leshem, Haj-Yahia and Guterman (2015); Natan, Drori and Hochman (2005). This research has contributed immensely to the knowledge and understanding on issues surrounding and ways to approach Arab mental health. However, such methodological approaches to research have been referred to by some as the main methodological set-back of psychological research in cross-cultural settings (Helfrich, 1999). This is because, argued by Valsiner (1995), that culture does not necessarily have a unidirectional influence and that individuals construct alter their personal culture. This set-back is particularly accentuated by the fact that societies nowadays are becoming less homogeneous and modern societies are more dominated by cultural change than cultural traditions (Spering, 2001).

The emic approach, which may be categorised as an idiographic-contextual approach. This approach takes an explorative stance to cultural meanings and individual contexts and psychological functioning. Some researchers have argued that a universal approach might emerge once emic approaches to research are explored in a number of cultures, leading to the development of a number of instruments that can be used in etic approaches to explore cultural differences and similarities (Segall et al., 1998). This is further reasoning for the current thesis in adopting an etic approach and then supplementing the research with an emic approach.

The etic/emic distinction has been fruitfully taken up in psychology, in the context of psychometric approaches to personality. Psychometric measures of personality have been developed to measure the Big 5 (e.g. Gosling, Rentfrow and Swann Jr., 2003; Rammstedt and John, 2007; Tsaousis and Kerpelis, 2004; Lippa, 1991). These questionnaires have been developed using a lexical approach in which dictionaries are used to map the personality sphere. Questionnaires are then used to reduce the personality sphere to a number of key

dimensions. According to BIG 5 theorists (John, 1990) the personality sphere can be economically described in terms of 5 underlying factors; openness to experience, conscientiousness, extraversion, agreeableness and neuroticism. It has been proposed that these dimensions are universal and have a biological/evolutionary underpinning. This is an example of an etic approach to personality.

To test this universal theory of personality, psychometric measures have been translated into other languages e.g. German (Angleitner and Ostendorf 1989); Filipino (Church and Kaitigbak 1989); Chinese (Yang and Bond, 1992); Hungarian (Szirmak and De Raad, 1994). It has been discovered that these translated measures do not behave exactly like the original measures, 5 factors are not always recovered and this was often shown through the extraction order. This has led some personality researchers to argue that an emic approach should be employed, which begins with a survey of the indigenous language. If starting with the indigenous language produces a model which is consistent with the BIG 5 it suggests that the BIG 5 model is indeed etic (universal) and if the subsequent models cannot be understood in terms of the BIG 5 then the approach must necessarily be emic.

The current research seeks to understand psychological help seeking for Syrian Arab populations. In order to do so, the research begins with theories in which psychometric measures were developed to assess seeking psychological help and factors that related to it (such as attitudes towards mental illness and coping styles). These psychometric measures have been used in different cultural contexts and languages, including Arab ones: Al-Krenawi (2002); Al-Krenawi et al. (2004); Al-Krenawi et al. (2009); Natan, Drori and Hochman (2005); Khan (2006). To test these universal theories in a Syrian Arab context, the measures were translated into Arabic and tested in Syria. The aim was to know whether these theories and psychometric measures are indeed universal and can be used in cross-cultural research, as has been done for decades, with varying populations and languages.

If the same psychometric measures translated into the indigenous language produce a factor structure consistent with the original, then the theories related to psychological help seeking are indeed etic i.e. the same processes are operating cross-culturally. If the models are not consistent then the approach to help seeking must turn to the emic.

With that in mind, understanding cultural beliefs about mental illness is crucial for the implementation of effective approaches to mental health care. Although each individual's experience with mental illness is unique, the following sections offers a sample perspective on the role that culture can play in mental health.

3.2.3 The Role of Culture in Mental Health

With increased cultural and population mobility it is increasingly the case that cultural groups are found embedded in other cultures. This has led to a need to address the mental health needs of groups living in diverse cultural environments e.g. Asians living in the UK (e.g. Bhui et al., 2003) or Chinese living in the USA (e.g. Tiwari and Wang, 2008) or Arabs living in the USA (e.g. Amer, 2005). The Cultural Influences on Mental Health (CIMH) model was developed by Hwang et al. (2008) to provide professionals with an overview of culture's dynamic influence on help seeking to address mental health needs of populations of diverse cultures. The model sought to help professionals broadly visualize the complexities involved in understanding the role of culture in mental health. They put forward that culture contributes to differences in (a) the prevalence of mental illness, (b) etiology and course of disease, (c) expression of distress, (d) diagnostic and assessment issues, (e) coping styles and help seeking pathways, and (f) treatment and intervention. These different elements are thought to be clearly and logically related and affect one another.

Other research explores the role played by cultural norms and beliefs in how mental health is defined and the cultural meanings underlying the concept of mental health. Kleinman (1978) introduced the notion of explanatory models of illness, arguing that how people understand and experience mental health is subject to their social context. He argued that those from different cultural backgrounds are likely to experience, interpret and express mental illness differently to those of other cultures; and this ultimately affects help seeking and styles of coping. The manifestations of symptoms of mental illness are thought to vary across different cultural backgrounds (Kleinman, 1978); and the environment of an individual is thought to provide contextual influence on conceptions, recognition and tolerance of mental illness and the manner in which distress is expressed and communicated (Marsella, 1980).

3.3 Psychological Help Seeking

Psychological help seeking is the interaction with others to deal with difficulties and emotional pain in aims to alleviate distress, and this help can be obtained from various sources (Broadhurst, 2003). Help seeking can be in the form of formal (e.g. mental health professionals) or informal help (e.g. family or friends) (Srebnik et al., 1996; Nicholas, Oliver, Lee and O'Brian, 2004; Gilat, Ezel and Sagee, 2010). Professional psychological help seeking can be defined as the process of events between the point of recognizing mental health problems or symptoms to having the intention to seek professional help to the point when the patient enters the mental health care system and remains in treatment for at least one consultation (Lin et al., 1982). Similar to this definition, for Arabs help seeking can be thought as the process that links the onset of mental health problems to accessing psychological care from a mental health professional (Al-krenawi et al., 2004).

Studies on psychological help seeking continue to show that there is a limited understanding of mental health services and care amongst populations across the world (Andrade et al., 2014; Eisenberg, Golberstein and Gollust, 2007) and generally public views of professional psychological help is rather negative (Rüsch et al., 2014; Goodwin, Savage and Horgan, 2016). Negative views about seeking psychological help can result in mental stigma and stigma discourages people to seek psychological help (Baun, 2009; Thornicroft, Rose, Kassam, & Sarorius, 2007), which is a combination of prejudice attitudes and discriminatory behaviours (Andrade et al., 2014; Kleinberg, Aluoja and Vasar, 2013).

Many determinants and factors affecting psychological help seeking have been put forward by studies. These determinants mainly surround differences in utilization across populations and demographics and attitudes towards mental health help seeking (Youssef and Deane, 2006).

Lack of knowledge about mental health issues has been related to low help seeking (Henderson, Evans-Lacko, & Thornicroft, 2013). In Europe, despite high rates of suicide (Cotter et al., 2015), inadequate help seeking has been reported particularly for major depression (Kleinberg et al., 2013); this is similar in the USA and Canada (Scott et al., 2010; Eisenberg et al., 2007).

Negative attitudes around care and services and mental health professionals has been found to be a barrier to help seeking in the West (Holmes, 2006; Halter, 2008). In a multinational study in Europe, two thirds of people were found to believe that receiving professional mental health treatment was worse than receiving no treatment at all (Ten Have et al., 2010). In a similar study (Lauber, Carlos and Wulf, 2005), also in Europe, it was found that receiving care in psychiatric hospitals was worse than no treatment at all. This study also found that a third of participants believed that medication for mental illness, such as antidepressants, are actually more harmful than helpful.

Research on help seeking among Arab populations across the world have yielded mostly consistent findings that Arabs underutilize professional psychological help (Lutzer, Vander and Gilat, 2008; Pines and Zaidman, 2003). Such patterns of utilization are also consistent with reported tendencies of minority groups to seek less help than the general population (Morgan, Ness and Robinson, 2003; Nickerson, Helms and Teller, 1994), despite the view that these groups are ones most in need of mental health support (Gilat et al., 2010). Many explanations for underutilization of mental health services have been forward. One common explanation is the tendency to mistrust formal institutions that belong to majority culture as well as those within these systems such as mental health professionals (Savaya, 1998).

For Arabs, particularly youth, there is a higher tendency to seek help from family and friends and other sources within the community (Sherer, 2007) than formal sources of help. There is evidence to suggest that there is a relationship between age and intention to seek help amongst Arabs. Younger Arabs exhibit a preference to seek help from family members for problems and emotional distress (Tishby et al., 2001), and young adults find that friends are a preferred source of help (Grinstein-Weiss et al., 2005). Family and friends are thought to relate more to a person's life than a professional. In regards to gender differences, Arab women appear to hold more positive attitudes towards seeking help for mental health problems than males (Raviv, Sills, Raviv and Wilensky, 2000; Schonert-Reichl and Muller, 1996; Grinstein-Weiss, Fishman and Eisikovits, 2005). It is theorized that the dimensions of seeking help are more consistent with female social norms and stereotypes than male ones.

It is evident that much research into psychological help seeking, particularly for Arabs, has focused on beliefs, opinions and intentions to seek psychological help as important aspects that determine the mental health help seeking process (Al-Krenawi and Graham, 1999, 2000a; Al-Krenawi et al., 2000). For the purpose of the current thesis the focus is on opinions on seeking professional psychological help; see Chapter 7 (Section 7.1.2 for further details on scale selection for the current thesis). While the focus of the current research is on formal help seeking, informal help seeking is explored in more detail in relation to social support in the Syrian context later in Chapter 9 and Chapter 10.

3.3.1 Cognitive Help Seeking and Person-Related Factors

In order to understand actual psychological help seeking, Saunders and Bowersox (2007) and Henshaw and Freedman-Doan (2009) proposed that it is important to understand the cognitive processes involved in seeking professional mental health help when it is made available. Opinions and beliefs about help seeking are pivotal elements of the cognitive process of help seeking (e.g. Schreiber, Renneberg, and Maercker, 2009) that propose phases of recognition, intentions to and actual future help seeking (Rickwood, Deane, Wilson and Ciarrochi, 2005), see Figure 1.1 for an illustration of the help seeking process. The current study investigates cognitive help seeking in the form recognising the need to seek professional psychological help.

Person-related factors have been proposed to play a major role in cognitive helping seeking processes (Sawyer et al., 2000; Wilson, Rickwood, Deane and Ciarrochi, 2001). Cognitive factors such as the need for autonomy and confidence in the usefulness of mental health treatment are strong barriers to psychological help seeking; the desire to be independent even in times of distress, negatively affects help seeking (Wilson and Deane, 2012).

Research in the Middle-east and in the West has helped identify person-related factors that may encourage or discourage cognitive help seeking. Such research has showed that help seeking can be daunting, and a reluctance to seek help can be influenced by difficulty in verbalizing emotional distress or in maintaining a lowered interpersonal openness (Raviv, Sills, Raviv and Wilansky, 2000; Wilson, Deane and Ciarrochi, 2005; Sherer and Karnieli-Miller, 2007). Again this is related to interpersonal openness to one's own problems that promotes or discourages recognition of the need to seek psychological help.

Barriers to psychological help seeking have been categorized (Pescosolido and Boyer, 1999):

1. *Person-related Factors*: factors related to a person's beliefs or opinions that discourage the desire and openness to seek professional help such as fear of mental illness, preference for self-help, stigmatizing mental health attitudes, little sympathy for mental health sufferers (Saunders, Zygowicz, and D'Angelo, 2006).
2. *Treatment-related Factors*: structural problems outside of the person's control that prevent help seeking such as high costs of treatment, limited availability of professional help, inaccessibility of mental health facilitators.

For the purpose of the current thesis, only person-related barriers are considered. Structural problems like availability affects everyone and the solutions are at a government policy level rather than at a community level, and these have been methodologically difficult to investigate in Syria.

Person-related factors are key to understanding cognitive helping seeking processes (Sawyer et al., 2000; Wilson and Deane, 2001). Negative opinions about seeking psychological help have been found to decrease intention to actual help seeking (Ajzen and Fishbein, 2000). A person's belief, that may be rooted in cultural norms and socialisations, can impact the help seeking process and so linking earlier discussions on culture the following section seeks to provide a snapshot on seeking psychological help in relation to Arab cultural and social norms.

3.3.2 Seeking Psychological and Arab Culture

In section 3.2 it was argued that Arab cultural values, social norms and socialization are organized around the principles of collectivism. Psychological therapies and techniques were developed in an *individualistic* culture. The next section examines the implications for the introduction of psychological therapies and techniques which were developed in an individualistic culture into a collectivist culture.

While little research can be found on the use of psychotherapies in the Arab world, theories and predictions based on cultural analyses, show that psychotherapy does not sit well with Arab culture. According to some researchers (Liebert and Spiegler, 1994; Dwairy and Sickle, 1996; Monte, 1995) psychotherapies have been mainly based on individualistic structures and dynamics of personality. They have been developed and mainly employed on patients in Western society with different cultures to those of Arab people. Such independent personality structures are not commonly found in people in the Arab world, and social and

cultural explanations of behaviours pertaining to Arabs are somewhat different to that found in Western cultures (Azhar and Varma, 2000).

Some psychotherapies such as those based on psychoanalysis or cognitive behavioural theories encourage individual self-actualization and may bring to surface emotions and problems so to best deal with them to become more functional in life (Liebert and Spiegler, 1994). During the course of the treatment feelings like anger, disappointment and fears are often addressed and the sources of these feelings come to light (Monte, 1995). Whilst it may appear that approaches like behavioural therapies are culture or value free, and, in the terminology adopted in this thesis, etc (Liebert and Spiegler, 1994). However, therapy can be considered intrusive in Arab societies; especially child behavioural therapies that require the establishment of balance between child and parent needs (Dwairy and Sickle, 1996). If this is the case, then it is necessary to take an emic viewpoint to understanding the barriers to taking up psychotherapy.

This can be illustrated by considering family or marital therapy which seeks to adapt family roles and communication patterns (Foley, 1989). While these therapeutic notions appear a norm in family structures commonly known in the West, these notions can be viewed as threatening and intrusive in the Arab familial structure (Al-Abdul-Jabbar and Al-Issa, 2000). As mentioned in the earlier section on Arab culture and socialization collectivist cultures found in Arab societies discourage self-expression, assertiveness and individual decision-making, especially against the authoritative head of the household (Dwairy and Thickle, 1996). And while the course of the therapy for Arab patients may result in the resolution of internal conflicts, given the social context Arabs live in, the outcomes of the therapy may inflict external conflicts and the success of therapy may be short-lived (Monte, 1995).

Based on Arab cultural values, social norms and their knowledge of professional psychological help, Dwairy and Sickle (1996) proposed three key guidelines to address Arab treatment needs. First, professional psychological help needs to be relevant to Arab populations. Second, the application of Western psychotherapies need to be evaluated in the Arab context to know how best to adapt them. Third, the incorporation of Arab culture into mental health treatment must be addressed. These three guidelines are fundamental when adapting Western mental health treatment for Arab culture.

3.4 Person-Related Barriers to Seeking Help

The previous section describes the importance of understanding the cognitive process involved in psychological help seeking and making considerations to factors related to the person in determining the outcomes of help seeking. A turn to culture is important to understand conceptualisations of mental health and psychological help seeking. But in looking into research to better understand factors that affect psychological help seeking it becomes clear that, other than culture, there are inter-individual and cognitive processes which are important in understanding how individuals suffering from poor mental health understand and seek help for their problems. These can be thought of as barriers to psychological help seeking and include: the processes, awareness and appraisal of mental distress and expressions of symptoms and needs for support, availability, appropriate sources of help, and openness to seeking help (Rickwood, Deane, Wilson and Ciarrochi, 2005). In understanding these barriers to help seeking through research, it becomes clear that the main influencers of the psychological help seeking processes are attitudes towards and conceptualisations of mental illness. In that negative attitudes and conceptualisations, in the form of mental health stigma, can lead to negative attitudes towards seeking psychological help and can deter people away from actual help seeking. In an etic approach, these psychosocial theories have been used to understand, explain and predict health behaviours (Sutton, 2002). It must be noted that attitudes towards mental illness may differ across cultures, particularly between the West and the Arab one. A review of literature available in the West is outlined, and then a turn to review research on Arab attitudes and conceptions is made.

3.4.1 Attitudes towards Mental Illness

An important person-related factor that has been proposed to play a major role in the cognitive helping seeking process is one's attitude toward mental illness (Pescosolido and Boyer, 1999); and negative attitudes can serve as an important barrier to psychological help seeking. Attitudes toward mental illness are beliefs or ideas about people who suffer from mental illness (Cohen and Struening, 1962). Research has shown that such attitudes a) vary across cultures and demographics (Corrigan, Green, Lundin, Kubiak and Penn, 2001), and, b) are influenced by shared belief of and stereotypes of mental illness (Corrigan, 1999). Studies by Chung, Chen and Liu (2001) and Zlati, Oh and Baban, (2001) have found negative attitudes

towards mental illness in the West with reports of: people being unwilling to interact with sufferers of mental illness and expressions of fear, anger, endorsed responsibility (i.e. responsibility for one's own illness) and stereotypes of dangerousness, pity, avoidance and segregation.

There is a large body of knowledge available on beliefs about and attitudes towards mental illness (Faulkner, Irving, Paglia-Boak and Adlad, 2010; Marsh and Shanks, 2014). From a systematic review by Holzinger et al. (2012) suggests that over the last two decades little has changed and general attitudes towards mental illness remain relatively negative across the world. Empirical research in the West (such as Rahav, Struening and Andrews, 1984; Rossler and Salize, 1995) has found that attitudes towards mental health differ by demographic variables including age, gender, marital status and education. In particular age has been found to be a major influential variable. In the West, younger age groups hold more positive attitudes than older age groups on mental illness and in general younger people are more critical of the quality of the mental healthcare system.

Research suggests that people from developing countries fear mental illness and hold negative attitudes towards sufferers, more so than in developed countries (Seeman, Tang, Brown, Altoning, 2016). Culture, tradition, access to education and health services are important factors that shape attitudes towards mental illness (Cheon and Chiao, 2012). In a review of ethno-cultural attitudes towards mental illness, Abdullah and Brown (2011) investigated attitudes across different ethnic groups across the world. The findings indicated that not all types of mental illnesses were viewed negatively, and the perceived cause of illness was an important determinant in shaping attitudes.

In 2010, Carpenter-Song et al. conducted an intensive observation-based ethnographic study about attitudes towards mental illness in the USA. They found that American or European participants who sought mental health treatment tended to understand mental illness from the biomedical perspective. In contrast, African American and Latino participants tended to emphasise the non-medical interpretations of illness, and found that medication treatments were frustrating and they tended to seek less help than their American or European counterparts. This was mainly due to the perceived social damage mental illness causes on individual and family reputation in the community.

Aloud (2004) found that dominant Arab-Muslim research suggests that attitudes towards mental illness and formal psychological help seeking are rather negative. It is thought that the majority of Arabs and Muslims tend to have less knowledge about and familiarity with mental health treatments and systems. Aloud also found that the desire and recognition to seek psychological help was mainly affected by cultural and traditional beliefs about mental illness as well as perceived societal stigma.

In a study on Arabic speaking communities in Australia, Youssef and Deane (2006) found common themes that influenced negative attitudes towards mental illness and inhibited professional help seeking. They found that shame and stigma were key barriers, and confidentiality and lack of trust in service providers were key determinants of attitudes. Religious leaders and the community informal help were identified as important sources of help for mental health problems.

3.4.2 Attitudes towards Mental Illness, Mental Health Stigma and Psychological Help Seeking

Extremely negative attitudes towards people who share a particular characteristic has been described as stigma. One of the first authors to study stigma was Goffman (1963) who extended the general term stigma beyond bodily signs to include drawing negative implications about a person's moral character. The concept of stigma was thus widened to include diverse categories that may or may not be related to outward bodily signs (Coker, 2005). Crocker, Major and Steele (1998) defined "stigmatized individuals possess (or are believed to possess) some attribute, or characteristic, that conveys a social identity that is devalued in a particular social context" (pg: 505). Jones (1984) use Goffman's definition and expand on this stating that stigma is the relationship between an attribute and a stereotype and it is this attribute which links a person to undesirable characteristics.

In psychology, Link and Phelan (2001) put forward a conceptualisation which identifies five dimensions of stigma: 1. People amplify and label human differences; 2. Cultural beliefs and values drive the labelling of the stigmatised person to undesirable qualities; 3. Stigmatised persons are placed in categories to ascertain in-group and out-group separation; 4. The labelled person experiences loss and the discrimination which leads to disparate life outcomes; and 5. The extent and persistence of stigmatisation is reliant upon the individual's

access to social, economic and political power. It is thought by Link and Phelan that these dimensions are comparable across cultures, however, the research is based on Western samples. And while it is thought that stigma can be comparable and similar across different cultures, research on this is reported for Western and for Arab (Section 3.4.3) samples separately.

In Western research, it has been found that stigmatising attitudes contain some common assumptions about people with mental illness; that they are dangerous and should be feared, childlike and should be cared for, irresponsible and rebellious (Farina, 1998; Martin, Pescosolido and Tuch, 2000). Other common assumptions are based on the notion that they are responsible for causing their illness, (Corrigan, River, Lundin, Wasowaki, Campion and Mathisen, 2000; Link and Phelan, 2001).

In studies of stigma (such as Chan, Mak and Law, 2009; Cheon and Chiao, 2012) it has been found that people suffering from mental illness often face a great deal of unjust and discriminatory behaviour (Prior, Wood, Lewis and Pill, 2003). Stigma plays an enormous role in mental health as it not only impedes mental health recovery but can often result in psychiatric readmission (Chinman, Weingarten, Stayner and Davidson, 2001; Linz and Sturm, 2013).

Studies in the West reveal that stigmatising attitudes result in negative consequences for mental health sufferers. These include rejection, social isolation (Agerbo et al., 2004; Rüscher et al., 2014) and diminished social relationships with the immediate family and with contacts outside the household (Perlick et al., 2001). People with mental illness strive to evade social blunders by avoiding social interactions and concealing their diagnosis history (Link, Cullen, Frank and Wozniak, 1987). As a result, this leads to a lower quality of life and high risk of unemployment (Graf et al., 2004; Wahl, 1999).

These effects deserve special attention because social relations and support determine the course and outcome of mental illness (Turner, 1999; National Institute of Mental Health, 1996). Social integration allows sufferers to gain social relationships and take part in the community. It is therefore one of the most important factors in ensuring a good quality of life. Yet it is a major problem for many people living with a mental illness (Ruesch et al., 2004; Watson, Corrigan and Ottati, 2004).

3.4.3 Arab Conceptions of and Attitudes towards Mental Illness

A turn now is made to providing a perspective on attitudes towards mental illness and mental health stigma rooted in and specific to Arab populations. The literature on Arab conceptions of mental health and mental illness is limited. Over the past twenty years there have been few studies that have specifically addressed attitudes towards mental health. The few studies that have been carried out have used small samples, often with student populations (e.g. Coker, 2005; Okasha, 1999; Al-krenawi et al., 2000).

Available research on attitudes towards mental illness (e.g. Dols, 1992, Coker, 2005) reveals is that there exists amongst Arabs, but religious attitudes promote lower rates of mental health stigma. These religious values promote tolerance, support the unfortunate and in some cases embrace a belief that those with lesser or limited mental capacity are blessed by God (Coker, 2005). However, other research suggests that tolerance of people with mental illness is limited to symptoms or behaviours that are socially acceptable, manageable and pose limited threat to social status and familial reputation (Al-krenawi et al., 2000). Stigma may therefore be as widespread in the Arab world, albeit socially customized, as Coker (2003, 2005) determined from research in Egypt.

Coker showed that overt and strange behaviours alone were not enough to elicit stigma (measured by social distance) but there was an association with a person's place and role in society. Stigma was found to be mediated by societal beliefs that the individual maintained a place in the social fabric in the community and their behaviour (due to mental illness) was temporary and manipulated by the social context and environment rather than as a result of deep rooted problems in individual psyche.

The research that has been done in the Middle-east shows that the conceptualisation of persons with mental illness is related to practical and moral judgements about the person's ability to fulfil a given role and their moral worth (Coker, 2005; Okasha, 1999). Research shows that mental ill health is stigmatised in Arab countries (Al-krenawi et al., 2004). Coker (2001) found that over half of participants in an Egyptian study stated that they would not accept an individual as a family member if they were diagnosed with a mental illness. This can be linked to the fear that the family name would be tarnished (Eapen, Yunis, Zoubeidi and Sabri, 2004) and result in collective shame and embarrassment.

Research conducted within the Middle-east has often shown that Arabs acknowledge the existence of a mental illness but have a tendency to attribute it to everyday ordinary stress or strain (Al-krenawi et al., 2000). Often, Arab thinking is based on the belief that all people are subject to problems in life that may lead to various mental health problems which are therefore normal and even widespread in society (Coker, 2001). Arabs in the Middle-east have been understood as seeing illness as something that comes from God and requiring treatment through interventions from within the society (Okasha, 1999). There appears to be strong religious, moral and social obligations operating in Middle-eastern societies that mediate against stigma (Trembovler, 1994) and there exists a strong moral imperative to care for the ill (Dols, 1992). So long as mental health symptoms can be normalised (i.e. shown to be variations on everyday behaviour) sufferers of mental illness are accepted and seem to need and are worthy of social support by Arab society. This applies if their illness can be explained by the external environment (e.g. strains of marriage or symptoms of physical ill health) and potentially does not affect others around them (Coker, 2005; El-Rufaie, Al-sabosy, Bener and Abuzied, and, 1999; Okasha, 1996).

In the Arab world, adolescents hold more negative attitudes than young adults in their early twenties, suggesting a difference in attitudes between American / European and Arab contexts. Al-Krenawi et al. (2004) found that in Palestine participants under the age of 21 years held more negative attitudes than participants aged 22-24 years. It was rationalized that the younger age groups have less knowledge and awareness about mental illness, are under more influence from parental viewpoints, whilst mental health services are less available to them.

Women in the Arab world have been found to hold more positive attitudes than men (Al-Krenawi et al., 2004) and that negative attitudes towards mental illness have been shown to be positively associated with low use of mental health services (Al-Krenawi and Graham, 2000). Despite there being no conclusive difference in attitudes between Arab nationalities on mental illness, perhaps due to the scarcity of research on this subject, what research there is suggests that individuals who strongly identify with Arab culture, maintain less positive attitudes towards mental illness (Al-Krenawi et al., 2004).

Generally, higher educational levels are linked to positive opinions concerning mental illness (Trikkas and Zafirakopoulou, 1996). Educational attainment is positively correlated with knowledge about mental illness as well as positive attitudes towards mental health (Aghanwa, 2004). Zayed and Lotfi (1993) showed that people living in rural areas in the Arab region hold more negative attitudes towards mental health than those in urban areas.

3.5 Other Barriers to Help Seeking

3.5.1 Preference to Seek Alternative Sources of Help

Predominantly, current mental health treatment in the Middle-east is based on non-Arab Western interventions but there are other sources of help that are available and common in the Arab world (Al-Krenawi, Graham and Kandah, 2000). These include traditional religious healers and the social support from family or friends (Smolak et al., 2013). As indicated by research there are several potential strengths in seeking alternative sources of help, particularly for Arab populations. For Arabs, alternative sources of help are seen as more congruent with social and cultural norms of that collective society (Hodge and Nadir, 2008), where interdependence is important for social functioning. Whereas alternative sources of help, particularly ones which rely on social support, can be argued to be incongruent with Western culture that promotes independence and self-reliance (Hofstede, 2010). Alternative sources of help include methods that are less stigmatized than professional psychological help and more commonly adopted by non-Western societies (Raguram, Weiss, Channabasavanna and Devins, 1996). This is an important aspect to the research in the thesis and will be further explored in later chapters.

3.5.2 Social Support

Social support has been defined as: resources available to an individual from other people (Cohen and Syme, 1985). It has also been defined as: the availability of psychological and material resources in social networks intended to help the individual cope with stress and overcome problems (Atri, Sharma and Cottrell, 2007). Types of social support extend to the range of social interactions that enable emotional, information and tangible support from others to individuals (Khatib, Bhui and Stansfeld, 2013). Some research on social support looks to measure perceived availability of support, rather than actual received support, as this

is widely considered as a more accurate measure of social support (Bal, et al., 2003; Barrera and Garrison-Jones, 1992).

Strong social ties have been found to be associated with better health, especially for women (Cohen and Janicki-Deverts, 2009). In addition, social support, particularly familial relations, were shown to improve symptoms of cardiovascular disease and promote healthier and stronger immune systems (Uchino, Cacioppo and Kiecolt-Glaser, 1996). Adherence to medical treatment was found to be linked to social support (Dimatteo, 2004). Social support from family and social networks was found to positively influence health status, coping behaviours, health beliefs, overall well-being and quality of life (Wang, Wu and Liu, 2003).

Social support was found by Khatib, Bhui and Stansfeld, (2013) to positively affect mental health especially for Western university students who receive support from their family, friends, teachers and social groups (Elliot and Gramling, 1990). A lack of social support has been found by Eskin (2003) to be related to mental health problems like depression and anxiety, and low levels of social support from parents have been shown to increase symptoms of depression amongst young people (Stice, Ragan, Randall, 2004). Ellison and George (1994) indicated the considerable and direct positive effects of social support on mental disorders.

The mechanisms of social support are thought to operate in two ways: first, social support has a positive effect on mental well-being because individuals are cared for and have the assistance from others around them for support in times of distress. Second, social support buffers the effects of events that may lead to mental illness and helps with symptom control (Tahmasbipour and Taheri, 2012). Chi and Chou (2001) stated that social support balances life events that are thought to cause depression. They suggested that the following dimensions have significant impact on mental health well-being: expansions of social network; network combinations; social contact frequency; social support satisfaction; emotional support; and effective financial support.

There are reported differences in social support amongst various ethnic groups in the West. In a multi-ethnic sample in the British Study Research with East London Adolescents: Community Health Survey (RELACHS) Stansfeld et al. (2004) noted that white English participants received less social support than Bangladeshis and suffered increased mental distress. Also, in the study of young people 'The Great Smokey Mountains', Costello et al.

(1997) found that even though American Indians displayed higher family deviance and adversity and worse levels of poverty, they displayed much lower overall prevalence of mental illness than white American participants. It was suggested that family ties and collectivist culture served as protective factors against stress or negative events.

Time spent with the family, engaging in activities, interacting and bonding, are measures used in research to indicate high familial social support (Runtz and Schallow, 1997). Cultural values, family practices and community environments are thought to serve as protection against mental illness and thus less need for external help (Maynard and Harding, 2010; Stansfeld and Sproston, 2002). Social support can operate like a buffer against life stressors (McCorkle et al., 2008) and can serve as a protective factor against negative events (Friedlander et al., 2007).

For collectivist societies found in the Arab world, family is an important socio-cultural component of functioning. And given the underdevelopment, scarcity and the high cost of mental health treatment in the Middle-east (Okasha, Karam and Okasha, 2012) as well as the well-established availability of social support for distress, Arabs tend to seek more alternative sources of help than treatment from a professional. Social support is not stigmatised like mental health treatment in the Arab context (Coker, 2005). This is because the help is being received from familiar networks within the community and that favours social support from familiar networks over professional psychological help seeking. Whether social support in the Arab region is sufficient for individuals to overcome mental health problems and distress is another matter that requires further and extensive research.

3.5.3 Religion and Help Seeking

The Role of Religion in the Arab World

Mainstream religions like Islam and Christianity, commonly practised by Arabs, encourage individuals to turn to God and strengthen their religious beliefs in difficult times. Hardship is reinterpreted to give meaning and purpose to the belief that God has a plan for everyone (Mohamed, 1995). Prayer is prescribed, at home or with others at places of worship, especially in times of distress and need (El-Azayem and Zari, 1994). The pillars of faith are thought to enable individual physical, spiritual and emotional well-being (Azmi, 1991). Moreover, religious teachings are concerned with the welfare of the individual as well as the

wider societal well-being (Al-krenawi and Graham, 2000). Everyone is taught that they have a responsibility to look after themselves and others around them no matter what the circumstances (Nagati, 1993). So that individuals are taught to achieve internal balance of thought, action and peace as well as to care for the collective welfare of others like family, friends and society (El-Azayem and Zari, 1994).

There is an understanding in the Muslim world that God is in control and may provide Muslims with a positive way to deal with negative events (Al-Abdul-Jabbar and Al-Issa, 2000). Mental illnesses like depression are often understood by the community to arise from or reflect a lack of faith (Walpole et al., 2013), especially when symptoms of hopelessness and suicidal tendencies present.

Whilst most scholars indicate that religions like Islam and Christianity encourage individuals to find external cures for their mental illness (Ansari, 2002; Coker, 2005; Inayat, 2005); there is some evidence to suggest that religious people, especially Muslims, believe that mental illness is a test from God (Al-Abdul-Jabbar and Al-Issa, 2000; Mohammad, 2003). They hold a belief that one must be patient and accept God's resolutions, and comfort can only be found through the obedience of God's will (Youssef and Deane, 2006).

3.5.4 Religious versus Psychological Help Seeking

Religion has been found to play an important positive healing role in mental health treatment and recovery amongst various religions (George et al., 2000; Myers and Hwang, 2004; Klocket, Trenetry and Webstet, 2011). However, some researchers have argued that religion worsens mental health well-being (e.g. Freud, 1953; Ellis, 1980). Other claims by Rogers, Maslow, Jung and Bandura that religion has many positive outcomes for mental health (Shreve-Neiger and Edelstein, 2004; Wulff, 1997). While the issue of the adequacy of religion or religiosity for mental health wellbeing is an important one, the current thesis only sets out to understand the sources of help available and sought after by Syrians. The focus is not on notions of religiosity across cultures or on religious healing and the mechanisms involved in this, but whether Syrians consider religious coping as a source of help for mental distress.

In the context of Islam and mental health, the first Muslim physician who introduced the coping techniques which share some of the characteristics of psychotherapy was Bakar Muhammad Zakaria Al-Razi (925 CE). In his famous book entitled 'El Mansuri' dan 'Al Tibb al-

Ruhani' (Sabry and Vohra, 2013) he introduced concepts of mental health and spoke of what might be understood as psychology, psychiatry and psychotherapy. However, since the publication of this early text Muslims have been found to be hesitant of seeking psychological help from professionals (Hodge, 2005) due to the differences in beliefs and values that accompany psychotherapy which conflict with religious beliefs (Hedayat-Diba, 2000).

Muslims often seek the help of religious figures in society like Sheikhs or Imams instead of psychotherapists (Ali, Liu and Humedian, 2004). They claim to deal with matters of the spirit and the unknown (Ali, Milstein and Marzuk, 2005). Certainly, religious leaders, particularly in the Arab world, are readily available and have been found to help people of Muslim faith make sense of their problems in the context of their religious beliefs (Youssef and Deane, 2006; Leavey, Loewenthal and King, 2007). There is a common understanding that a doctor would be contacted if one is suffering physical (bodily) problems, but religion is responsible for the 'soul' (Sembhi and Dein, 1998). There is some evidence to suggest that clergy's (in various religions) are favoured over psychiatrists for mental health problems as they are believed to be helpful, understanding and caring, whereas psychiatrists are viewed as cold, mechanical and uninvolved (Mitchell and Baker, 2000; Johansen, 2005).

Some patients feel both medical and traditional healing are complimentary and often seek the help of both traditional healers and medical professionals (Cinnirella and Loewenthal, 1999; Rassool, 2015). In a study conducted in Saudi Arabia of Muslim patients with Schizophrenia, Wahass and Kent (1997) finds that patients who were offered either spiritual guidance or cognitive therapy had similar positive treatment outcomes. Patients who received both help seeking methods had the best treatment outcomes.

Researchers have over the past decades been trying to encourage a greater presence of religion in social and psychological curriculum (Netting, Thibault and Ellor, 1990; Sheridan et al., 1992; Rassool and Gemaey, 2014). More recent research suggests that it is more beneficial for religious patients to seek the help of therapists that share the same religion (Ansari, 2005; Yilmaz and Weiss, 2000). However, there is substantial counter evidence to suggest that patients seeking the help from therapists in the West who maintain differing religious values greatly benefit from therapy (Cinnirella and Loewenthal, 1999); especially as

fears of broken confidentiality and judgement based on religious standards are reduced (Rothermel, 2009).

Therapy can be more effective if the therapist understands and is empathetic with the patient's religious and cultural values (Al-Krenawi et al., 1994; Inayat, 2005). Yilmaz and Weiss (2000) assert that non-religious therapists, or those who hold different religious orientations, can be just as understanding and sensitive to patients' religious and cultural values and norms. Research does endorse that psychotherapy is most effective for religious people if it is set within the framework of religion so that treatment incorporates religious and cultural practices familiar to the patient (Padela, Guntet and Killawi, 2011; Fonte and Horton-Deutsch, 2005). This should help induce mental health healing and recovery if patients feel at ease (Al-Abdul-Jabbar and Al-Issa, 2000; Inayat, 2005).

Despite the demand for traditional or religious healing, several concerns are raised over this kind of treatment and these can be related to the etic and emic approaches to mental health. To start, traditional healing adopts an emic approach and thus lacks evidence-base and scientific grounding in its effects on mental illness outcomes (Dwairy and Sickle, 1996). Traditional methods have been criticised for their reliance on the placebo effect and research remains mixed on the benefits of religious healing on mental illness (De Mamani, Tuchman and Duarte, 2010). While traditional healing forms a part of the healthcare sector in some Arab countries like Saudi Arabia, this is rarely monitored for misuse or corruption. It is not regulated to ensure the prescription of unified or successful traditional treatment methods, leaving vulnerable people susceptible to worsened and / or prolonged mental illness.

There is little collaboration between clergy and mental health providers worldwide (Leavey et al., 2007) and this is problematic for several reasons: first, in cases where patients seek the help of both medical and traditional treatment, the facilitators will know little about patient prognosis and the course of prescribed treatment and prescriptions could be counteracting one another. Second, limited financial resources are being spent on inappropriate methods. If treatment is not successful, then there would be limited opportunity to seek alternative means of help for better mental health outcomes. Third, lack of co-ordination raises and reinforces the responsibility that the family of mental health sufferers must make executive,

uninformed and independent decisions about treatment thus limiting the patients' accessibility to alternative help (Okasha, 1999).

Co-ordination between traditional and medical facilitators could ensure that families obtain informed advice on the best methods suited to the patients' problems, culture and beliefs. Currently it remains that in the Arab world traditional healers do and will continue to provide intervention for mental illness. More inspection into the positive and negative aspects of this are needed to be investigated (Okasha, 1999).

3.6 The Aim of the Current Research

The aim of the current thesis is to investigate the dimensions behind psychological help seeking for a Syrian Arab population. In a similar methodological approach to personality testing, **the first aim** of the current research begins by adopting renowned theories in which psychometric measures were developed to assess: seeking psychological help, attitudes towards mental illness and coping styles. These psychometric scales have been used in past research, including Arab research. Before looking at the relationship between these different variables, an investigation into the scales is made to determine whether these validated and widely used scales translate well when used in a different cultural context to the West. Through this etic approach it will be determined the ability to utilise these in global research and thus make them available in the Arabic language.

Subsequently **the second aim** of the research is, the findings from the CFA investigations are utilised in path analysis to investigate the relationships between seeking help, attitudes towards mental illness and coping styles and to further investigate the relationship with social support and mental well-being. The aim is to understand the relationship between these different person-related factors in the cognitive help seeking process, which may later influence the decision for actual help seeking.

Some limitations were found in the quantitative research and it was necessary in **the third aim** of the current research to supplement the current research with an emic approach that utilizes qualitative investigations into psychological help seeking, attitudes towards mental illness and alternative sources of help. This turn in the research approach aims to supplement the quantitative research findings with qualitative in-depth investigations of mental health issues from the Syrian perspective during the war today.

3.7 Summary

The literature review demonstrates that mental health treatment has been recognised by Arab Muslims for centuries. The incidence of mental illness in the Middle-east, due in part to the ongoing unrest in the region is, potentially, very high. However, research on mental health in Syria is scarce, but, given the ongoing war in Syria since 2012, it is an important issue to address.

Previous research has focused on the important role of culture in conducting psychological research. Cultural approaches have been adopted in order to understand the different characteristics and traits of people in alternative cultures, including that of Syria.

Research on Arab culture common in Syria has stressed the importance of recognising that Arabs live in a collective society. This is a culture that promotes interdependence and strong familial bonds; a culture that holds family honour and social norms in high esteem and one which avoids unfamiliar concepts.

Culture has great significance in addressing the subject of psychological help seeking. Some psychological concepts are universal, so outsider observers' viewpoints are relevant. On the other hand, taking into account the viewpoint of the participant or person who is being studied i.e. an emic approach allows for deeper understandings of the effects of cultural differences, particularly in comparing Western and Arab environments.

It has been found that Arab conceptions of mental health understood from the medical/psychiatric perspective leads generally to stigmatisation. But there also exists a moral obligation, rooted in religious viewpoints, to help those in need. In looking to understand barriers to psychological help seeking, research finds that negative attitudes towards mental illness are major obstacles to seeking help. Arabs often use alternative sources of help that are less stigmatised. Arabs have access to informal help seeking from family, friends and the community. And more often than not Arabs seek help from religious leaders or find solace in their religion to overcome distress. These concepts are proposed to form person-related factors that influence the cognitive help seeking process to give indications to actual psychological help seeking in the future.

Similar to the other research, an etic approach is adopted in the current research and three well-established and validated scales are selected, measuring: seeking psychological help, attitudes towards mental illness and coping styles. The first aim is to investigate how well these scales translate to the Syrian Arab culture. Second, the aim is to investigate the relationship between these different variables using path analysis to better understand the cognitive help seeking process. And finally the third aim is to make a turn to an emic approach to supplement the quantitative research using a qualitative approach to investigate mental health issues for Syrians today.

Chapter 4: Methodology

The current chapter describes the methodology used to make investigations in the thesis. An outline of ethical considerations, sampling of participants and researchers and procedures for piloting and data collection is provided. A brief outline is given of the measures used in data collection as well as information on data preparation for analyses.

4.1 Background

In 2011-2012, the author of the current thesis was the project manager of the Youth Attitudes Survey (YAS) for the Syrian Development Research Centre (SDRC). The YAS was developed to investigate the circumstances and attitudes of young people aged 10-29 years in Syria. As part of agreements with SDRC the measures used in the current thesis were an integral part of the YAS and were administered to participants in the exploratory study. It was proposed that the survey would be repeated at approximate five year intervals and would provide longitudinal data that could be used to follow the life courses of individuals and groups allowing national and international agencies to track the progress of youth in Syria on key indicators and thus providing a basis to help guide the development of evidence-based strategies and policies for Syrian youth.

Following similar national longitudinal studies (e.g. Population Council in Egypt, 2009) the YAS was designed to cover eight key areas: education; employment; migration; citizenship; personal development; influencers in the lives of youth; health and mental health; and family formation. The Youth Attitudes project comprised two surveys for data collection: 1. A Household Survey: Administered to the head of household, consisting of 12-survey questions which took approximately 10-minutes of structured interviewing to complete. 2. An Individual YAS: Administered to young people aged 10-29 years, consisting of 198-survey questions and took approximately 60-minutes of structured interviewing to complete.

It was planned that the YAS would be administered to approximately 8,000 young people, a representative sample drawn from the Syrian national population of households. The national data would have then been used to validate measures and indicators used in the YAS and subsequently any redesign of the survey needed would have taken place before the next planned data collection. However, due to the war in Syria it was not possible to conduct major data collection: plans to collect data on a national level were abandoned when the war in the

country made data collection potentially unsafe. Instead, in 2011 a more limited study was conducted in three regions of Syrian with 1,008 participants. The goal of this study was exploratory with an aim to provide a snapshot understanding of young people and to test and assess the survey items in preparation for later major data collection when the security situation in the country permitted. It must be noted that pre-war data collection was terminated in the whole of Syria after July 2011, and the very last pre-war data collection was conducted for the YAS project. Data collection following that time period were sanctioned to government agencies and INGO's conducting humanitarian assessment of needs.

The SDRC conducted the Youth Attitudes Survey exploratory study in collaboration with the Central Bureau of Statistics (CBS) Syria. The study was funded by the United Nations Population Fund (UNFPA), United Nations Children's Fund (UNICEF), Massar (a Syrian NGO) and the British Embassy in Syria. The project was supported by the Population Council in Egypt and the Syrian Youth Commission for Volunteers.

4.2 Ethical Considerations

Ethical considerations and approvals for the thesis were obtained from the University of Westminster. This study met the guidelines for research with human participants set out by the British Psychological Society. The approval to conduct the research was obtained by the examining committee at two different pass stages in the PhD: the 'Application for PhD' stage and the 'Transfer from MPhil to PhD' stage. As this study was carried out in the Syrian Arab Republic, local ethical approvals were also sought, unfortunately these documents are not obtainable due to the war in Syria and have most likely been destroyed as a result of the conflict.

The data collection and data analysis reported here were part of a larger study conducted by the SDRC. The SDRC obtained ethical and legal approval from the CBS which is the body which oversees social research in Syria; the written contract for the YAS project between the SDRC and the CBS formed the ethical approval to conduct the study. The wellbeing and safety of the participants were considered in all aspects of the design and conduct of this research. Ethical approval from the Syrian governing research body to distribute the selected measures

for the current thesis were only permitted to conduct these measures with participants aged 15-29 years and not those younger.

4.2.1 Informed Consent and Instructions to Participate

Informed consent was obtained from all participants prior to data collection. Participants were requested to take part in a survey that was investigating their attitudes and opinions on various aspects of their life and that there were no right or wrong answers to the survey questions. They were informed that participation would take approximately 60-minutes of their time. It was made clear that participation in the study was voluntary and participants had the right to refuse to answer any of the research questions or withdraw from the study at any time, even after full data collection. Participants were assured that the information would be used for data analyses only and the information published would be entirely anonymous. Contact details of the head of the research study 'Masa Al-kurdi' and the point of contact for the CBS were provided to all participants. At the completion of the survey interview, feedback on participation experiences was collected.

4.2.2 Incentives to Participate

All participants in the study were informed that in gratitude for their participation in the YAS study they would receive a small gratuity as a token of appreciation. These gratuities took the form of internet rechargeable cards as well as some stationary items such as pencils and notepads were kindly provided by the local internet provider SCS to the SDRC to provide to participants – these gifts were a small token of appreciation that were financially insignificant.

4.2.3 Data Protection

All information obtained was treated with utmost confidentiality and participants were reassured that no identifiable information in any of the reports or publications would be used. The lead researcher was responsible for the confidentiality of all data acquired. As part of the written legal agreement with the CBS all data files containing personal and identifiable information of the participants would be deleted from their systems after data entry and coding, and only one copy of this information would remain with the lead researcher; access to identifiable information were only accessible to the lead researcher.

Steps were taken in order to protect the data from loss or theft. Data files containing identifiable information for the participants were stored in separate files on CD and stored in locked cabinets with the lead researcher. None of the data files used for analyses or reporting contained any identifiable information and all the data presented was entirely anonymous. All other data files were stored on removable computer hardware with password access. Anonymous raw data files were only viewable to the research team, namely: lead researcher, the PhD supervisory team, the Director of the SDRC and the point of contact at the CBS.

4.3 Design

The current study employed a cross-sectional survey design. The variables of interest were measured as part of the major YAS project: amended versions of the Community Attitudes towards Mental Illness (Taylor and Dear, 1981); the Opinions about Seeking Professional Help (Fischer and Turner, 1970); and the Religious Coping Styles (Pargament et al., 1988) and the Surrender Scale (Wong-McDonald and Gorsuch, 2000). All of these measures had several sub-scales, which were treated as independent variables for the purpose of analyses (please see Chapter 4 section 4.5 for further details).

4.4 Participants and Researchers

4.4.1 Participants

The sample was a stratified cluster sample and was obtained by the use of the Household Census (2004) which was updated in 2009 (CBS Syria, 2009). The sample for the whole YAS project was 1,008 for participants aged 10-29 years.

The sample in the study covered three Syrian governates as classified by the CBS: urban Damascus, urban Aleppo and Al Sweida (urban and rural). The full sample (Table 4.1) was estimated using the following calculations for household clusters (group of houses in one small area) and number of families needed to cover the three regions, desired number of participants, age group and gender distributions.

Table 4.1: Household Clusters and Number of Families in Damascus, Aleppo and Al Sweida

	Urban		Rural		Total	
	Clusters	Families	Clusters	Families	Clusters	Families
Damascus (urban)	20	400	0	0	20	400
Aleppo (urban)	20	400	0	0	20	400
Al Sweida (urban/rural)	13	260	14	280	27	540
Total	53	1060	14	280	67	1240

The sample clusters were randomly selected according to the distribution described in Table 4.1 using the SPSS program (SIMPLE_SYSTEMATIC). After that 20 families were randomly drawn from each cluster, so that each cluster included 15 families and 5 backup families, again identified using SPSS. All of the 15 (plus 5 extra) households included in the sample contained eligible respondents for the whole study; these were males and females aged 10-29 years that were members of these households.

Based on up to date data available on Syria from the CBS (2009), 39.9% of young people in Syria were aged 10-29 year olds. Table 4.2 indicates the population breakdown in the chosen governates for data collection for the full YAS project. The sample size was statistically estimated using a confidence level of 95%, as follows:

Table 4.2: Population Distribution and Sample Size by Governate and Age Group

% youth in Syria (10-29 years)	Governate	Population (all ages)	Population youth (10-29 years)	Sample size
39.9	Damascus (Urban)	1,733,000	691,467	304
	Al-Sweida (Urban & Rural)	364,000	145,236	405
	Aleppo (Urban)	4,744,000	1,892,856	299
	Total	6,841,000	2,729,559	1,008

The sample distribution over the three governates were: Damascus (30.1%); Aleppo (29.7%) and Al Sweida (40.2%). Unlike Damascus and Aleppo, for Al-Sweida data collection took place in both urban and rural areas; and the sample size was more or less equally distributed between both. Gender and age group distribution are illustrated in the Table 4.3.

Table 4.3: Distribution of Sample by Age and Gender

		Gender		Total
		Male	Female	
Age Groups	10-14	160	152	312
	15-21	168	176	344
	22-29	174	178	352
Total		502	506	1008

Overall, the response rate for the overall survey was 72%; and by comparison to other survey response rates, conducted internationally this can be considered to be a very good response rate (Groves, 2006).

For the purpose of this thesis only participants aged 15-29 years (N = 696) (highlighted in grey in Table 4.3) were included in order to meet the ethical approvals mentioned previously in section '4.2 Ethical Considerations'. There was an equal distribution of males and females and ages across all governates.

All missing data (< 1% of the total dataset) were removed from the dataset (N = 13) and final sample used for data analyses in the current study were N = 683.

4.4.2 Researchers

The current research was conducted and led by the author of this thesis. For the purpose of data collection fifteen additional interviewers were recruited from the CBS to assist with the household survey data collection. In order to put participants at ease and to encourage the sharing of potentially more sensitive information the researchers were selected from each one of the three governates so that the interviewers were part of the community of the respondents, sharing the same Arabic dialect. The lead researcher conducted data collection in Damascus. All the researchers had minimum 8 years research field experience and were recruited with the help of the CBS management. The researchers underwent thorough training prior to piloting and data collection (see Section 4.6).

4.5 Measures

The measures used in the current study were a sub-set of those used in the YAS project. The YAS research instruments included a household-level survey and an individual survey that was administered to young people. For the purpose of the current study, the following measures were used in data analyses: The Community Attitudes towards Mental Illness scale; the Opinions about Seeking Professional Help scale; the Coping Styles scale; and the Self-Reporting Questionnaire (SRQ-20).

The measures selected in the current study were chosen because they have been widely used in past research (please see Chapter's 6-9 for further background information on their use), and because some of these scales had already been adopted in Arab research (e.g. Al-Krenawi, Graham, Dean and Eltaiba, 2004). Similar to those, the current study aimed to adopt these renowned scales, and make them available in the Arabic language, to understand attitudes towards mental illness, psychological help seeking and coping style. However, even though these measures have been used in past research, the factor structure and cultural relevance has never been assessed on an Arab population. For this reason, there was interest to adopt these scales and to test their appropriateness for use in a Syrian Arab population. Further, an investigation was made to understand the relationship between the different factors proposed to relate to psychological help seeking.

The CAMI scale is a well-known scale which combines two widely used questionnaires, the Opinions about Mental Illness (OMI) scale and the Community Mental Health Ideology (CMHI) scale. The former scale has been used to investigate attitudes towards mental illness in Syria in comparison to the United Kingdom (Al-kurdi, 2011). But for the purpose of the current research it was beneficial to select a scale that measures individual acceptance or rejection of mental health sufferers in the community, as well as individual reactions to local facilities serving the needs of mental health patients. The CAMI scale captures well these two elements and for this reason the scale was adopted in the current study.

The OSPH scale has been used to document opinions on seeking psychological help internationally and within the Arab world (e.g. Al-Krenawi, 2002; Al-Krenawi and Graham, 2000). The scale measures numerous personality, interpersonal and social components that may be influential in understanding professional psychological help seeking. The scale also

measures individual beliefs about psychological treatment, social support, mental health stigma and the ability recognise negative feelings and experiences. The scale captures well opinions on seeking help and for this reason it was selected for data collection in the current study.

The coping styles scale has been widely used in contemporary studies of religious coping (e.g. Pargament, 1996, 1997; Pargament and Park, 1995; Wong-McDonald and Gorsuch, 2000). The scale was developed by one of the leading researchers in religious coping styles (Pargament, 1988) and is grounded in the prominent model of religious coping, which was further adapted and updated in 2000 (Wong-McDonald and Gorsuch). Based on the theoretical model, the scale captures well the complex and continuous process by which religion intermingles with life stressors and mental wellbeing. For this reason, the scale was selected for data collection in the current study.

Finally, the Self-Reporting Questionnaire (SRQ-20) was developed by the World Health Organization to screen for common mental disorders. The scale provides an initial indication of mental health wellbeing, and this scale has been validated in Syria and the cut-off point to indicate mental illness is known for the Syrian population (Maziak et al., 2002). For this reason, the scale was selected for data collection in the current study.

4.5.1 Demographic Data

For current data analyses only gender and age were used in multiple analyses. Only 5% of participants in the sample were not in education at the time of the survey, and a total of 20% of participants reported that they were engaged in some kind of employment (formal or informal sector).

4.5.2 Community Attitudes towards Mental Illness

The original Community Attitudes towards Mental Illness scale was developed by Taylor and Dear (1981). The original CAMI scale comprised, a total of 40-items measured on a 5-point Likert scale from 'strongly agree' to 'strongly disagree'. The CAMI is made up of four subscales: 1. Authoritarianism; 2. Benevolence; 3. Social Restrictiveness; and 4. Community Mental Health Ideology. In order to comply with the demands of the YAS project it was necessary to, wherever possible, reduce the demands placed on respondents by cutting the

number of items in the scales. The CAMI was, therefore shortened to 20 items. Please refer to Chapter 6 for full details of the process used to shorten the scale. Please Appendix 1 for a list of the CAMI scale items.

4.5.3 Opinions about Seeking Professional Help

The original Opinions about Seeking Professional Help scale (OSPH) was developed by Fischer and Turner (1970). The OSPH scale was a 29-item scale which measure opinions on a four-point Likert scale from 'Strongly agree' to 'Strongly Disagree'. The OSPH comprises four sub-scales 1. *Recognition* of the need to seek professional psychological help; 2. *Tolerance* of the stigma associated with psychological help; 3. *Interpersonal* openness regarding one's problems; 4. *Confidence* in the mental health professional. For use in the YAS survey the OSPH was shortened to 16-items. See Chapter 7 for full details on the OSPH scale used in the current study. Please Appendix 1 for a list of the OSPH scale items.

4.5.4 Coping Styles

In its original form the Coping Styles (CS) scale developed by Pargament et al. (1988), comprised 24 items measuring religious coping styles), 12 items were later added by Wong-McDonald and Gorsuch (2000). The scale measures opinions on a five-point Likert scale from 'Strongly agree' to 'Strongly Disagree'. A total of 36-items measuring four-factors of religious coping styles: 1. Self-Directing; 2. Collaborative; 3. Deferring; and 4. Surrender. For the purpose of this study the CS scale was amended and consisted of 16-items measured on a four-point Likert scale from 'Strongly agree' to 'Strongly Disagree'. Please see Chapter 8 for full details on the CS scale used in the current study. Please Appendix 1 for a list of the CS scale items.

4.5.5 General Mental Health Well-Being

The Self-Reporting Questionnaire (SRQ-20), developed by the World Health Organization to screen for common mental disorders was utilized in the current study. The SRQ-20 comprises twenty dichotomously scored questions. 'Yes' was scored as 1 and 'No' as 0. Total scores were calculated by summing the 'Yes' responses. High scores indicate high mental illness. The cut-off score of greater than or equal to 8 indicates a positive initial screening of mental illness (Maziak et al., 2002). The SRQ-20 was used as a single observed predictor variable 'Wellbeing' in the path analysis models in Chapter 9. Please Appendix 1 for a list of the SRQ-20 items.

4.5.6 Social Support

The social support measure was a combined score on three items used in the YAS 1. Do you seek help from anyone for problem solving? 2. Do you seek help from anyone for financial support? 3. Do you seek help from anyone for emotional support? The items were measured on a three-point scale, No = 1; Sometimes = 2; Yes = 3: The score on the measure was calculated by combining the scores on all three items into one overall score which was used as a single observed predictor variable called 'Social_Helpseek' in the path analysis models in Chapter 9. Please Appendix 1 for a list of the items.

4.6 Procedure

4.6.1 Survey Development

The CAMI, OSPH and CS measures were translated into Arabic using the standard back-translation technique (Breslin, 1970). The thesis author translated the instruments into Arabic from their English originals; these were then translated back into English by an independent translator unaffiliated with the study. Only small differences in translation emerged and these were resolved between the translators. The small differences found between the translators were related to simple sentence structure rather than cultural concepts, and differences were resolved by deciding on the optimal wording by combining both translator efforts. For the purpose of the thesis a total of 75-survey items were administered to participants, this accounted for approximately 15-20 minutes of structured interviewing.

4.6.2 Training of Researchers

A 5-day (8 hours per day) training programme to prepare 15 CBS research interviewers for data collection was designed by the author of the current thesis. This training focused on preparation for the field and the administration of the household survey and the YAS. The training fulfilled the following objectives and by the end of the programme researchers:

- Understood the objectives of the research project and the survey.
- Mastered the household selection and data collection methods.
- Became familiar with each survey item and any queries were attended to.
- Understood how to fill in the survey in the structured interview setting.

- Had the opportunity to demonstrate their field research skills to trainers by practicing their style of survey questioning, so that their style was perfected.
- Were given the opportunity to practice with one another in practice role plays and group exercises.

4.6.3 Piloting of the Survey

After the training was completed each researcher had the opportunity to pilot the survey with two participants selected from the list of households. A sample was recruited from the representative sample selected for the households. Each interviewer had the chance to pilot the survey with two participants, i.e. a total of two household surveys and two individual surveys. The aim of the pilot testing was to test the survey to look for feedback from participants. Feedback on the pilot were obtained from participants by the interviewers, and the author of the current thesis obtained feedback on the pilot from interviewers. Through the pilot it was made sure the translation of survey items were adequately translated and made sense in the Arabic language. It was reported by interviewers that respondents had good understanding of intended meaning of the survey questions, and did not find them complex or ambiguous or too intrusive. This with the exception of the coping styles measure, which the pilot found that some items had to be reworded and amended to suit the context and language of the Syrian context. Please see Chapter 8 'Methods' section for further details on amendments made to the coping styles scale.

While a small number of questions were repeated to some participants, overall respondents did not lose interest and the survey was simple to interview, especially for the skips and filtered sections. There were no questions that participants abstained from answering and it was felt by the interviewers that the questions were connected and flowed well in the pilot interviews. Each survey took approximately 60 minutes to complete, but sections that included the measures used in the current research only took approximately 15-20 minutes to complete.

Any issues or queries that were raised about the details of the data collection were then addressed and the survey and its methodologies were finalized. Guidelines for data collection were developed and agreed upon by interviewers to following during data collection. This

would ensure identical approaches in data collection by all interviewers, minimising any potential bias that may have affected the data collected.

1. Clear and legible answers should be written in the allotted space for each question. Information must be verified prior to entry into the survey form to avoid deletion and alteration, which might damage the form and blur the information.
2. All information must be entered during the structured interview and none should be left for office work. The coding boxes must remain blank and free of any script.
3. Full compliance with the survey's requirements and instructions, especially the set sequence of questions.
4. The general rule is to move from one question to another in a sequence, unless it is required to ask the next question or skip to another.
5. The survey has concise formulation for all questions. Researchers are not expected to paraphrase these formulations and never repeat the question unless the respondent fails to understand the question, and with minimum interpretation to avoid misleading the participant to a certain response.
6. The survey includes instructions for the researcher, these should never be conveyed to the respondents.
7. Most questions have a multiple choice structure coded in Arabic for each answer. Scores must not be disclosed to the respondent. The researcher will choose the appropriate choice based on the respondent's answer. Should the researcher find that the answer provided does not match any of the stated options, he/she must choose "other" and then specify accurately.
8. No explanation of any seemingly obscure ideas must be attempted without referring to the instructions, the supervisor or the survey management. Should the researcher be obligated to give any explanations, or deviate from the prescribed instructions, he must refer to it next to the relevant question.
9. Chosen answers must be circled; no other symbols should be used ($\sqrt{\quad}$ or X etc.). In case an option was mistakenly circled, the wrong circle must be stricken-through and the right option should be circled as shown:



4.6.4 Data Collection and Instructions to Participants

Full data collection took place in July 2011 and lasted for 14 working days. Researchers were situated in the field in pairs, one male and one female researcher, so that same gender interviews were conducted; i.e. males interviewed male participants and females interviewed female participants. Researchers were instructed to approach the household together and introduce themselves to the head of household or the adult (18 years and above) present in the household at the time of the visit. In cases where head of household or a legal adult was not present in the house at the time of visit then researchers returned to the household at an estimated time when a legal adult would be available during their visit. There was less than 1% of cases where the selected participant was not found at home due to commitments outside of the home such employment or schooling, and in those cases interviewers came back at a later time when the participant would be found at home to take part in the survey. It must be noted that, visits to the households were made during daylight hours and were made approximately 2pm onwards. This was suitable for after school hours and ensured that those who were committed to work had their afternoon siesta / lunch break period at home. Researchers presented their official identification to the head of household when obtaining consent for participation in the study. Furthermore, an official letter from the CBS outlining the legitimacy of the study, signed and stamped by the head of the CBS, was presented to participants to reassure them of the legitimacy of the study being conduct.

The researchers were instructed to inform the legal adult prior to entering the household the purpose of their visit. Researchers were asked to show their ID cards and the legal documents obtained from the CBS about the study. Once given permission to enter the premises they proceeded to do so. In cases where male researchers were not given permission to enter the household due to cultural norms practiced by some Syrians, the male researcher respected these wishes and remained outside the household until his female researcher colleague completed the survey and they were both able to move on to the next household.

Once permission was obtained to enter the household, the researchers selected and obtained consent for participation in the study for participants present at the time of interview in that household under the following criteria for structured survey interviewing:

- One young person (either male or female) in the age group 10-14 years;

- One female from the age group 15-21 years;
- One male from the age group 15-21 years;
- One female from the age group 22-29 years;
- One male from the age group 22-29 years.

In cases where consent was obtained to partake in the study but permission was not granted to conduct the interview inside the household (due to local cultural norms that restrict prolonged face-to-face interactions with strangers, especially for young females), a structured interview was conducted at the door of the household (less than 1% of interviews). Once interviews and debriefing were completed the researchers shared with participants the small incentive gifts as gratitude for their participation and cooperation in the study. They were then instructed to continue to the next household on their list for further data collection. Researchers gave themselves enough time to finish all surveys in time for the end of working day.

4.6.5 Data Entry and Cleaning

All hardcopy surveys were handed over from field researchers to the management team at the CBS for data entry. A data file was prepared by the author of this thesis in the statistical program SPSS and data entry was conducted by the team at the CBS with close supervision by the author. Data entry took approximately 14 working days. Data files were handed over to the author of the thesis and thereafter data cleaning took place. The files were prepared for data analyses and data files containing participant identifiable information were stored in a locked safe location.

Chapter 5: Approach to Statistical Analyses

The current chapter describes and explains the approach to statistics in the thesis. It outlines descriptive and inferential data analyses, and the use of Structural Equation Modelling, particularly Confirmatory Factor Analysis (CFA) and path analysis modelling.

All data analyses were conducted by the author of the thesis using SPSS version 21 for descriptive and inferential statistical analyses and AMOS version 21 for Structural Equation Modelling analyses.

5.1 Descriptive and Inferential Data Analyses

Descriptive data were derived to describe the main features of the sample and the outcome scores on the selected measures. Means and standard deviation were calculated. Spearman's Rho test of correlation were calculated between sub-scale variables. A series of independent samples t-tests were conducted to explore differences between genders and age groups on sub-scale scores. Assumption checks on the data were conducted.

5.2 Using Structural Equation Modelling

The core techniques of SEM were adopted for analyses in the current thesis. SEM refers to a group of statistical methods designed to test conceptual and theoretical models and offers extensive and flexible causal-modelling capabilities (Lowry and Gaskin, 2014). SEM comprises of several techniques including CFA, path analysis modelling, structural regression modelling, second order factor analysis and covariance structure modelling, and correlation structure modelling (Kline, 2011). For the purpose of the thesis, analyses using CFA and path analysis modelling were used to analyse data and develop models for explanations.

Path analysis modelling is a form of SEM and was used to evaluate complex multivariate hypotheses about seeking psychological help, attitudes towards mental illness and coping styles. A two-phase model-building process was used, suggested by many as the optimal approach (e.g. Leong, Hew, Ooi, and Lin, 2012; Hair, Black, Babin, and Anderson, 2010; Teo, Cheah, Leong, Hew, and Shum, 2012). The analytical process began with the CFA models and from these path analysis models were developed for testing.

5.3 Confirmatory Factor Analysis

CFA was adopted to examine how well the models fitted the sample data independently for the CAMI, OSPH and the CS scales. CFA is a statistical technique driven by the theory on the observed and unobserved variables in the measurement models. The objective of using CFA was to know the extent to which the model predicted by the original authors estimated the fit on the Syrian sample, comparing the covariance matrix to the observed covariance matrix to indicate model fit. Moreover, through CFA the scales used on the Syrian sample were assessed.

The assessment of the overall fit of the model was based on multiple criteria that reflected the meaningfulness of the model, statistical criteria (e.g. amount of variance) and practical criteria (e.g. the percentage of covariance explained by the model). The measurement models specified the relationship of the observed variables to the latent constructs; which provided a link between scores obtained on the measurement instruments and the underlying factors that they presumed to measure. Assessing the extent to which the model fitted the dataset was fundamental to CFA.

The measurement models were developed to assess the factor structure of CAMI, OSPH and CS scale separately using CFA. After assessing the factor structure for each scale, CFA models that showed poor model fit were amended for better goodness-of-fit (please Section 5.5 below on model fit indicators).

5.3.1 Model Modifications and Selection Criteria

The CFA outlined in Chapter 6-8 was used in an exploratory way to see if it was possible to produce coherent measures (Hair, Black, Babin and Anderson, 2009). In this way, modifications to the measurement models were undertaken to find a good fit. The selection criteria for modifying the CFA models were as follows:

- Using factor loadings to locate items that were weakening the scale (to start standardized loadings < .20), items were deleted to achieve the best model fit for the scale (Kline, 2011).
- After testing the model on the sample, the item which had the lowest factor loading (standardized estimates) was removed from the model.
- A new CFA was conducted.

- This process was repeated, until the best model fit was achieved.
- When the model achieved good fit as indicated by fit indices, or when further modifications to the model led to poorer model fit, model modifications were stopped and the model was accepted.

Please see Chapter 6 to 8 for further details on the CFA models developed in the thesis. Once the sub-scales for each separate scale were established from the CFA, the mean score for each sub-scale was used in the path analysis models. Please see Appendix 7, 13 and 19 for lists of items deleted and retained after CFA modifications for each of the scales.

5.4 Path Analysis Models

The CFA models outlined in Chapter's 6 to 8 were used to develop path analysis models in Chapter 9. The mean score of each sub-scale was used in path analysis models and were used in as the exogenous (person-related) variables in the models and were tested to know how they related to the endogenous variable 'Recognition' of the need to seek psychological help (cognitive help seeking).

The goal of using path analysis models was to understand: patterns of correlations; explain variations between groups within the specified model; decide on the fit of the whole model for the target Syrian population; and know pathways that were affecting the endogenous variable of the models: 'Recognition' of the need to seek psychological help. This outcome variable was used to indicate cognitive help seeking, measuring the recognition of the need to seek psychological help (Please Chapter 9 for further details).

Path analysis models were used to assess the comparative strength of different effects the exogenous predictor variables were having on the endogenous outcome variable 'Recognition' of the need to seek psychological help. While path analysis did not allow to statistically test directionality or test causation, it was possible to make informed conclusions about the hypothesized conceptual models best fits of pattern of correlations within the current data set. The hypothesised models are outlined in Section 1.3 and further in Section 9.3. Path analysis enabled the specification of the relationships between the exogenous and endogenous variables and thus arriving at a logical theory about the directional relationships between each exogenous variable and the single outcome endogenous variable. It also

permitted the examination of direct and indirect effects on the outcome variable (Lleras, 2005).

A three-stage investigation was conducted for each of the hypothesised conceptual models (please see Chapter 9 section 9.3): First, a path analyses model was estimated to assess the direct effects of predictors (exogenous variables) on 'Recognition' (endogenous variable). The path models were based on the maximum-likelihood estimators. Second, a multi-group analysis was then employed to examine whether the path coefficients for males and females were invariant. Third, gender differences were examined through gender-specific path analysis models, and through the comparison of parameters across male and female models.

5.5 Model Fit Indicators

Model fit indicators were used to assess the models in CFA and path analyses models. All missing data (< 1% of the total dataset) were removed from the dataset (Graham, 2012). SEMs were developed with raw data using AMOS to find a good fitting model.

Standard goodness-of-fit indices were selected to assess the strength and fit of the structural models (e.g. Hu and Bentler, 1999; Brown and Cudeck, 1993); all the while acknowledging that recommended cut-off values were subjective guidelines (Marsh et al., 2011; Heene, Hilbert, Draxler, Zeigler, and Bühner, 2011). Reporting a range of indices was needed as different indices reflected different aspects of the models (Crowley and Fan, 1997).

Absolute fit indices were used to determine how well the models fitted the study data (McDonald and Ho, 2002). These indices provided the most fundamental indication of how well the proposed theory fitted the data (Hooper, Coughlan and Mullen, 2008).

The Chi-Square (χ^2) value is the traditional measure for evaluating overall model fit (Hu and Bentler, 1999). A good model fit was assessed by a not significant result at a 0.05 threshold (Barrett, 2007). However, using the χ^2 as an indicator for goodness of fit for models was considered in light of some of its weakness. The test is generally sensitive to sample size, so that the χ^2 test almost always rejects the model when a large sample size, similar to the current study, is used (Bentler and Bonnet, 1980; Jöreskog and Sörbom, 1993). At the same time, employing a small sample size would usually give the χ^2 lack of power and thus it would not be able to differentiate between a good and a poor fitting model (Kenny and McCoach, 2003). Due to these restrictions alternative indices were also used to assess model fit.

The relative/normed Chi-square (χ^2/df) minimized the impact of sample size on the model χ^2 (Wheaton et al, 1977). The rule of thumb put forward and used here to indicate a good model fit was a value that ranged from 2 to 5 (Tabachnick and Fidell, 2007). Another absolute fit index used was the Goodness of Fit Index (GFI) which has been argued to be the equivalent to R^2 in multiple regression; model fit was assessed at values 0 to 1, with good model fit indicated by value closer to 1 (Blunch, 2013). The Adjusted Goodness of Fit Index (AGFI) is the same as the GFI but adjusted for the number of degrees of freedom compared with the number of parameters and again good model fit was assessed if the value was closest to 1. In some cases, AGFI had been reported as a negative value, while this is rare it is possible, and this indicates that the model fit is extremely poor.

Relative fit measures indicated the limits between which the study models could be placed between the saturated model with maximum fit and the independence models which had maximum number of constraints and minimum fit. Here, the Comparative Fit Index (CFI) measures the proportionate improvement in fit by comparing a target model with a more restricted, nested baseline model. The CFI value was assessed between 0 and 1 with a value of $> .95$ to 1 indicated very good model fit (Bentler, 1990).

Fit measures based on the non-central χ^2 distribution were also used to indicate fit of the models. The Steiger-Lind root Mean Square Error of Approximation (RMSEA) provided a correction for model complexity (90% confidence interval) whereby values less than .08 reflected relatively good-fitting models; however, values around 0.10 have been argued in the past to be accepted (Blunch, 2013). P-value (PCLOSE) was used to test the null hypotheses that RMSEA for the target population was significant at less than 0.05. Standardised parameter estimates were examined using SEM factor loadings. Recommended indications were guided by Comrey and Lee (1992): factor loadings $> .71$ = excellent; $> .63$ = very good; $> .55$ = good; $> .45$ = fair; and $> .32$ = poor.

5.6 Summary

The current thesis used structural equation modelling techniques to investigate psychological help seeking to know how it relates to attitudes towards mental illness and coping styles in the Syrian context. CFA investigations were used to assess three widely used scales in the USA on a Syrian population, namely: CAMI, OSPH and CS. Path analysis modelling was used

to investigate the relationship between mean scores on sub-scales derived in the CFA investigation. For all modelling using AMOS, goodness-of-fit indicators were used to assess and report model fits.

Chapter 6: Confirmatory Factor Analysis of the Community Attitudes towards Mental Illness Scale.

The current chapter outlines the CFA for the Community Attitudes towards Mental Illness (CAMI) scale. This chapter provides background understanding on the scale, and outlines methodology in conducting this investigation and the process in which the scale was amended for the study.

6.1 Introduction

Reactions to the mentally ill varies from society to society. Indeed, as discussed in Chapter 3, the concept of mental illness itself is not constant across time or cultures. Researchers who are concerned with improving the life outcomes of people who suffer from mental illness have argued that it is not enough to simply study mental illness as an organic disease but to also research reactions to mental illness. According to Corrigan and Watson (2002) it is important to identify attitudes to mental illness and, in particular, acceptance and tolerance. Research in the developed world has found that negative public attitudes towards persons with mental illness are an obstacle to recovery from illness and to full engagement in society (Pinfold et al., 2003). Researchers of mental ill health found that not only do patients suffer the symptoms of the illness but also stigmatisation (Schulze and Angermeyer, 2003). Stigmatising behaviours are social attitudes and deeds that have developed during socialisation and are shared by a majority of people (Link, Cullen, Struening, Shrout and Dohrenwend, 1989).

The World Health Organisation (2000; 2001; 2003; 2005; 2014) highlights the impact stigma plays in mental health treatment and recovery worldwide, as it not only impedes mental health recovery but can also result in psychiatric readmission (Chinman, Weingarten, Stayner and Davidson, 2001). International studies in America and Europe reveal that stigmatising attitudes result in negative consequences for mental health sufferers, such as social rejection and isolation (Agerbo, Byrne, Eaton and Mortensen, 2004) that diminished relationships within the family and the outside community (Perlick, et al., 2001).

As discussed in Chapter 3, research suggests that mental illness is not stigmatised as much in the Arab world as it is in other societies and that this can be explained with reference to religious values (Fabrega, 1991). However, Coker (2005) found that in the Arab world some

people distance themselves from those with mental ill health for fear of physical harm or disruption to the neighbourhood, in case the person in question transferred their disorder to the people around them. Eapen, Yunis, Zoubeidi and Sabri (2004) noted a fear that the family name would be tarnished. In the Middle-east, stigma is a reflection of practical and moral judgements about the person's ability to fulfil a given role and their moral worth (Coker, 2005).

The acceptance of mental illness and the provision of social support to sufferers is conditional on whether the symptoms expressed can be explained by the external environment (e.g. strains of marriage, unemployment) and do not have the potential to affect others around them (Weiss, Ramakrishna, and Somma, 2006; Brown et al., 2010). Such attitudes may prevent society from truly understanding the meaning of mental health and holding misconceptions about sufferers. A consequence is that sufferers may be deterred from seeking help and that barriers are created for recovering patients to be socially integrated within the community.

6.1.1 Community Attitudes towards Mental Illness

The importance of social integration has been identified as crucial in determining a good quality of life for patients and adversely affecting the likelihood of relapse. This has meant that the measurement of public attitudes toward mental illness has taken on new significance (Perlick, et al., 2001). Scales measuring community attitudes were developed to assess and predict the host community's reactions. There are two scales which are used widely in research: the Opinions about Mental Illness (OMI) scale and the Community Mental Health Ideology (CMHI) scale. These two scales were combined and adapted and used to develop the CAMI scale (Taylor and Dear, 1981).

The OMI scale was originally developed in a study investigating the attitudes of hospital personnel toward mental illness (Cohen and Struening, 1962). Since then the OMI has been widely used in a variety of populations and for a variety of purposes such as to measure opinions of medical personnel (Rahav, Struening and Andrews, 1984; Taylor, Dear and Hall, 1979). The OMI comprises five Likert sub-scales that were empirically derived from factor analysis of a pool of 100 opinion statements. The statements reflected a range of sentiments about mental illness and theoretically drew upon existing scales such as the Custodial Mental

Illness Ideology Scale (Gilbert and Levinson, 1956), the California F scale (Adorno et al. 1950) and Nunnally's (1961) Multiple Item Scale. The five OMI sub-scales are as follows: *Authoritarianism*, a set of beliefs that sufferers of mental illness are inferior to society and require coercive handling; *Benevolence*, a paternalistic, sympathetic view of sufferers based on moral and religious principles; *Mental Hygiene Ideology*, a medical model view of mental illness as an illness like any other illness; *Social Restrictiveness*, a view that mental illness is a threat to society; and *Interpersonal Etiology*, reflecting a belief that mental illness arises from life stressors.

The Community Mental Health Ideology (CMHI) scale was developed by Baker and Schulberg (1967) to measure an individual's commitment to social action within the community in the treatment of mental illness. The scale comprises 38 opinion statements expressing three different aspects of the basic ideology: *Total Population*, rather than merely those seeking psychological help; *Primary Prevention*, including efforts via environmental intervention; and *Total Community involvement* in working with a variety of community resources to assist patients.

The OMI and CMHI scales were used as the basis for the development of the CAMI scale with the following objectives: 1. Emphasizing community rather than professional attitudes toward mental illness, and 2. reducing the total number of items in the scale.

The OMI scale has been used in the past in Arab research to compare attitudes towards mental illness between British and Syrian students by Al-kurdi (2011). The OMI scale was used to measure and compare attitudes. As mentioned before, as with the CAMI scale, the OMI scale measured five underlying factors of attitudes, namely, Authoritarianism, Benevolence, Mental Hygiene Ideology, Social Restrictiveness, and Interpersonal Etiology. The findings showed that Syrian participants held more positive attitudes than British participants. For both groups of students, it was Benevolence that was scored most positively. The findings concluded that a further investigation into the cultural aspects related to attitudes need to be explored in future research. However, the appropriateness and relevance of these variables to the Arab population were not investigated and the scale was used in an etic approach to research.

Similarly, the CAMI scales has been used in past Arab research to investigate attitudes towards mental illness between psychiatric and non-psychiatric nurses in occupied Palestine by Natan, Drori and Hochman (2015). The findings showed that both groups of nurses indicated stigma towards mental illness, and the study calls for further investigations to reduce stigma for this population. Similar to Al-kurdi (2011), the research by Natan et al. (2015) adopted an etic approach to the research and did not investigate the appropriateness and relevance of the scale on the Arab population prior to data collection.

For the purpose of the current research, the CAMI scale will be adopted to investigate attitudes towards mental illness in the Syrian context. The aim in the current chapter is to investigate the scale dimensions using CFA first to find out how well the scale structure applies to the Syrian context and compare it to that of the Western context in which it was developed before going on further to investigate attitudes within the Syrian population.

6.1.2 The Original CAMI Scale

The purpose of the CAMI (Taylor and Dear, 1981) is to provide an instrument for the systematic description of community attitudes toward mental illness. Two objectives further directed the development of the CAMI scale. The first was to develop an instrument able to differentiate between individuals who accept and those who reject sufferers of mental illness in their community. The second was to develop a scale to predict and explain community reactions to local facilities serving the needs of mental health patients.

Four sub-scales make up the CAMI scale: 1. *Authoritarianism*: the need to hospitalize the mentally ill and discriminate between them and “normal” people; 2. *Benevolence*: signifying the moral responsibility of society to care for the mentally ill and the need for sympathetic and kindly attitudes towards sufferers; 3. *Social Restrictiveness*: implying the dangerousness of the mentally ill and the desire to maintain social distance; and 4. *Community Mental Health Ideology (CMHI)*: expressing the therapeutic value of the community on mental health recovery and the acceptance of the principle of deinstitutionalized care.

A total of 40-items comprise the CAMI scale, 10-items for each sub-scale (five of which were positively expressed and the others negatively worded). Items are measured on a 5-point Likert scale: strongly agree / agree / neutral / disagree / strongly disagree. A random stratified sample, by socioeconomic status, in the original study (Taylor and Dear, 1981) in the United

States was selected, based on socioeconomic status, to validate the CAMI scale; a total sample of 1,090 households was included in this study. Three of the four scales showed high reliability in the original study: *CMHI* ($\alpha = .88$), *Social Restrictiveness* ($\alpha = .80$) and *Benevolence* ($\alpha = .76$). The alpha coefficient for *Authoritarianism* ($\alpha = .68$) was lower but it is considered to be approaching acceptability (George and Mallery, 2003).

6.1.3 The aim of the Current Study

One of the important predictors of help seeking identified from past research was attitudes towards mental illness. In line with the overall aim of the thesis to adopt an etic approach to the research and to model help seeking in the Syrian context. The aim of the current chapter is to examine the CAMI scale to understand attitudes towards mental illness in the Syrian context.

The CAMI scale is an English language instrument and was developed and validated in the USA for global use. This particular scale, and the sub-scales that measure it, have been used in past Arab research. In an etic approach, the present investigation was designed to assess the 4-factor structure of the CAMI on a sample of Syrian people. This investigation will help determine the relationship between concepts being measured and the applicability and appropriateness of this scale in the Syrian Arab context. The aim is also to produce and make available for future research an Arabic translation for the CAMI, which appropriate for a Syrian population.

A CFA approach was chosen to develop a measurement model for the CAMI for later use in path analysis models which investigates psychological help seeking and its relationship with attitudes towards mental illness and coping styles.

6.2 Method

The current study was part of the YAS project. A cross-sectional survey was conducted using a stratified cluster sample of 683 participants (please see Chapter 4 for details on methodology).

6.2.1 Measures

In the current study participants completed the CAMI scale.

6.2.1.1 The Shortened CAMI Scale (CAMI-20-Syria)

For the purpose of this study the CAMI was shortened to 20-items and was translated, back-translated and administered in Arabic (Please see Chapter 4 section 4.6 for an outline on scale translation). The decision to shorten the original scale was: 1. *Contextual* – not all the statements in the CAMI were relevant to the Syrian context and it would not have been appropriate to disseminate them to a Syrian sample (e.g. “Increased spending on mental health services is a waste of tax dollars”: The Syrian pound is used rather than dollars, and tax spending on mental health services is not regulated in Syria). 2. *Pragmatic* – it was necessary to shorten the CAMI scale as it was being used in the long survey as part of the full YAS study; and 3. *Empirical* – from the factor analyses conducted by the original authors (Taylor and Dear, 1981, pg: 230-231), items, with factor scores of less than 0.4 were excluded from the scale. Please see Appendix 2 for a list of the CAMI items from the original scale, with an indication of the items selected for data collection in the current study.

Responses to all items were scored on a 5-point Likert scale ranging from ‘strongly agree’ to ‘strongly disagree’ scored from 1 to 5 for positive items and in reverse for negatively scored items. The overall sub-scale score for each participant was calculated by summing up the scores on the items for each sub-scale (ranging from a low of 5 and high of 25; mid-point 15) as follows, high scores indicated positive attitude on the sub-scale:

Authoritarianism: $\sum HE09_1, HE09_2, HE09_3, HE09_4, HE09_5$ (Original scale items: 1, 4, 5, 6, 10). High scores indicated little discrimination towards mental illness.

Benevolence: $\sum HE09_6, HE09_7, HE09_8, HE09_9, HE09_10$ ((Original scale items: 12, 14, 15, 16, 20). High scores indicated a sympathetic attitude towards mental illness.

Social Restrictiveness: $\sum HE09_11, HE09_12, HE09_13, HE09_14, HE09_15$ (Original scale items: 22, 23, 24, 28, 29). High scored indicated little fear from mental illness.

Community Mental Health Ideology: $\sum HE09_16, HE09_17, HE09_18, HE09_19, HE09_20$ (Original scale items: 32, 36, 38, 39, 40). High scores indicated openness to integrating mental illness into the community.

The list of items used in the CAMI are given in Appendix 1. The overall CAMI score (ranging from a low of 25 to a high of 100; mid-point 63) was calculated by adding up the scores of all the sub-scales – high scores indicated a more positive attitude towards mental illness.

6.3 Results

In order to assess the CAMI scale for good model fit, it was important to test the CAMI CFA model in a gradual process and test the model’s fit in different ways (please see Chapter 5 section 5.5 for further details on model fit indicators). To start, the CFA was assessed using all of the study data. To further confirm the model, the Syrian sample was tested using two randomly selected halves of the data. Tests of invariance for gender and age groups were then conducted to ensure the model fit did not vary across groups.

6.3.1 Descriptive and Inferential Findings:

Descriptive analyses were conducted on the four-factor 20-item CAMI model to indicate the means, standard deviations and differences between genders on the CAMI factors. Overall attitudes towards mental illness scores were moderate ($M = 67.1$; $S.D. = 7.3$). There were no gender differences in attitudes ($t(683) = .13$, $p = .90$). As shown in Table 6.1 the results showed that the highest mean score was found for sub-scale ‘Benevolence’ ($M = 18.5$, $S.D. = 2.3$). Mean score on the sub-scale ‘Community’ was found to be the lowest ($M = 15.5$, $S.D. = 2.9$). Please see Table 6.1 for average scores on all the sub-scales. Figure 6.1 shows the spread of the data, variations of scores in sub-scales are similar. There were a small number of outliers.

Table 6.1: Means, Standard Deviation and Independent Samples t-test of Gender Differences for CAMI Variables

	All Participants (N = 683)		Males (N = 334)		Females (N = 349)		Gender Differences		
	Mean	S.D.	Mean	S.D.	Mean	S.D.	t	df	p
Authoritarianism	15.6	2.1	15.7	2.1	15.6	2.1	0.66	681	0.51
Benevolence	18.5	2.3	18.5	2.2	18.4	2.4	0.35	681	0.73
Community Mental Health Ideology	15.5	3	15.4	3	15.6	2.9	-1.01	681	0.31
Social Restrictiveness	17.5	3.1	17.6	3	17.4	3.3	0.54	681	0.59

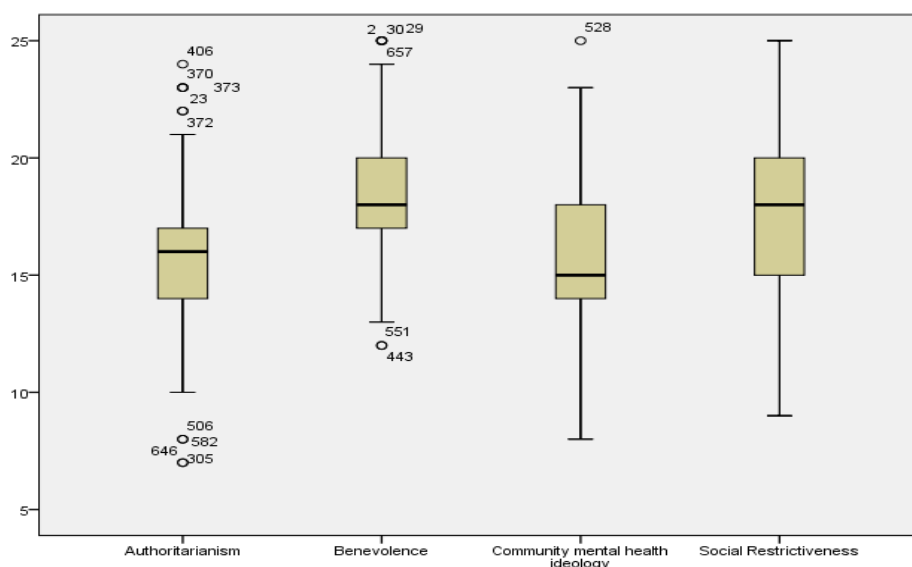


Figure 6.1: Boxplot Graph – The Spread of CAMI Sub-Scale Scores, Median

6.3.1.1 Assumption Checks

Normal Distribution

Normal distribution was assessed for the CAMI data. Kolmogorov-Smirnov (K-S) and the Shapiro-Wilk (S-W) tests were assessed and it was found that the assumption of normality has to be rejected (Boyle, Saklofske and Matthews, 2014). Appendix 3 shows the SPSS output for the tests of normality, and for both K-S and S-W the p-value is less than 0.05, hence the rejection of the normality assumption.

However, both these tests are sensitive to large sample sizes and thus cannot be used to report normal distribution accurately (Rose, Spinks and Canhoto, 2014). A rule of thumb applied by many (Field, 2013; Pallant, 2013; Rose et al., 2014; Howell, 2016) to detect normally distributed data. If the skewness value is divided by the standard error and the result is greater than ± 1.96 , it suggests that the data are normally distributed (see Appendix 3). Further, as illustrated by the histograms of the CAMI sub-scales in Appendix 4 the data appears to be normally distributed.

Internal Consistency

Internal consistency was assessed using Cronbach's Alpha, if value for the Alpha was found to be 0.7 or greater then the scale shows good internal consistency (Brace, Kemp and Snelgar, 2012). Although values between 0.3 and 0.7 can also be accepted (Boyle, Saklofske and Matthews, 2014). The CAMI was assessed and the Cronbach's alpha for the whole scale using

the Syrian data was 0.73. In assessing the internal consistency for each scale separately the findings showed that the Cronbach's Alpha for each sub-scale alone was low, particularly for Authoritarianism = 0.05 and Benevolence = 0.19. But Alpha was better for the two sub-scales Community = 0.585 and Social Restrict = 0.58.

Item Analysis

Appendix 5 shows the response distributions for the CAMI sub-scales in a 5-point Likert scale. For each statement, values closer to five would equate to strong agreement while values closer to one would equate to strong disagreement. As shown in the table, there was a higher frequency of agreement and strong agreement responses to the following items: Authoritarianism (HE09_1; HE09_4R; HE09_5R); Benevolence (HE09_6R; HE09_8R); Social Restrictiveness (HE09_14R); Community (HE09_16R). Interestingly, all of these items were items that had reversed scoring for data analyses. There was a higher frequency of disagreement and strong disagreement responses to the following items: Benevolence (HE09_9; HE09_10); Social Restrictiveness (HE09_11; HE09_15R). The remainder of responses were more or less equally distributed across the 5-point Likert scale.

6.3.2 Factor Analysis

The data were analysed by means of a principal component analysis, with direct oblimin rotation. Unlike the original CAMI structure which contains four components, a total of six components, with an eigenvalue equal to or greater than 1.0, were found. Items of the CAMI that were meant to load together, according to the original structure, did not necessarily load together under one component. In that the item loadings for the CAMI sub-scales were mixed across six components. Please see Appendix 6 for the components found by the principal component analysis, with the variables that load on them. For instance, only three of the 'Authoritarian' items load together in component 1, and the other two items load together in component 4 together with items from the 'Benevolence' and 'Social Restrict' sub-scale. Further, the six components together explain only 56.4% of the variance.

6.3.3 Confirmatory Factor Analyses

The proposed factor structure, hypothesized from previous work by Taylor and Dear (1981) is presented in Figure 6.2. From this, model fit was assessed for the sample of Syrian young people in the study. Model fit was assessed using various goodness-of-fit indicators as stated

in Section 5.5. The chi-square is always reported in the CFA analyses but the main assessment of model fit was based on other indices as reported for each model.

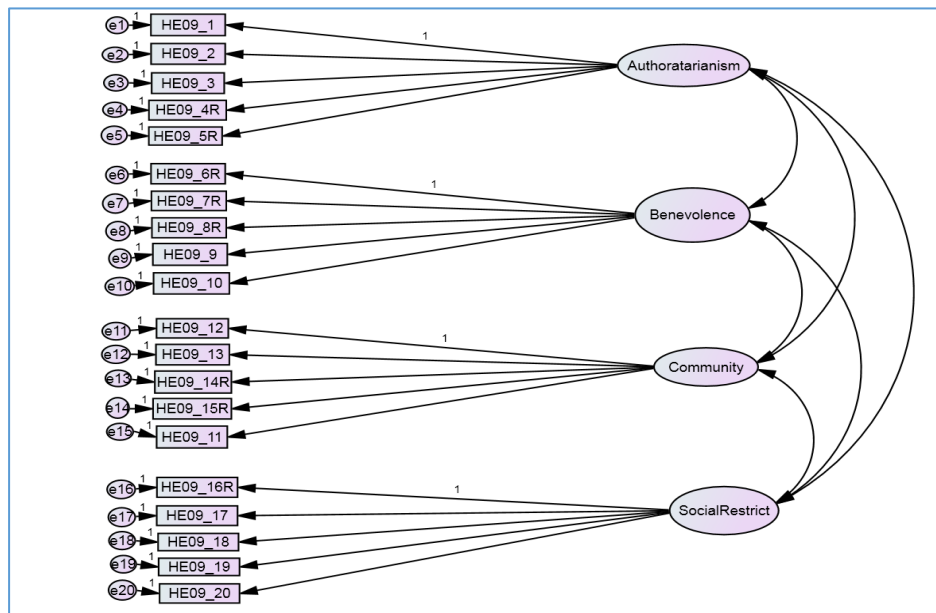


Figure 6.2: A Basic Model of the CAMI Scale in the Study

When the Syrian data was fitted to the CAMI structure, the model fit was poor for the data used in the current study $\chi^2(164, N = 683) = 1105.9, p < .005$. Other values of model fit were also poor (CMIN = 6.74; CFI = .64; GFI = .85; AGFI = .80; RMSEA = .092; PCLOSE = .00).

Modifications to the measurement model were undertaken to find a good fit. By modifying the model to achieve good fit, a good fit for the modified model was achieved. Chi-square was significant $\chi^2(16, N = 683) = 61.2, p < .005$. Other values of model fit indicated good fit to the sample data (CMIN = 3.83; CFI = .97; GFI = .98; AGFI = .95; RMSEA = .064; PCLOSE = .075). Table 6.2 shows the modifications made to the 20-item CAMI scale, to indicate how model fit was obtained.

Table 6.2: Whole Sample – Model Modifications Using Factor Loading Item Deletion

Modification	M.I/ Factor Loading	χ^2	CMIN	CFI	GFI	AGFI	RMSEA	PCLOSE
None	—	1105.9	6.743	.635	.845	.801	.092	0
Delete HE09_2	-.01	997.5	6.832	.658	.85	.805	.092	0
Delete He09_7R	-.09	871.9	6.759	.688	.858	.812	.092	0
Delete HE09_16R	.04	663.1	5.868	.749	.886	.846	.084	0
Delete HE09_14R	.1	571.6	5.833	.775	.898	.858	.084	0
Delete HE09_8R	.11	494.9	5.892	.798	.907	.868	.085	0

Delete HE09_15R	.1	454.4	6.4	.809	.909	.865	.089	0
Delete HE09_6R	.09	284.7	4.825	.878	.938	.904	.075	0
Delete HE09_4R	-.58	264.3	5.507	.875	.938	.899	.081	0
Delete HE09_5R	-.45	196.2	5.162	.903	.949	.912	.078	0
Delete HE09_1	.16	156.3	5.036	.911	.951	.916	.081	0
Delete HE09_3	0.06	139.1	5.795	.926	.957	.919	.084	0
Delete HE09_20	.41	100.4	5.907	.941	.966	.928	.085	0
e11 <--> e13	16.89	61.2	3.828	.968	.979	.953	.064	.075

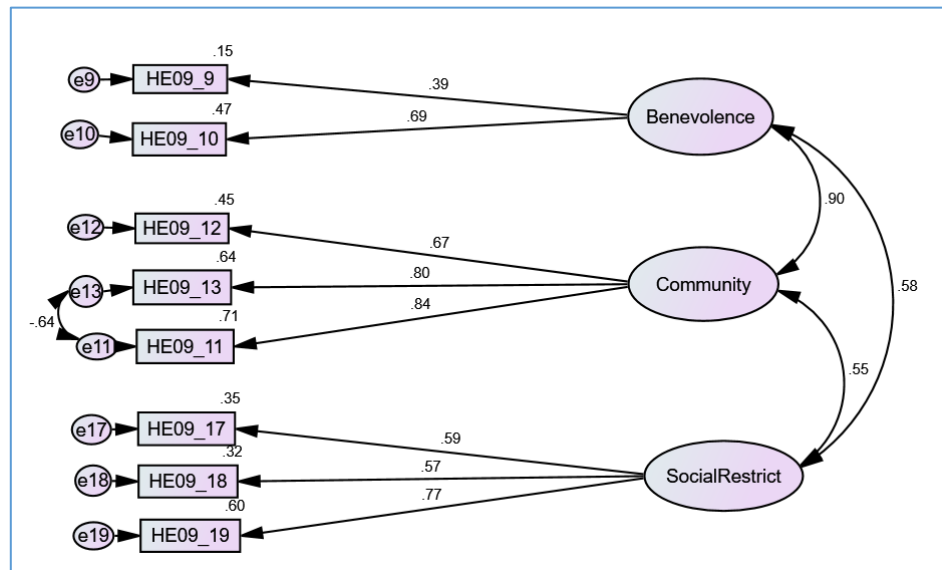


Figure 6.3: Whole Sample Data – The Standardized Estimates of the Modified CAMI Model

Figure 6.3 illustrates the best model to fit the data in the study. By eliminating the sub-scale Authoritarianism (items deleted: HE09_1; HE09_2; HE09_3; HE09_4R; HE09_5R) as well as other items in the other sub-scales as outlined in Table 6.2, a good model fit was achieved. A discussion of these modifications is made later in the ‘Discussion’ Section 6.4.

While Nunnally and Bernstein (1994) suggest that it is not desirable to maintain less than three observed variables for each latent variable, as in the modified model for sub-scale ‘Benevolence’, in retaining only two items meant that the model was identifiable to the data. Moreover, the model was accepted as it met the two-indicator rule (Blunch, 2013): 1. Every factor has at least 2 indicators; 2. No manifest variable is an indicator for more than one factor; 3. Error terms are not correlated within the factor with only two indicators; and 4. Covariance matrix for the latent variables does not contain zeros.

6.3.4 Split Half Sample

In developing a CFA model representative of the Syrian sample of young people, it was important, to determine the reliability of the data gathered and of the scale used, in order to ensure internal coherence to convey structural validity. One way to determine this was to compare findings on the CAMI scale on two samples, but because of the war in Syria it was not possible to collect additional data for group comparisons. Instead of returning to the field to determine the test reliability, the assessment here was based on the same set of data but randomly splitting the sample into two groups; each sample being treated as a different sample: Split Sample 1 (SS1, N = 342) and Split Sample 2 (SS2, N = 341).

The original 20-item model was run for SS1, and modification to achieve good model fit was conducted using the factor loading deletion. An assessment was made to determine: if after modifications: 1. the modified model was a good fit for both SS1 and SS2; and 2. the Split Sample modified model was the same as the model derived from the whole sample (see Figure 6.3).

In SPSS the sample was randomly split into two separate data files and data analyses were conducted on each split half data file separately to determine model fit. For SS1 the fit of the model was poor, in fact the model does not run. Through item deletion, a good fit for the modified model was achieved. Chi-square was significant $\chi^2(17, N = 342) = 51.9, p < .005$. Other values of model fit were good, with the exception of PCLOSE (CMIN = 3.10; CFI = .95; GFI = .96; AGFI = .92; RMSEA = .078; PCLOSE = .028). Table 6.3 shows the modifications made to the original 20-item CAMI scale, to indicate how model fit was obtained for SS1.

Table 6.3: Split Sample 1 – CAMI Model Modifications Using Factor Loading Item Deletion

Modification	Factor Loading	χ^2	CMIN	CFI	GFI	AGFI	RMSEA	PCLOSE
None	Close to 0							
Delete HE09_1	Close to 0							
Delete HE09_7R	Close to 0							
Delete HE09_3	Close to 0							
Delete HE09_2	Close to 0							
Delete HE09_14R	Close to 0							
Delete HE09_15R	Close to 0							
Delete HE09_8R	Close to 0							
Delete HE09_16R	0.04	194.3	4.047	0.824	0.91	0.854	0.095	0
Delete HE09_4R	-0.48	132.1	3.84	0.835	0.887	0.855	0.087	0
Delete HE09_5R	-0.38	94.5	2.952	0.91	0.947	0.908	0.076	0.009
Delete DE09_6R	0.09	68.2	2.841	0.934	0.957	0.919	0.074	0.028
Delete HE09_20	0.4	51.9	3.055	0.945	0.96	0.924	0.078	0.028

The modified model for SS1 was the

same as the model derived from the whole sample data as shown in Figure 6.3, except without any residual covariance. This meant that the 3-factor 8-item model was consistent for the Syrian data. Please see Figure 6.4.

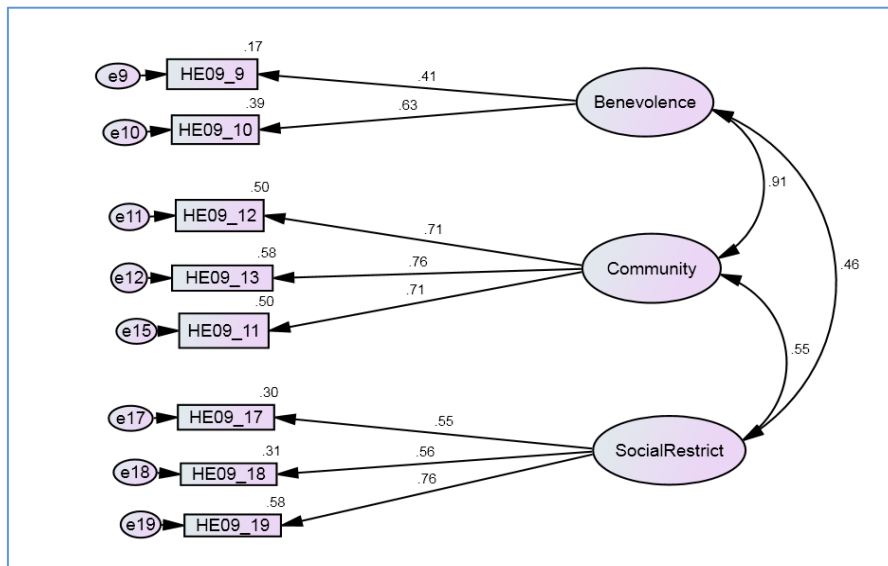


Figure 6.4: Split Sample 1 – The Standardized Estimates of the Modified CAMI Model

In running the modified SS1 model on the data for SS2, a good model fit was also achieved. Chi-square was significant $\chi^2(17, N = 341) = 65.5, p < .005$. Other values of model fit were good, with the exception of PCLOSE (CMIN = 3.85; CFI = .94; GFI = .96; AGFI = .91; RMSEA = .091; PCLOSE = .002). Figure 6.5 shows the model using the SS2 data.

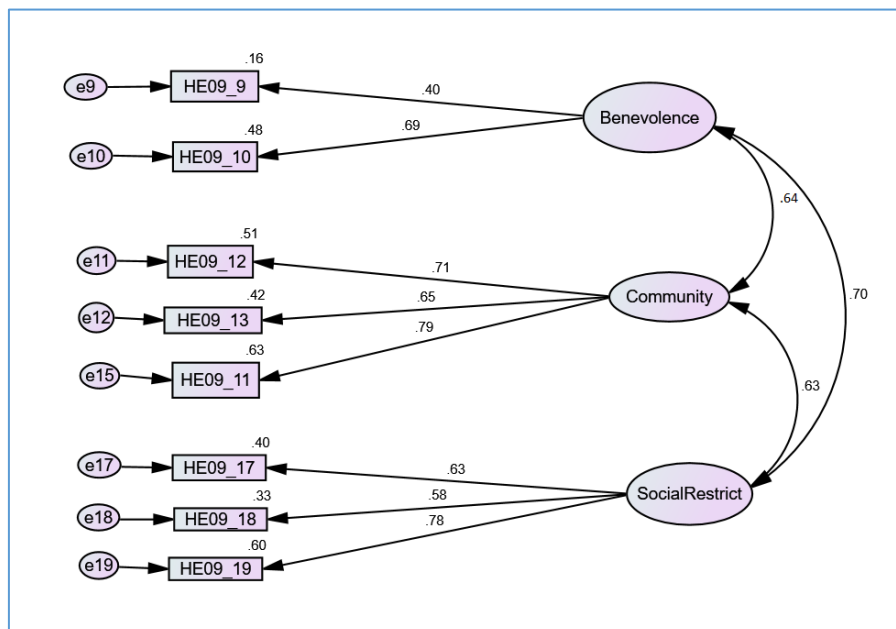


Figure 6.5: Split Sample 2 – The Standardized Estimates of the Modified CAMI Model

6.3.5 Measurement Model Invariance

Configural invariance was tested during the CFA exploration to determine whether the factor structure represented in the CFA achieved adequate fit when both groups of genders or age groups were tested together, and to find whether factor loadings were sufficiently equivalent across both groups (Meredith, 1993; Steenkamp and Baumgartner, 1998; Hortensius, 2012). If variance between groups was found, this would indicate that the composite variables were not actually measuring the same underlying latent structure. Gender and age group invariance was tested.

6.3.6 Gender Invariance

The invariance test for genders examined whether the factor structure represented in the original 20-item CFA achieved good fit when both genders were tested together. Two groups were created in AMOS (male and female) and the data was split by gender. The resultant model did not achieve good fit, $\chi^2(164, N = 683) = 1005.9, p < .005$. This indicates configural variance between the data for males and females. The CFA model was calculated for male and female samples separately, addressing the modifications to improve the model fit.

6.3.7 Male Sample

The CFA model for the male sample was developed in the same way as the model derived from the whole sample; the model (to include all twenty CAMI items) was calculated for the male sample (N = 334). The model did not run in AMOS, indicating a very poor fit. Through item deletion, a good fit for the modified model was achieved. Chi-square was significant $\chi^2(23, N = 334) = 70.4 p < .005$. Other values of model fit were good, with the exception of PCLOSE (CMIN = 3.06; CFI = .94; GFI = .96; AGFI = .92; RMSEA = .079; PCLOSE = .012). Table 6.4 shows the modifications made to the model, to indicate item deletions made to achieve a good model fit.

Table 6.4: Male Sample – CAMI Model Modifications Using Factor Loading Item Deletion

Modification	Factor Loading	χ^2	CMIN	CFI	GFI	AGFI	RMSEA	PCLOSE
None	Close to 0							<i>model did not run</i>
Delete HE09_7R	Close to 0							<i>model did not run</i>
Delete HE09_1	Close to 0							<i>model did not run</i>
Delete HE09_8R	Close to 0							<i>model did not run</i>
Delete HE09_4R	Close to 0							<i>model did not run</i>
Delete HE09_6R	Close to 0							<i>model did not run</i>
Delete HE09_14R	Close to 0							<i>model did not run</i>
Delete HE09_15R	Close to 0							<i>model did not run</i>
Delete HE09_16R	0.05	144.8	3.016	0.893	0.934	0.892	0.078	0.001
Delete HE09_5R	-0.4	116.9	3.076	0.911	0.943	0.901	0.079	0.002
Delete HE09_2	Close to 0	102.3	3.35	0.901	0.923	0.9	0.083	0.018
Delete HE09_3	0.04	90.7	3.78	0.92	0.944	0.895	0.091	0
e12 <--> e13	MI: 14.927	70.4	3.063	0.943	0.957	0.916	0.079	0.012

As with the model derived for the whole sample, similar modifications were necessary and were applied to the model derived from the male sample; with the exception of retaining the observed variable HE09_20 in the ‘Social Restriction’ latent variable and residual error covariance e12 and e13. The 3-factor 8-item model was consistent and sufficient for the Syrian data. Figure 6.6 illustrates the model of good fit for the male sample, which was somewhat similar to the previous models.

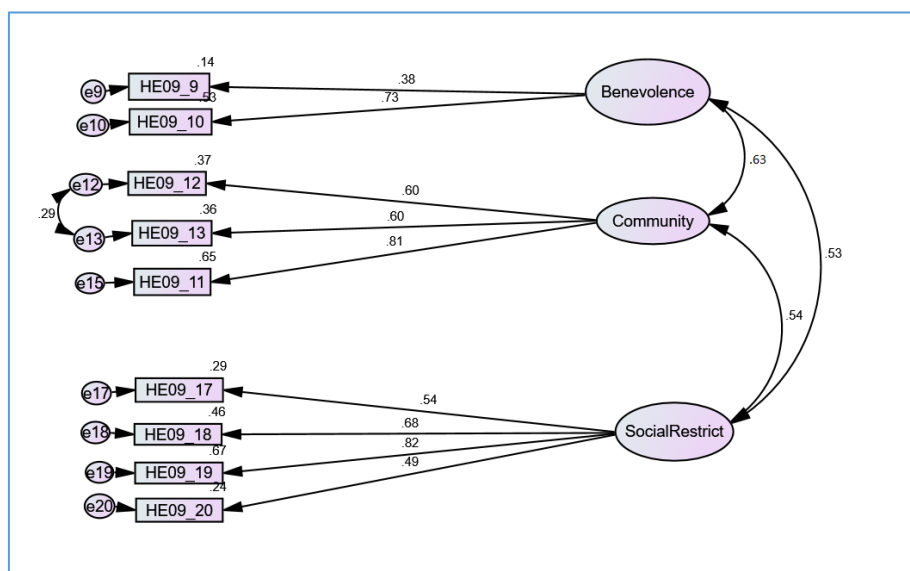


Figure 6.6: Male Sample – The Standardized Estimates of the Modified CAMI Model

6.3.8 Female Sample

The CFA model for the female sample (N = 349) was modified in the same way as the model for the male sample. It was a very poor model fit to the female sample data $\chi^2(164, N = 349) = 628.1, p < .005$. Through item deletion to modify the model for good fit, a good model was achieved. Chi-square was significant $\chi^2(16, N = 349) = 41, p < .005$. Other values showed good model fit (CMIN = 2.57; CFI = .96; GFI = .97; AGFI = .94; RMSEA = .067; PCLOSE = .12). Please see Table 6.5 for the modifications made to the full model, to indicate item deletions made to achieve a good model fit.

Table 6.5: Female Sample – CAMI Model Modifications Using Factor Loading Item Deletion

Modification	M.I/ Factor Loading	χ^2	CMIN	CFI	GFI	AGFI	RMSEA	PCLOSE
None	–	628.1	3.83	0.649	0.835	0.789	0.09	0
Delete HE09_2	-0.08	583.4	3.996	0.663	0.839	0.79	0.093	0
Delete HE09_7R	0.07	526	4.078	0.684	0.843	0.791	0.094	0
Delete HE09_14R	0.17	475	4.204	0.702	0.852	0.8	0.096	0
Delete HE09_15R	0.2	397.1	4.052	0.737	0.863	0.809	0.094	0
Delete HE09_5R	-0.71	327.7	3.901	0.755	0.876	0.823	0.091	0
Delete HE09_16R	0.15	245.7	3.46	0.811	0.904	0.859	0.084	0
Delete HE09_8R	0.18	210.7	3.572	0.83	0.91	0.862	0.86	0
Delete HE09_20	0.34	171.3	3.569	0.852	0.92	0.871	0.086	0
Delete HE09_1 (AUTH)	Close to 0				<i>model did not run</i>			
Delete HE09_3 (AUTH)	Close to 0				<i>model did not run</i>			
Delete HE09_4R (AUTH)	-0.24	94.8	3.95	0.904	0.941	0.889	0.092	0
Delete HE09_6R	0.2	67.5	3.969	0.929	0.955	0.905	0.092	0.001
e11 <--> e13	MI: 11.177	41.2	2.573	0.964	0.972	0.936	0.067	0.12

As with the model derived for the whole sample, similar modifications were necessary and were applied to the model derived for the female sample; with exception of residual error covariance e11 and e13. Figure 6.7 illustrates the model fit for the female sample.

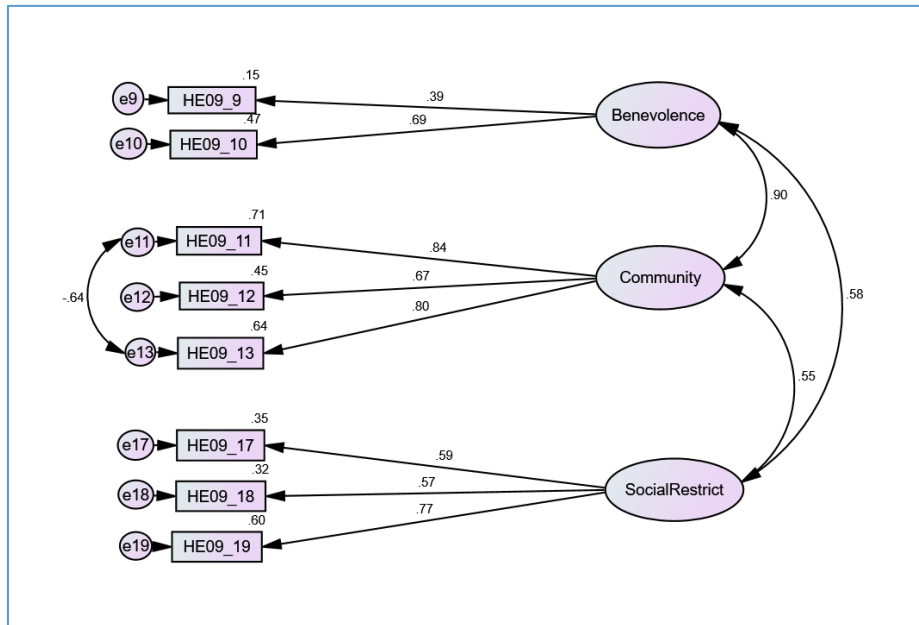


Figure 6.7: Female Sample – The Standardized Estimates of the Modified CAMI Model

6.3.9 Age group Invariance

As with the invariance test for genders, configural invariance was tested between two age groups to see whether the factor structure in the 20-item CFA achieved a good fit when tested together. Two age groups were created in AMOS (15-21 years and 22-29 years) and the data was split between these age groups. The CFA model was calculated separately, addressing the modifications to improve the model fit. Similar to the gender invariance test, the resultant model for age groups did not achieve good fit $\chi^2(164, N = 683) = 1015.8, p < .005$, indicating configural variance between the data for the different age groups. A CFA model was developed for each age group, and analyses and modification were addressed.

6.3.10 15-21 Year Olds

For the group aged 15-21 years ($N = 338$), the data showed extremely poor fit to the model, in fact the model did not run. Similar to the previous samples. Items from the model were deleted to achieve a good model fit. A good model fit was achieved. Chi-square was significant $\chi^2(16, N = 338) = 40, p < .005$. Other values of model fit were good (CMIN = 2.50; CFI = .96; GFI = .97; AGFI = .94; RMSEA = .067; PCLOSE = .131). Table 6.6 shows the modifications made, indicating item deletions made to achieve a good model fit for this age group.

Table 6.6: 15-21 Year Olds – CAMI Model Modifications Using Factor Loading Item Deletion

Modification	Factor Loading	χ^2	CMIN	CFI	GFI	AGFI	RMSEA	PCLOSE
None	Close to 0							<i>model did not run</i>
Delete HE09_1	Close to 0							<i>model did not run</i>
Delete HE09_7R	Close to 0							<i>model did not run</i>
Delete HE09_3	Close to 0							<i>model did not run</i>
Delete HE09_2	Close to 0							<i>model did not run</i>
Delete HE09_15R	Close to 0							<i>model did not run</i>
Delete HE09_14R	Close to 0							<i>model did not run</i>
Delete HE09_8R	Close to 0							<i>model did not run</i>
Delete HE09_4R	Close to 0							<i>model did not run</i>
Delete HE09_5R	Close to 0							<i>model did not run</i>
Delete HE09_6R	Close to 0							<i>model did not run</i>
Delete HE09_16R	0.05	92.3	3.847	0.903	0.941	0.889	0.092	0
Delete HE09_20	0.36	55.9	3.291	0.939	0.961	0.917	0.082	0.013
e11 <-> e13	MI: 7.398	40	2.498	0.962	0.972	0.937	0.067	0.131

Of note, the model fit for the sample of 15-21 year olds was similar to that of the previous modified models; indicating again that this modified model was best suited for the Syrian sample in the study. Please see Figure 6.8.

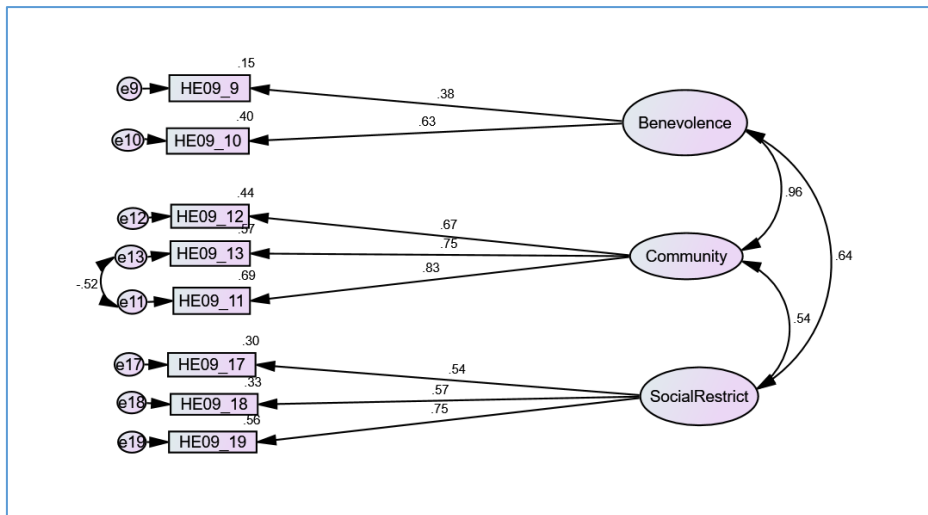


Figure 6.8: 15-21 Year Olds – The Standardized Estimates of the Modified CAMI Model

6.3.11 22-29 Year Olds

The sample data of 22-29 year olds (N = 345) did not fit the model well $\chi^2(164, N = 345) = 634.3, p < .005$. Other values of model fit were also poor (CFI = .66; CMIN = 3.87; GFI = .84; AGFI = .79; RMSEA = .091; PCLOSE = .00).

Using item deletion for better model fit, the CFA model was modified. A good model fit was achieved. Chi-square was significant $\chi^2(23, N = 345) = 64.2, p < .005$. Other values for model fit were good, with the exception of PCLOSE (CMIN = 2.79; CFI = .95; GFI = .96; AGFI = .93; RMSEA = .072; PCLOSE = .039). Table 6.7 shows the modifications made, indicating how model fit was obtained.

Table 6.7: 22-29 Year Olds – CAMI Model Modifications Using Factor Loading Item Deletion

Modification	Factor Loading	χ^2	CMIN	CFI	GFI	AGFI	RMSEA	PCLOSE
None	–	634.3	3.868	0.656	0.837	0.791	0.091	0
Delete HE09_7R	0.06	555.6	3.806	0.686	0.845	0.799	0.09	0
Delete HE09_1	0.04	525.1	4.07	0.684	0.835	0.782	0.094	0
Delete HE09_3	0.04	455.4	4.03	0.717	0.857	0.807	0.094	0
Delete HE09_14R	0.14	403.9	4.121	0.739	0.867	0.816	0.095	0
Delete HE09_8R	0.18	356	4.238	0.76	0.878	0.826	0.097	0
Delete HE09_6R	0.21	297.3	4.187	0.792	0.894	0.843	0.096	0
Delete HE09_15R	0.2	224	3.796	0.838	0.91	0.861	0.09	0
Delete HE09_4R	-1.21	179.6	3.741	0.862	0.919	0.869	0.089	0
Delete HE09_16R	0.13	133.1	3.502	0.896	0.936	0.889	0.085	0
Delete HE09_2	Close to 0			<i>model does not run</i>				
Delete HE09_5R	-0.31	85.9	3.581	0.926	0.95	0.905	0.087	0.001
e11 <--> e13	MI: 8.966	64.2	2.792	0.951	0.962	0.926	0.072	0.039

As indicated by Table 6.7, the modified model was again similar to the other modified models.

Please see Figure 6.9.

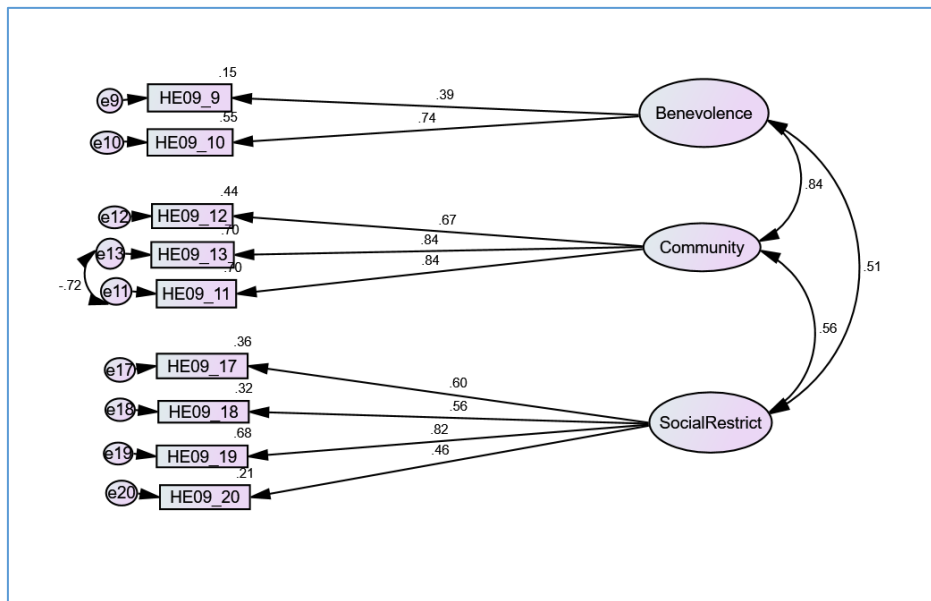


Figure 6.9: 22-29 Year Olds – The Standardized Estimates of the Modified CAMI Model

6.3.12 Common Method Bias

Common method bias (CMB) illustrates whether the dataset was biased towards some external factors, unrelated to the measure at hand. External factors were examined to determine if any responses may have inflated or deflated the results.

Several statistical techniques have been developed to control for the effect of CMB. Two particular techniques that have been used by researchers are ‘Harman single-factor test’ and ‘the marker variance technique’ (Podsakoff, MacKenzie, Lee and Podsakoff, 2003; Jarvenpaa and Maichrzak, 2008; Pavlou, Liang and Xue, 2007; Sharma, Yetton, Crawford, 2009). Unlike a second order CFA model, which looks to confirm that the hypothesized constructs load into a certain number of underlying sub-constructs (Awang, 2014), the CMB techniques help show that the findings are not affected by any bias or intervening variables that may have affected the outcome CFA models. Further, the Common Latent Factor (CLF) models are linked to all observed items (MacKenzie and Podsakoff, 2012), whereas a second order CFA model is only linked to its first order factors.

The Harman single-factor test loads all the measures into an exploratory factor analysis to detect the presence of common method variance (CMV) by the emergence of a factor that accounts for the majority of covariance amongst all the measures (Podsakoff et al., 2003). This test makes an overall assessment of the effect of CMB in the dataset for all the items in

the scale, and in the current research this included the items which were later eliminated from the final CFA models. Testing for CMB using this test started in SPSS where an Exploratory Factor Analysis (EFA) was conducted with the number of factors for extraction constrained to 1 (Podsakoff et al., 2003). To initially eliminate CMB in the data, the percentage of variance explaining this single factor needs to be less than 50%.

The marker variable technique controls for the CMV by testing the hypothesized models in a two-stage process and these were both explored in AMOS (Lindell and Whitney, 2001). First, a Common Latent Factor (CLF), a latent variable named 'common factor', was added to the hypothesized CFA model (shown in Figure 6.2). The common factor was linked to every observed item to determine the common variance among all observed items in the model, i.e. what kind of variance was commonly shared among them. The idea was to constrain paths from the common factor to the observed items so that the regression weight paths were calculated; making clear how much of the common variance was accounted for by CMB.

Second, in order to get a further accurate representation of the common variance, a marker variable 'Locus of Control' (LOC) was added; this marker variable is theoretically unrelated to any of the study measures (Lindell and Whitney, 2001; Podsakoff et al., 2003; Sharma, Yetton, Crawford, 2009). The variable LOC was assessed for construct validity before selection, and it appeared to be unrelated to all the variables explored in the current thesis. Further, LOC was not correlated with any of the items of the CAMI, OSPH or CS scales. Further, the hypothesized CFA model is run with and without the CLF variable; and the standardized regression weights are compared. A Delta/Difference (difference in regression weights with or without the CLF variable) of above 0.2 signifies that the specified paths were affected by CMB. Therefore, any variance shared with the marker variable would have then been due to common method bias.

6.3.13 The Findings from the Common Method Bias Tests

For the current study, the Harman Single-Factor test showed that 18.5% of variance in the EFA was explained by this single variable, hence no CMB evident in the CAMI items.

For the marker variable techniques, a Common Latent Factor (CLF) was added to the CFA model (shown in Figure 6.2). In the model all the regression weights were 0.26 (unstandardized estimates) and in squaring this, it was shown that only 7% of common

variance was accounted for by CMB. In adding the unrelated marker variable to the hypothesized model (shown in Figure 6.2) it appeared that the CMB decreased; the regression weight paths decreased to 0.20. This shows that only 4% of variance found in the data is due to external factors unrelated to the research, indicating that the findings of the current study are largely unaffected by external intervening factors that may have biased the outcomes of the measurement model. Further, the model (shown in Figure 6.2) was run with and without the CLF variable; the standardized regression weights were compared. Please see the Table 6.8 for delta values, where regression paths that were mostly affected by CMB were highlighted in grey.

Table 6.8: Difference in Standardised Regression Weights for the CMB – the CAMI Scale

Difference in Standardized Regression Weights			
Observed Item	Pathway	Latent Variable	Delta (Difference)
HE09_3	<---	Authoritarianism	.246
HE09_2	<---	Authoritarianism	.235
HE09_1	<---	Authoritarianism	.07
HE09_4R	<---	Authoritarianism	.165
HE09_5R	<---	Authoritarianism	.166
HE09_7R	<---	Benevolence	.277
HE09_6R	<---	Benevolence	.133
HE09_8R	<---	Benevolence	.002
HE09_9	<---	Benevolence	-.679
HE09_10	<---	Benevolence	-1.242
HE09_12	<---	Community	-.054
HE09_13	<---	Community	-.02
HE09_14R	<---	Community	-.196
HE09_15R	<---	Community	-.19
HE09_11	<---	Community	-.119
HE09_16R	<---	Social Restrict	.128
HE09_17	<---	Social Restrict	-1.176
HE09_18	<---	Social Restrict	-1.16
HE09_19	<---	Social Restrict	-1.431
HE09_20	<---	Social Restrict	-.74

As shown in the Table, there were 3 paths in the model (as shown in grey highlight) that appeared to be slightly affected by CMB. So for the latent variable 'Authoritarianism' two-fifth of its items, and for the latent variable 'Benevolence' one-fifth of its items, were affected

by CMB. This meant that if these items were to be used in structural models, the CLF should be retained. By retaining the CLF, it uses the estimates calculated with CLF in the model instead of when the model runs without this. This creates common method bias adjustment; i.e. regression weights would be adjusted for CMB in the measurement or structural model. The 3 paths in the model which appeared to be affected by CMB were some of the items excluded in the modified 8-item CAMI measurement model.

Overall, the tests explored in the current study showed that common method bias had limited effect on the CAMI items used in the current research.

6.3.14 Overall Conclusions: Optimal CAMI Measurement Model

In exploring the 20-item CAMI model using the whole sample dataset, several modifications were undertaken to achieve good model fit. Through the following investigations the modified 3-factor 8-item CAMI model, the optimal model, was derived:

- *Structural Validity and Internal Coherence of the Model*: these were determined through a random split of half of the data, where good fit of the model was found for both SS1 and SS2.
- *Configural Invariance*: the factor structures and loadings of the 8-item model were sufficiently equivalent across genders and age groups in the sample.
- *Common Method Bias*: it was illustrated that, in general, the dataset was not biased to any external factors, unrelated to the measure at hand.

The optimal model was consistent and applicable for the whole sample. The optimal model consisted of the following items:

- *Benevolence*: HE09_9 and HE09_10
- *Community*: HE09_11; HE09_12 and HE09_13
- *Social Restrictiveness*: HE09_17; HE09_18 and HE09_19

The optimal measurement model is shown in Figure 6.10. Please see Appendix 7 for the list of items included in and excluded from the final CAMI CFA model. In refining this model there was a balance between ensuring indices of good fit and avoidance of 'over-fitting' of the model. This was the CAMI model used in path analysis models to investigate the relationships between seeking psychological help, attitudes towards mental illness and coping styles later in Chapter 9.

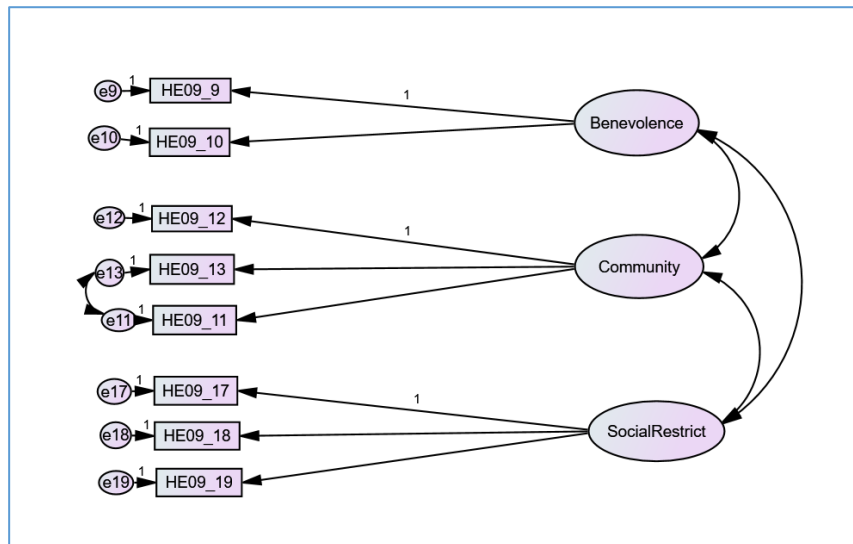


Figure 6.10: The Optimal CAMI Model in the Study

6.4 Discussion

The CAMI scale was used to investigate attitudes towards mental illness in Syria. Most positive attitudes were indicated by the sub-scale ‘benevolence’. Opinions relating to ‘benevolence’ indicate a paternalistic view towards people suffering from mental illness that arises from a moral point of view; a religious kindness toward unfortunates. People with mental health problems are seen not as failures but rather as an obligation for society to help them. It was the sub-scale ‘community’ that was most negatively scored: indicating beliefs that people suffering mental ill health are not “normal” like others in society and mental health problems are very much different to any other kind of illness.

This study was the first CFA investigation of the CAMI scale using a sample drawn from a Syrian population. The model fit was not good for the Syrian sample dataset and the internal consistency for each sub-scale was very low (see Section 6.3 Results). The EFA analyses showed that items belonging to the same sub-scale did not load together in one component. Further indicating that the scale factor structure fitted onto the Syrian data was not a good fit. But after CFA modifications to the model, it produced a better fit to the data, with some limitations.

The current study adopted an etic approach to investigating attitudes towards mental illness. In utilizing a scale developed in the USA for global use on a Syrian Arab sample, it showed that this scale was not entirely appropriate or relevant in a Syrian context. After some

modifications to the scale, the construct fitted the sample data better. A three-factor 8-item model produced excellent fit to the data based on several goodness-of-fit indicators. However, only three out of four sub-scales of the CAMI were useful for investigations involving Syrian young people. The sub-scale 'Authoritarianism' was eliminated. The retained sub-scales were: Benevolence, Social Restrictiveness and Community Mental Health Ideology. The four-factor 20-item scale used in data collection did not fit the data well for all groups in the sample based on gender and age. Modifications to the model were made and an optimal model, fit for all groups in the sample was presented (as shown in Figure 6.10).

In taking a closer look at the Syrian context, potential explanations for the findings in the current study can be put forward. In measuring community attitudes towards mental illness, distinct aspects were applicable to Syrian young people, while others were not. The sub-scale 'Authoritarianism' assumed a view that mental illness was lack of self-discipline and self-control; this sub-scale did not fit the Syrian data well and was eliminated from the optimal model. Without further research it is not possible to be sure why this is the case but one explanation is that the concepts behind this sub-scale are not relevant to the Syrian context, because of the cultural differences compared to the West, especially the USA.

One possible illustration for the cultural inappropriateness of the sub-scale 'Authoritarianism' was that in the Arab context introspection on mental illness is generally first made from a religious viewpoint rather than about personal character (Weiss, Ramakrishna, and Somma, 2006). For Arabs, mental illness is generally something prescribed in the person's destiny by God (Fabrega, 1991). Often it is believed that people suffering from mental health problems arise from a lack of faith in God ("Iman") and a weakened religiosity. The 'Authoritarianism' sub-scale may not have fit the data well because the statements may not have been entirely relevant to the Syrian sample, and as a result of cultural differences the meaning of statements may have been understood in a different way than intended by the original authors.

Another potential explanation for such finding could have been that in its original form the authors reported a relatively low alpha level for this sub-scale. Shortening the items in the sub-scale for use in the current study could have reduced the alpha level even further, resulting in a sub-scale with poor validity. Further exploration of this is much needed.

The low factor loadings for some items may in the different sub-scales have also been due to differences in interpretation of the statements between Western and Syrian cultures. For example, for the 'Benevolence' sub-scale three out of five items were removed. Two items in the optimal model to measure 'Benevolence' were retained and indicated participants' moral obligation to care for the mentally ill. But it could be that for the Syrian sample, in line with Arab culture, maintaining social distance from mental health sufferers due to mental health stigma is the social norm (Eapen et al., 2004). However, empathy and compassion, perhaps linked to religiousness, appeared to play a role in determining attitudes (Coker, 2005). This needs further exploration in future research as it is difficult to differentiate between religious and moral values rooted in culture as religion and culture are intertwined in Syria.

Two out of five items were eliminated from the sub-scale 'Social Restrictiveness', which measures people's desire to isolate sufferers of mental illness and implies their danger to the community. In the Arab context it is common to segregate sufferers from the community (Eapen et al., 2004); it is a social norm that young people have been raised with. It could be that participants expressed what occurs in their society, according to common knowledge, and hence not all the items were applicable to the Syrian culture.

Furthermore, eliminating two out of five items from the sub-scale 'Community' could have also resulted from cultural differences, whereby statements for this sub-scale may not have been measured entirely in the right context. This sub-scale looks to know whether people are accepting to mental health facilities in residential areas. In Syria people needing mental health in-care facilities are those suffering from severe mental illnesses which are often psychotic illness like Schizophrenia or severe Mania (Okasha, Karam and Okasha, 2012). Young people have been socialized with a belief that only sufferers that maintain "unmanageable" mental illnesses are admitted to one of the two psychiatric asylums that exist in Syria. It could be that participants in this survey lacked the awareness and knowledge that other common mental illnesses such as Clinical Depression or Eating Disorders may also need in-care treatment. These are illnesses which are predominantly accepted and normalized by the Arab culture and are least stigmatized (Conner et al., 2010).

In Syria, facilities for mental health care within residential areas do not exist and it is only in the last few years that more facilities were being located in Syria other than the two main psychiatric asylums; but still these were not integrated in the community. In contrast to the West, if Syrian participants have never been exposed to mental healthcare services in their community, and they do not really understand the concept of mental illness, some items measuring 'Community' would not be applicable to this sample. Statements may have been interpreted in a different way to samples in previous research conducted in the West.

While having mental health care facilities in residential areas is not a common experience for Syrians, it can still be argued that it is important to measure community attitudes towards this. Understanding how people feel about hosting mental health services within their community would be a good indicator to how well accepted these services would be, and how best to approach the matter. Future investigations into this may need to adopt an emic approach and understand from a cultural point of view the important issues surrounding the community that would make it acceptable to make available services within residential areas.

There was a covariance between two error terms (e11 and e13) for items HE09_11 and HE09_13 in some of the CAMI models reported in the current study. This shows that these two scale items have variance in common other than what is explained by the shared latent variable 'community', a variance not entirely explained or related to the latent variable. Alternatively, the error covariance could have been due to the items being similar in meaning: "People with mental illness should be isolated from the rest of the community" (HE09_11) and "I wouldn't want to live next door to someone who has been suffering from psychological problems" (HE09_13). Both these items measure the proximity of people with mental illness to the rest of the community. Further investigation into these scale items is needed to determine the reason for the error covariance.

The concept of mental illness varies between cultures, and the Arab culture may be particularly different from others (Ghuloum and Bener, 2011). It could be that the items in the survey were signifying severe mental illness, rather than problems which would be culturally normalized e.g. depressive symptoms. In Arab culture symptoms of depression and anxiety are more accepted than the more severe symptoms seen in mental illnesses like schizophrenia (Coker, 2005). So in asking the Syrian participants about the social restriction

or danger of the mentally ill, the survey could have been associated with scenarios involving those suffering more severe symptoms, rather than mental health problems in general. The survey does not make clear the difference in attitudes between “mild-moderate” mental health illness or symptoms and those which are more “severe-adverse”. In future research, scales used to assess attitudes towards mental illness need to make this differentiation clearer.

A further potential reason for a poor model fit could be that the version of the CAMI used in the current study was shortened from a 40-item scale to a 20-item scale. The construct of the CAMI may have varied as there were fewer statements measuring each sub-scale. While it is reasonable to suggest that the use of Arabic language may have given rise to a different factor structure for the CAMI, the statements were translated and back-translated from English to Arabic, and rigorous testing and piloting was conducted to ensure the statements captured the meaning in Arabic as they were in English (please see Chapter 4 particularly section 4.6).

To summarize, an etic approach to understanding attitudes towards mental illness in Syria using the CAMI scale was adopted. The findings show that this universal scale was not entirely applicable in the Syrian context. Modifications to the CAMI model were made and the model became a good fit to the Syrian sample data. The optimal CAMI model was used in the development of path analysis models in Chapter 9 which further adopt an etic approach to the research to investigate the relationship between seeking professional psychological help, attitudes towards mental illness and coping styles in Syria.

Chapter 7: Confirmatory Factor Analysis of the Opinions about Seeking Professional Help Scale.

Following the pattern established in Chapter 6, the current chapter describes and discusses the CFA for the Opinions about Seeking Psychological Help (OSPH) scale. This chapter provides background understanding on the scale, and outlines methodology in conducting this investigation and the process in which the scale was amended for the study.

7.1 Introduction

A great deal of research has focused on the correlates of mental healthcare use (seeking professional help) to understand the factors that influence this. Help seeking views and practices have been shown to vary according to age, ethno-racial groups, gender, religion and socioeconomic status (e.g. Bayer and Peay, 1997; Okasha, 1999). Female gender, younger age, divorced or separated relationship statuses have all been shown to be correlated with increased use of mental healthcare (Parslow and Jorm, 2005; Al-Krenawi and Graham, 1998, 2000). Low religiosity and low socioeconomic status have been found to be negatively associated with psychological help seeking, negative associations for the former and positive associations for the latter (Bayer and Peay, 1997; Okasha, 1999).

There is an underutilization of mental health services by Arabs in the Middle-east, measured by low number of service use, and this includes delays in care seeking and poor compliance with treatment recommendations (Douki et al., 2007). This underutilization of services has been explained, at least in part, by a lack of trained Arab mental health practitioners (Al-Krenawi, 2002). The likelihood of seeking help is also affected by gender. Research in the Arab world has shown that it is mainly men who utilize inpatient psychiatric services (Kadri and Moussaoui, 2001; Douki et al., 2007). This may be of particular concern as it appears that more Arab women suffer from adverse clinical and social outcomes than men when it comes to mental illness.

In relation to the Arab culture and social norms some explanations have been put forward (Al-krenawi et al., (2004); Al-krenawi (2009); WHO (2000)) for the gender discrepancy in service-use in the Arab world. Women are more likely to be rejected by their family if they were to need institutionalised care. However, women are usually perceived as less aggressive

than men which encourages greater family tolerance to provide care for women at home instead of in an institution. There are graver social consequences in the Arab world for women than men to consider before seeking psychiatric care, especially institutionalisation. Women are less likely to marry if they have been institutionalised and, if married, are more likely to be divorced by their husbands and lose all rights over their children (Al-Krenawi and Graham, 1998).

Attitudes towards mental illness influence opinions on seeking professional psychological help and consequently actual help seeking (Al-Krenawi, Graham, Dean and Eltaiba, 2004). One of the most common reasons for underuse of mental health services has been found to be stigma (Al-Krenawi, Graham, Kandah and Opher, 2000). In America and Europe, single women have been found to hold less positive attitudes towards seeking psychological treatment than married women, especially if the women are in an unhappy marriage. They are then the most receptive to and will consider seeking this kind of support (Komiya, Good and Sherrod, 2000). But the relationship between opinions on seeking professional help and marital status and age is dependent on the perceived need to seek psychological treatment (Al-Krenawi et al., 2004).

Cultural factors can influence openness to seeking professional help, especially in the Arab world. Seeking professional help for Arabs from mental health services can be viewed as jeopardizing prospects of marriage and tarnishing the family name (See Chapter 3 for further information). It has been found to increase the likelihood of divorce and even give men the leverage to take a second wife (Savaya and Cohen, 2005). Arab women in the Middle-east have been shown to fear the withdrawal of benefits given to them from their family, like continued education or socialising, if they seek psychological help (Al-Krenawi and Graham, 2000). This can result in negative attitudes and low desires to seeking help; treatment would be thought to negatively influence lifestyle. Moreover, using mental health services may be viewed by family and others in the Arab community as personal weakness or an inability to cope with one's own problems or breaking social laws by seeking outside help for resolving personal issues (Al-Krenawi et al., 2000). Involving a stranger in personal matters that may implicate the family are frowned upon and this is seen as an invasion of privacy and a shaming of the family in public in the Arab world (Dwairy and Sickle, 1996).

7.1.1 Opinions about Seeking Professional Help

Increasing research to measure psychological help seeking behaviours has placed focus on measuring opinions to clarify the domains or factors that influence a person's tendency to recognize and seek or resist psychological help. As discussed previously in Chapter 3, opinions and beliefs about seeking psychological help form part of the cognitive help seeking process that lead to the decision about actual help seeking (see Figure 1.1). Research on this area has much practical and useful significance to understand factors that influence the help seeking process. Attitude scales help indicate various viewpoints on seeking help which can be used to predict actual help seeking behaviours and useful in exploring the relationship of these attitudes with other explanatory variables like stigmatization.

A well-known attitude scale was developed by Fischer and Turner (1970) called the Opinions about Seeking Professional Help (OSPH) scale. This measured opinions on seeking or resisting professional psychological help during times of mental distress and emotional discomfort. The authors' theory behind the development of the OSPH scale was the desire to construct a scale that would continuously measure opinions. They wanted the scale to capture numerous personality, interpersonal and social components that may be influential in understanding professional help seeking. The developed scale measures individual beliefs about psychological treatment, social support from friends and family, mental health stigma and the ability to introspect and be open about negative feelings and experiences (admitting interpersonal difficulty).

At the time of its development two other scales were widely used in psychological research. The first by Brady, Zeller and Reznikoff, (1959) involved the measurement of attitudes towards different areas of psychiatry, using sentence completion and images. The second was a rating scale by Nunnally (1961) which measured mental health concepts to discover public attitudes towards mental health professionals and their treatment methods. However, Fischer and Turner (1970) wanted to go beyond these constructs and not only look at overall opinions on seeking help, but the factors that differentiated opinions on seeking help.

The OSPH scale has been used to document opinions on seeking psychological help internationally and within the Arab world. In a cross-cultural study of Arab students in the Middle-east using the OSPH scale in English, Al-Krenawi (2002) found that year of study, age

and marital status were significant predictors of positive attitudes towards seeking help. Younger students maintained less positive attitudes as did students with less years of study, particularly single women. The findings were thought to be related to social stigma related to mental illness and low knowledge on mental health. The implications of this study suggest that practitioners in the Middle-east should acknowledge mental illness from the perspective of the patient and their family (i.e. take an emic approach to research) in light of the culture and society which they belong to. In line with this view, Al-Krenawi and Graham (2000) argue that mental health professionals need to bridge the gap between mental health knowledge and lay beliefs on mental illness and take into consideration cultural and religious values.

In 2004, Al-krenawi et al. also utilised the OSPH scale, again in English, but this time with a sample of Muslim-Arab female undergraduate students in Jordan, the United Arab Emirates and Occupied Palestine (N = 262). The findings showed that there was not a significant difference in opinions between the Arab nationalities. It was found that year of study, marital status and age were significant predictors of positive attitudes towards seeking psychological help. Participants that were in higher years of education had more positive attitudes. Married participants and those of older ages also had more positive attitudes towards seeking psychological help. The study also revealed that participants referred to God through prayer during times of psychological distress. Al-krenawi et al., found that it is important to further research attitudes in other Arab nationalities to see if similar findings can be found.

Later in 2009, Al-krenawi et al., conducted the same study but this time in Egypt, Kuwait, Palestine and Israeli Arab communities in Occupied Palestine (N = 716) with male and female undergraduate students. Similar to before, there were no noticeable differences found between the different Arab nationalities. But there were significant differences found in attitudes between males and females, with females holding more positive attitudes towards mental illness. Further, participant opinions in terms of recognition of personal needs and mental health stigma varied across the different levels of education. They found that participants often use traditional health methods for mental health distress.

Khan (2006) conducted a cross-sectional study to describe sub-group variations in attitudes towards seeking psychological help amongst Muslims in Ohio, USA. Khan made use of the OSPH scale to describe differences in attitudes between African American, Arab, and South

Asian Muslims (N = 459). The findings indicated that all groups held positive attitudes towards seeking help. Khan found, however, that there is an unmet need in the community for mental health care as more participants underutilised services. Females more than males indicated positive attitudes towards seeking help, and older age groups help more positive attitudes. Similar to Al-krenawi et al., the study found that participants used prayer on a regular basis as a source of comfort during times of problems and distress.

In a doctoral thesis in the USA, Aloud (2004) utilised the OSPH scale to investigate factors affecting attitudes toward seeking and using formal mental health and psychological services among Arab-Muslims (N = 360) in Columbus, Ohio. The results showed that participant attitudes were affected by cultural and traditional beliefs about mental illness. Knowledge of mental illness, familiarity with professional mental health services, mental health stigma and use of informal (social) support were influential factors for opinions on seeking psychological help.

The choice to adopt the OSPH scale in the current thesis was because it has been used in the Arab context, and this research has had tremendous contribution to knowledge on Arab psychological help seeking. However, this popular scale has been used in the global sense, in that the psychometric measure was first developed and validated in the West and has since been applied in the Arab context in several research studies. It remains unclear whether the dimensions of the OSPH do indeed translate well into the Arab context, particularly the Syrian Arab one. The current research starts with the same psychometric scale used in past Arab research, namely the OSPH, to determine the application and relevance in the Arab context and produce a consistent factor structure similar to the original scale but in the Syrian Arab context. Subsequently, investigations into psychological help seeking for Syrian Arabs would be determined as better approached from the global or culture-specific sense.

7.1.2 The Original OSPH Scale

The original OSPH scale was a 29-item scale measuring opinions on a four-point Likert scale. The authors Fischer and Turner (1970) used a participatory approach to develop the statements in the scale, and arriving at the final scale took four stages. First, statements were generated in collaboration with several prominent clinical psychologists. A total of 47 statements were originally produced and accepted as items that measured general

orientations towards seeking professional psychological help. Second, the statements were judged by a panel of 14 prominent clinical and counselling psychologists and psychiatrists. Each item was rated on its relevance to orientations; negative and positive items were identified. A total of 31 negative and positive items were considered highly relevant to the scale. Third, the 31-item scale was administered to a total of 97 participants (78 high school and 19 nursing students) and item analysis showed that all the items correlated significantly with the summed attitude scores and were not affected by social desirable responding. Fourth, the scale was administered to another group of participants, this time 115 summer college students. Item analysis found that two of the items were poorly correlated with the total attitude score and were omitted from the scale.

The overall OSPH scale contained 11 positive items and 18 negative items (a total of 29 items); where negative items were reversed for scoring. In the original scale, items were scored on a 4-point Likert scale ranging from 0 to 3, and scores ranged from 0 and 87 – high scores indicated positive attitudes towards help seeking. The scores from the two rounds of testing (N = 212) were re-scored for the 29-item scale and the data was used to standardize the scale. The internal reliability of the scale was very good (N = 212, $r = .86$). The reliability estimate was later recalculated using a larger and more diverse student sample and still there was good consistency of responses within the whole scale (N = 406, $r = .83$). However, there were gender differences found in item scoring, whereby 16 out of the 29 scale items were significantly different in scores between males and females in the sample. Although females tended to endorse the items in a more favourable manner than males, both genders generally expressed positive attitudes towards help seeking.

The authors conducted a factor analysis on the 29-item scale using item responses of college and nursing students (N = 424, equal gender representation). They reported that four interpretable factors emerged: 1. '*Recognition*' of the need to seek professional psychological help (8 items); 2. '*Tolerance*' of the stigma associated with psychological help (5 items); 3. '*Interpersonal*' openness regarding one's problems (7 items); 4. '*Confidence*' in the mental health professional (9 items). The factor analysis was then performed for each gender separately to ensure that the four-factor model was adequately representing both males and females and that the inter-correlations of items were similar. This was especially important as initial item analyses showed gender differences on over half of the scale items. All factor

analyses showed the same four factor structure and that item loadings were stable and interpretable in the same manner.

The reliability estimates for the OSPH scale using Tryon's (1957) method was reported by the author's: $r = .83$. The reliability estimates for the sub-scales were reported as follows: Recognition: $r = .67$; Tolerance: $r = .70$; Interpersonal: $r = .62$; and Confidence: $r = .74$. Inter-correlations between the sub-scales were reported to be low, ranging from .25 to .35, with the exception of the sub-scales 'Recognition' and 'Confidence' which were correlated at .58. Generally, the sub-scales were reported to be reasonably independent.

The overall sub-scale score for each participant was the sum of the responses for the individual items for each sub-scale, high scores indicated a positive opinion on seeking psychological help:

Recognition: $\Sigma 4, 5, 6, 9, 18, 24, 25, 26$.

Tolerance: $\Sigma 3, 14, 20, 27, 28$.

Interpersonal: $\Sigma 7, 10, 13, 17, 21, 22, 29$.

Confidence: $\Sigma 1, 2, 8, 11, 12, 15, 16, 19, 23$.

7.1.3 The aim of the Current Study

As mentioned in earlier chapters, the overall aim of the thesis is to adopt an etic approach to the research and to model psychological help seeking in the Syrian context. Similar to Chapter 6, the aim of the current chapter is to examine the OSPH scale to understand opinions towards psychological help seeking in the Syrian context.

The OSPH scale was developed and validated in the USA for global use, and used in research in the English language. This scale has been used in Arab research, but it has not been assessed for relevance and applicability in the Syrian context. In an etic approach, the present investigation was designed to assess the 4-factor structure of the OSPH on a sample of Syrian young people. This investigation will help determine the relationship between concepts being measured and the applicability and appropriateness of this scale in the Syrian Arab context. The aim is also to produce and make available for future research an Arabic translation of the OSPH, which is appropriate for a Syrian population.

Again, a CFA approach was chosen to develop a measurement model for the OSPH for later use in path analysis models in Chapter 9, which investigates psychological help seeking and its relationship with attitudes towards mental illness and coping styles.

7.2 Method

A cross-sectional survey was conducted using a stratified cluster sample of 683 participants (please see Chapter 4 for details on methodology).

7.2.1 Measures

Participants completed the OSPH scale.

7.2.2 The Shortened OSPH Scale

For the purpose of this study the OSPH was shortened to 16-items and was translated, back-translated and administered in Arabic language (Please see Chapter 4 section 4.6 for an outline on scale translation). Please see Appendix 1 for a full list of the OSPH scale items used in the current study categorized by sub-scale.

Like with Chapter 6 the decision to shorten the original scale was contextual, deleting items such as “A person with a serious emotional disturbance would probably feel most secure in a good mental hospital”, because in the Syrian context mental hospitals are largely underdeveloped and do not cater well for mental illness and so are deemed inadequate for mental health treatment in Syria (Okasha and Okasha, 2012). Therefore, viewpoints would have been reflective of actual circumstances rather than opinions on seeking help. As with Chapter 6 the decision to shorten the OSPH scale was also pragmatic and empirical. Please see Appendix 8 for a full list of the OSPH items from the original scale, with an indication of the items selected for data collection in the current study.

The scale retained all four sub-scales: 1. *'Recognition'*; 2. *'Tolerance'*; 3. *'Interpersonal'*; and 4. *'Confidence'*. Responses to all items within the sub-scales were scored on a 4-point Likert scale ranging from 'strongly agree' to 'strongly disagree' scored from 1 to 4 for positive items and in reverse for negatively scored items. The overall sub-scale score for each participant was calculated by summing the scores on the items for each sub-scale (ranging from a low of 4 and high of 16; mid-point 10) as follows. High scores indicated positive attitudes on the sub-scale:

Recognition: \sum HE10_3, HE10_4, HE10_5, HE10_8 (original scale items: 4, 5, 6, 9). High scores indicated high recognition of the need to seek psychological help.

Tolerance: \sum HE10_2, HE10_12, HE10_14, HE10_16 (Original scale items: 3, 14, 20, 27). High scores indicated high tolerance of mental illness.

Interpersonal: \sum HE10_6, HE10_9, HE10_11, HE10_15 (Original scale items: 7, 10, 13, 21). High scores indicated high interpersonal openness towards one's problems.

Confidence: \sum HE10_1, HE10_7, HE10_10, HE10_13 (Original scale items: 2, 8, 12, 15). High scores indicated high confidence in the outcomes of psychological help seeking.

Then the overall OSPH score (ranging from 16 to 64; mid-point 40) was calculated by adding up the scores of all the sub-scales – again, high scores indicated more positive attitudes towards seeking professional help.

7.3 Results

In the same as in Chapter 6, the OSPH scale was tested in a gradual process to test model fit using CFA.

7.3.1 Descriptive and Inferential Findings

The descriptive findings were calculated for the four-factor 16-item OSPH CFA model. Overall, opinions on seeking professional help were moderate ($M = 38.9$, $S.D. = 4.3$). There were no gender differences on overall opinions on seeking professional help ($t(683) = 1.6$, $p = .12$). In looking at the various sub-scales of the OSPH, indicated in Table 7.1 the findings showed that the highest mean score was found for the sub-scale 'Tolerance' with stigma associated with psychological help ($M = 10.7$, $S.D. = 1.8$), than any of the other sub-scales. The lowest mean score was found for the sub-scale 'Interpersonal' openness regarding one's own mental health problems ($M = 8.2$, $S.D. = 1.4$). Figure 7.1 shows the spread of the data, the boxplot graph indicates that there is similar variation in sub-scale. There were a small number of outliers. There were no outliers found for Confidence. For Recognition, there were 6 (0.88%) high outliers. Similarly, for Interpersonal there were 5 (0.73%) high outliers. For Tolerance, there were 3 (0.44%) high outliers and 8 (1.17%) low outliers.

Table 7.1: Means, Standard Deviation and Independent Samples t-test of Gender Differences for OSPH Variables

	All Participants (N = 683)		Males (N = 334)		Females (N = 349)		Gender Differences		
	Mean	S.D.	Mean	S.D.	Mean	S.D.	t	df	p
Recognition	9.3	1.6	9.3	1.6	9.4	1.6	-1.24	681	0.22
Tolerance	10.7	1.8	10.7	1.9	10.7	1.7	-0.11	681	0.91
Confidence	8.2	2.1	8.2	1.4	8.3	1.5	-1.46	681	0.14
Interpersonal	10.6	1.4	10.5	2.1	10.8	2.1	-1.09	681	0.27

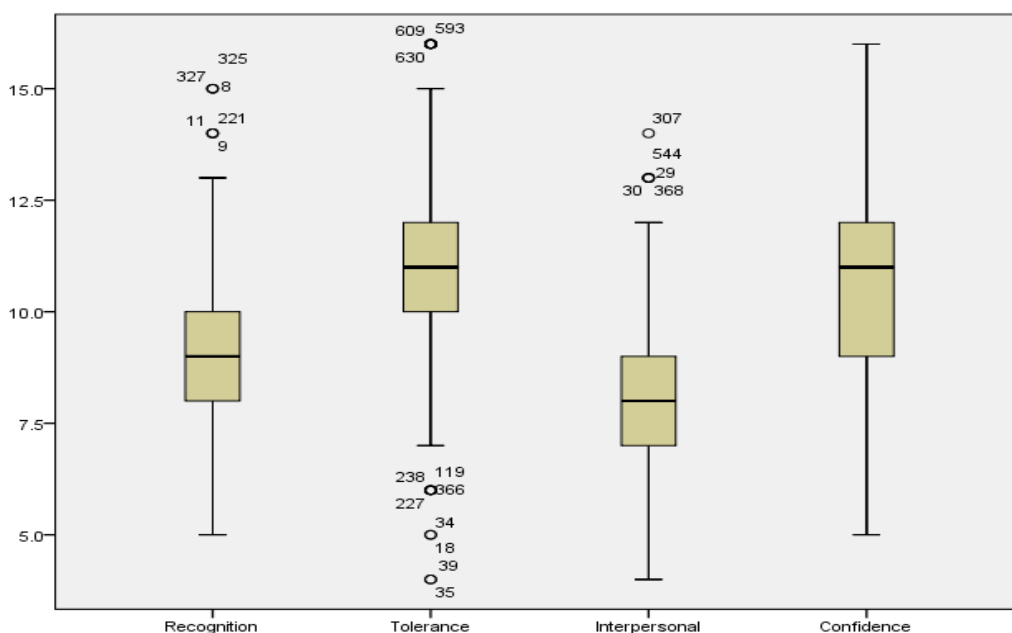


Figure 7.1: Boxplot Graph – The Spread of OSPH Sub-Scale Scores, Median

7.3.1.1 Assumption Checks

Normal Distribution

Normal distribution was assessed for the OSPH data. As with the CAMI findings, in assessing Kolmogorov-Smirnov (K-S) and the Shapiro-Wilk (S-W) tests the assumption of normality has to be rejected because the p-value for both tests was found to be less than 0.05 (please see Appendix 9). Using the same rule of thumb as in Chapter 6, the OSPH data was found to be normally distributed (please see Appendix 9 for table of normal distribution). Appendix 10 illustrates the normal distribution of the OSPH sub-scales plotted on histograms.

Internal Consistency

As with the CAMI scale in Chapter 6, internal consistency of the OSPH was assessed. The Cronbach's Alpha for the OSPH scale for Syrian data was 0.54. The Cronbach's Alpha for each sub-scale was low: Recognition = 0.18; Tolerance = 0.23; and Interpersonal = 0.06. The sub-scale 'Confidence' had a good Alpha level (0.62).

Item Analysis

Appendix 11 shows the response distributions for the OSPH sub-scales in a 4-point Likert scale. For each statement, values closer to four would equate to strong agreement while values closer to one would equate to strong disagreement. As shown in the table, there was a higher frequency of agreement and strong agreement to most of the items. There was a higher frequency of disagreement and strong disagreement responses to the following items: Tolerance (HE10_14) and Recognition (HE10_5). There was only one item (Confidence = HE10_7) that showed mixed distribution in responses.

7.3.2 Factor Analysis

Similar to Chapter 6 a factor analysis was conducted on the data. Like the original OSPH scale, four components with an eigenvalue equal to or greater than 1.0 were found. Please see Appendix 12 for the pattern matrix for the components found with the variables that load on them. As with the CAMI model, the items loaded on mixed components. Component 3 and 4 are made of only items of the sub-scale 'Tolerance'. The four components together explain only 47.9%.

7.3.3 Confirmatory Factor Analysis

The proposed factor structure, hypothesized from previous work by Fischer and Turner (1970) is presented in Figure 7.2.

When the Syrian data was fitted to the OSPH structure the model fit was poor from a statistical perspective for the data used in the current study; $\chi^2(98, N = 683) = 734.9, p < .005$ and not acceptable. Other values of model fit were also poor (CMIN = 7.50; CFI = .59; GFI = .87; AGFI = .82; RMSEA = .098; PCLOSE = .00).

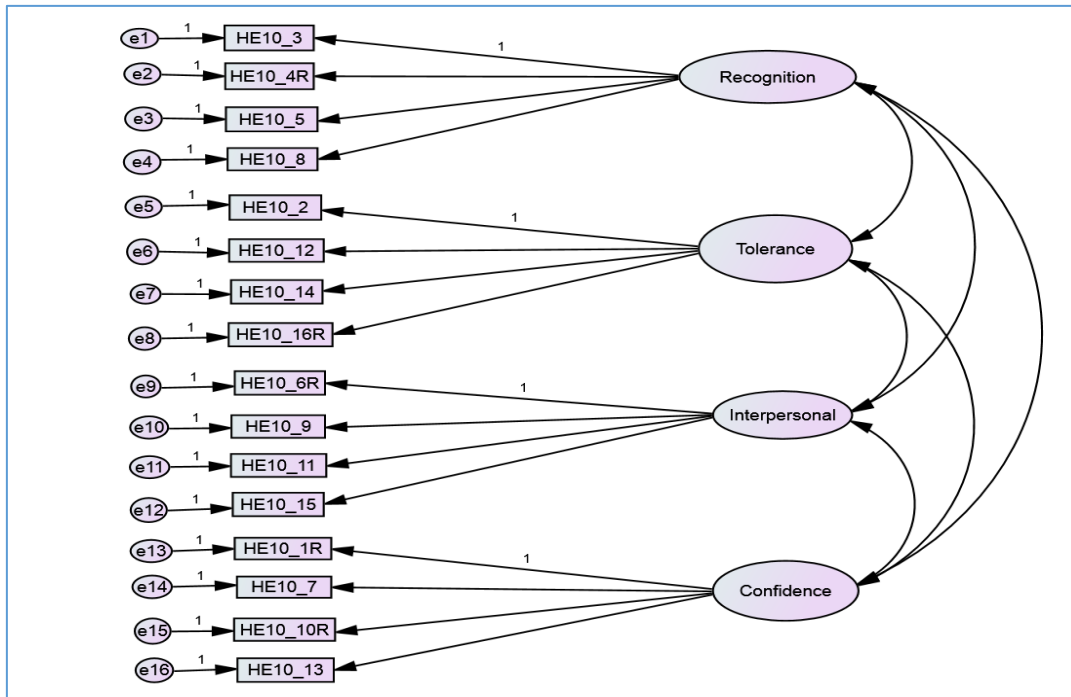


Figure 7.2: A Basic Model of the OSPH Scale in the Study

In modifying the OSPH structure for the whole sample using factor loadings, a good model fit was achieved. Chi-square was significant $\chi^2(21, N = 683) = 116.8, p < .005$. Other values showed good fit, with the exception of PCLOSE (CMIN = 5.56; CFI = .87; GFI = .97; AGFI = .93; RMSEA = .082; PCLOSE = .00). Table 7.2 shows the modifications made to the whole sample model, to indicate item deletions made to achieve a good model fit.

Table 7.2: Whole Sample – OSPH Model Modifications Using Factor Loading Item Deletion

Modification	Factor Loading	χ^2	CMIN	CFI	GFI	AGFI	RMSEA	PCLOSE
None	—	734.9	7.499	.588	.873	.824	.098	0
Delete HE10_4R	-.13	594.2	7.074	.641	.889	.841	.094	0
Delete HE10_12	.12	482.3	6.793	.688	.906	.861	.092	0
Delete HE10_16R	.1	418.5	7.093	.715	.914	.867	.095	0
Delete HE10_5	.18	317.9	6.622	.768	.929	.884	.091	0
Delete HE10_1R	.47	236.7	6.229	.801	.945	.904	.088	0
Delete HE10_13	.39	140.8	4.856	.867	.962	.928	.075	0
Delete HE10_6R	.48	116.8	5.561	.867	.965	.925	.082	0

Figure 7.3 illustrates the best model to fit the data in the study. As indicated in the model by eliminating 7 items in the scale structure but at the same time retaining all the OSPH sub-scales (latent variables), a relatively good model fit was achieved.

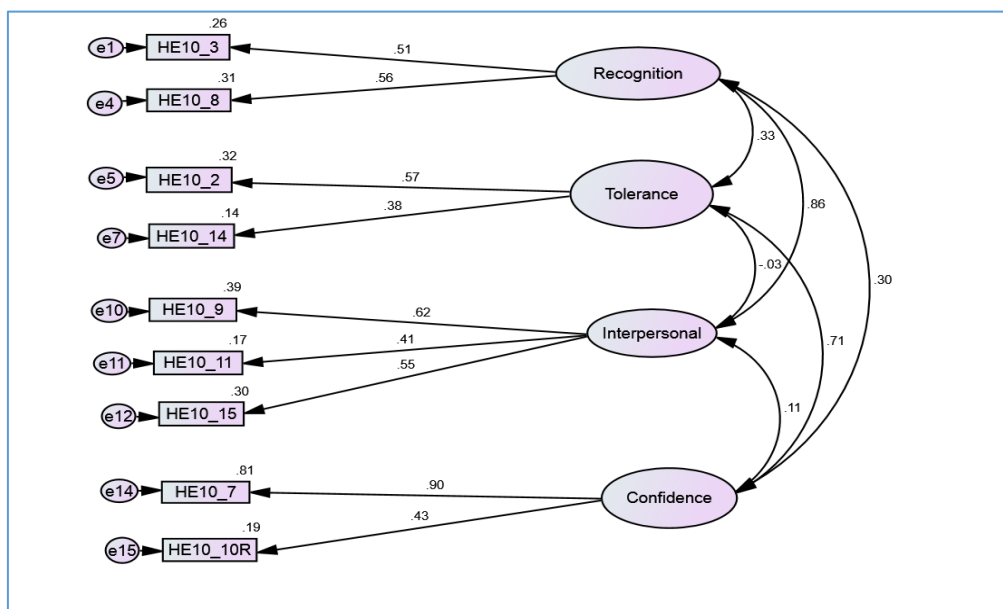


Figure 7.3: Whole Sample – The Standardized Estimates of the Modified OSPH Model

7.3.4 Split Half Sample

Similar to Chapter 6, the findings on the OSPH were compared between split sample 1 and split sample 2 to determine the reliability of the scale used.

For SS1 the fit of the model was poor $\chi^2(98, N = 342) = 427.9, p < .005$; other values showed poor model fit too (CMIN = 4.37; CFI = .58; GFI = .85; AGFI = .79; RMSEA = .10; PCLOSE = .00). Through factor loading item deletion a good model fit for the modified model was achieved. Chi-square was significant $\chi^2(21, N = 342) = 44.1, p < .005$. Other values of model fit were very good (CMIN = 2.10; CFI = .93; GFI = .97; AGFI = .94; RMSEA = .06; PCLOSE = .29). Table 7.3 shows the modifications made, to indicate how model fit was obtained for SS1.

Table 7.3: Split Sample 1 – OSPH Model Modifications Using Factor Loading Item Deletion

Modification	Factor Loading	χ^2	CMIN	CFI	GFI	AGFI	RMSEA	PCLOSE
None	—	427.9	4.37	.58	.85	.79	.1	0
HE10_16R	-.2	401	4.77	.59	.85	.79	.11	0
HE10_12	.17	361.9	5.1	.61	.86	.79	.11	0

HE10_3	.26	267.7	4.54	.68	.89	.83	.1	0
HE10_8	.17	185.7	3.87	.76	.92	.87	.09	0
HE10_13	.34	116.4	3.06	.84	.95	.91	.08	0

The modified model was somewhat similar to the modified model derived for the whole sample shown in Figure 7.3. This meant that the 4-factor model was relatively consistent for the Syrian data. Please see Figure 7.4.

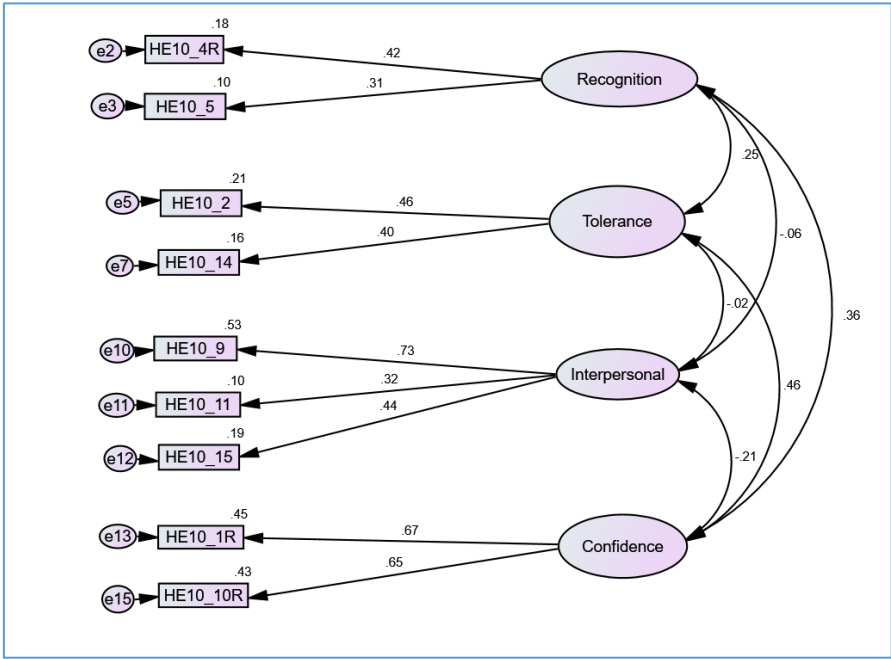


Figure 7.4: Split Sample 1 – The Standardized Estimates of the Modified OSPH Model

In running the modified SS1 model on the data for SS2, a good model fit was also achieved. Chi-square was significant $\chi^2(21, N = 341) = 72.1, p < .005$. Other values of model fit were very good, with the exception of PCLOSE (CMIN = 3.43; CFI = .84; GFI = .96; AGFI = .91; RMSEA = .084; PCLOSE = .004). Figure 7.5 shows the model fit using the SS2 data.



Figure 7.5: Split Sample 2 – The Standardized Estimates of the Modified OSPH Model

7.3.5 Measurement Model Invariance

As in Chapter 6, configural invariance was tested during the CFA exploration.

7.3.6 Gender Invariance

The resultant model did not achieve good fit $\chi^2(98, N = 683) = 734.9, p < .005$, indicating configural variance between the data for males and females. The CFA model was calculated for male and female samples separately.

7.3.7 Male Sample

For males the model fit was poor $\chi^2(98, N = 334) = 430.7, p < .005$; other values showed poor model fit (CMIN = 4.40; CFI = .58; GFI = .85; AGFI = .79; RMSEA = .10; PCLOSE = .00).

Through item deletion using factor loadings a good model fit was achieved. Chi-square was significant $\chi^2(14, N = 334) = 39.8, p < .005$. Other values of model fit were very good (CMIN = 2.84; CFI = .92; GFI = .97; AGFI = .93; RMSEA = .074; PCLOSE = .064). Table 7.4 shows the modifications made to achieve a good model fit for the male sample.

Table 7.4: Male Sample – OSPH Model Modifications Using Factor Loading Item Deletion

Modification	Factor Loading	χ^2	CMIN	CFI	GFI	AGFI	RMSEA	PCLOSE
None	–	430.7	4.395	.576	.845	.785	.101	0
HE10_4R	0	343.8	4.093	.636	.865	.807	.096	0
HE10_16R	.12	285.9	4.027	.678	.885	.83	.095	0
HE10_5	.19	236.5	4.008	.715	.896	.84	.095	0
HE10_1R	.35	182.4	3.801	.757	.914	.86	.092	0
HE10_12	.39	129.4	3.404	.811	.936	.89	.085	0
HE10_6R	.45	113.5	3.912	.805	.938	.883	.094	0
HE10_11	.39	84	3.998	.833	.949	.89	.095	0
HE10_13	.4	39.8	2.844	.915	.972	.929	.074	.064

As with the model for the whole sample, similar modifications were necessary and were applied to the model derived from the male sample; with the exception of omitting here the observed variable HE10_11 in the latent variable ‘Interpersonal’. Again, this indicated that the 4-factor OSPH model was consistent and sufficient for the Syrian data. Figure 7.6 illustrates the model for the male sample.

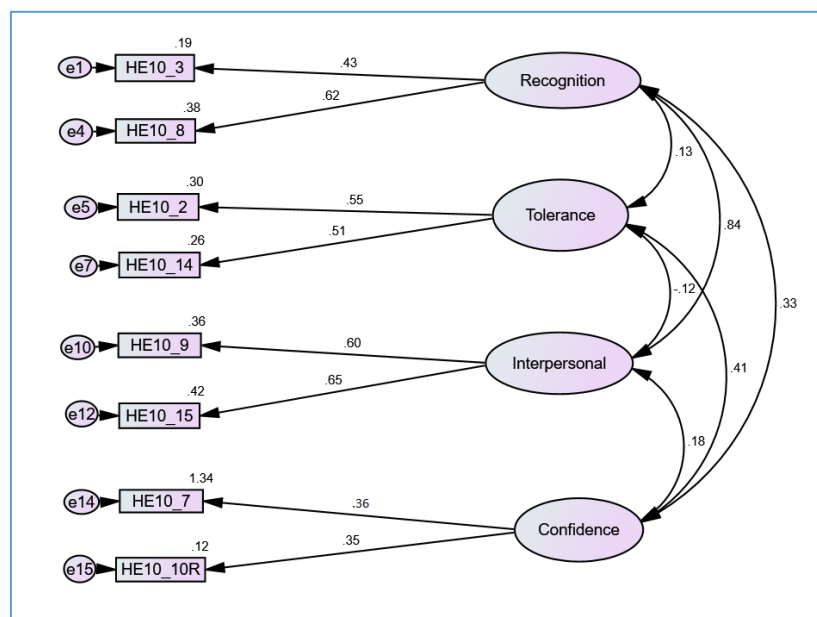


Figure 7.6: Male Sample – The Standardized Estimates of the Modified OSPH Model

7.3.8 Female Sample

The CFA model for the female sample (N = 349) was modified in the same way as the model for the male sample. The model for the female sample was a poor model fit $\chi^2(98, N = 349) =$

401.4, $p < .005$. However, through factor loading item deletion to modify the model for better model fit, a good model was achieved. Chi-square was significant $\chi^2(21, N = 349) = 64.5, p < .005$. Other values of model fit were good, with the exception of PCLOSE (CMIN = 3.07; CFI = .89; GFI = .96; AGFI = .92; RMSEA = .077; PCLOSE = .018). Please see Table 7.5 for the modifications made to achieve a good model fit for female participants.

Table 7.5: Female Sample – OSPH Model Modifications Using Factor Loading Item Deletion

Modification	Factor Loading	χ^2	CMIN	CFI	GFI	AGFI	RMSEA	PCLOSE
None	–	401.4	4.096	.615	.87	.819	.094	0
HE10_4R	.01	330.4	3.933	.664	.885	.836	.092	0
HE10_16R	0	295	4.155	.685	.889	.837	.095	0
HE10_12	-.13	242.5	4.111	.725	.904	.851	.095	0
HE10_5	.2	176.9	3.686	.788	.924	.876	.088	0
HE10_13	.35	119	3.131	.848	.944	.902	.078	.002
HE10_6R	.47	92.3	3.182	.864	.951	.908	.079	.004
HE10_11	.43	64.5	3.072	.893	.961	.917	.077	.018

Again as with the model for the male sample, the model for the female sample was similar to the previous models in the current study, with the exception here of omitting observed item HE10_11 in the latent variable ‘Interpersonal’ and retaining HE10_1R in the latent variable ‘Confidence’. Other than that, similar modifications were necessary and were applied to the model derived from the female sample. Figure 7.7 illustrates the model of fit for the female sample.

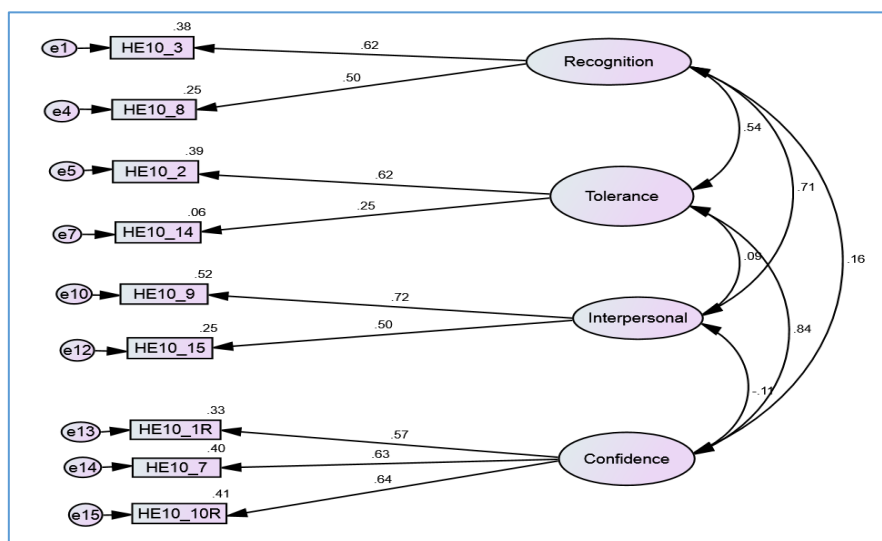


Figure 7.7: Female Sample – The Standardized Estimates of the Modified OSPH Model

7.3.9 Age Group Invariance

Configural invariance was tested in the same way as in Chapter 6. The resultant model for age groups did not achieve good fit $\chi^2(98, N = 683) = 734.9, p < .005$, indicating configural variance between the data for the different age groups.

7.3.10 15-21 Year Olds

For the group aged 15-21 years ($N = 338$), the model showed extremely poor fit to the data $\chi^2(98, N = 338) = 386.9, p < .005$, other values of fit showed poor fit (CMIN = 4.05; CFI = .62; GFI = .86; AGFI = .81; RMSEA = .095; PCLOSE = .00).

Through item deletion using factor loadings a good model fit was achieved. Chi-square was significant $\chi^2(21, N = 338) = 56.8, p < .005$. Other values of good model fit were evident (CMIN = 2.71; CFI = .90; GFI = .96; AGFI = .92; RMSEA = .071; PCLOSE = .056). Table 7.6 shows the modifications made to achieve a good model fit for this age group.

Table 7.6: 15-21 Year Olds – OSPH Model Modifications Using Factor Loading Item Deletion

Modification	Factor Loading	χ^2	CMIN	CFI	GFI	AGFI	RMSEA	PCLOSE
None	—	396.9	4.05	.619	.864	.811	.095	0
16R	.11	355.5	4.233	.641	.872	.817	.098	0
4R	.12	281.4	3.963	.696	.893	.842	.094	0
12	.15	227.6	3.857	.74	.907	.857	.092	0
5	.25	187.3	3.902	.768	.919	.869	.093	0
1R	.37	134.8	3.548	.817	.94	.896	.087	0
13	.41	72.1	2.485	.901	.96	.925	.066	.077
6R	.52	56.8	2.706	.901	.964	.923	.071	.056

The model fit for the sample of 15-21 year olds was similar to that of the previous modified models in the current study. This indicates that this modified model was best suited for the Syrian sample in the study. Please see Figure 7.8.

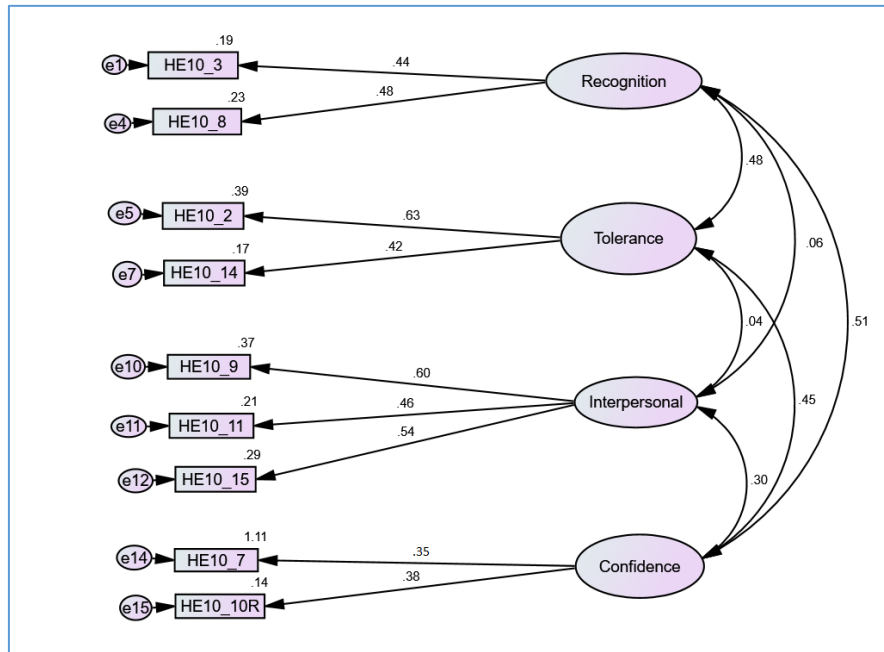


Figure 7.8: 15-21 Year Olds – The Standardized Estimates of the Modified OSPH Model

7.3.11 22-29 Year Olds

The model fit for the sample of 22-29 year olds (N = 345) was poor: $\chi^2(98, N = 345) = 448.9, p < .005$. Other values of model fit were also poor (CMIN = 4.58; CFI = .57; GFI = .86; AGFI = .80; RMSEA = .102; PCLOSE = .00).

Using factor loadings to indicate item deletion for better model fit, the CFA model was modified and a good model fit was achieved. Chi-square was significant $\chi^2(21, N = 345) = 64.4, p < .005$. Other values for model fit were good, with the exception of PCLOSE (CMIN = 3.07; CFI = .89; GFI = .96; AGFI = .92; RMSEA = .078; PCLOSE = .018). Table 7.7 shows the modifications made to achieve good model fit.

Table 7.7: 22-29 Year Olds – OSPH Model Modifications Using Factor Loading Item Deletion

Modification	Factor Loading	χ^2	CMIN	CFI	GFI	AGFI	RMSEA	PCLOSE
None	–	448.9	4.581	.57	.855	.799	.102	0
5	.02	376.5	4.482	.615	.868	.811	.101	0
12	.07	304.5	4.289	.667	.89	.838	.098	0
16R	.15	262.5	4.449	.695	.898	.843	.1	0
13	.33	200.4	4.175	.743	.917	.864	.096	0
4R	-.23	130.8	3.441	.823	.94	.895	.084	0
6R	.45	99.7	3.438	.846	.948	.902	.084	.001
11	.37	64.4	3.069	.892	.961	.917	.078	.018

As indicated, the modified model for the sample of 22-29 year olds was again similar to the other modified models in the current study. Please see Figure 7.9.



Figure 7.9: 22-29 Year Olds – The Standardized Estimates of the Modified OSPH Model

7.3.12 Common Method Bias

As in Chapter 6, some methods to test CMB were explored. For the Harman Single Factor test, the EFA showed that 17% of variance was explained by this single variable. Hence no CMB was evident because the percentage of variance explaining this single factor was less than 50%.

Similar to Chapter 6, the marker variable technique was used to assess CMB. A latent variable named 'common factor' was added to the model and was linked to every observed item (shown in Figure 7.2). In the model all the regression weights were 0.07 (unstandardized estimates) and in squaring this, it was shown that only 0.50% of common variance was accounted for by CMB.

A marker variable 'Locus of Control' was added to the model (shown in Figure 7.2). It appeared that the CMB decreased after adding the unrelated marker variable; the regression weight paths increased to 0.08, meaning that only 0.64% of the variance in the findings were due to common method variance; the findings were predominantly unaffected by factors unrelated to the research.

The model (shown in figure 7.2) was also run with and without the CLF variable; thereafter the standardized regression weights were compared. As shown in Table 7.8, there were no pathways affected by CMB, meaning that any of these items were eligible to be included in structural models in the future without needing to adjust regression weights or having to retain the CLF in testing any of the models.

Table 7.8: Difference in Standardised Regression Weights for the CMB – the OSPH Scale

Observed Item	Pathway	Latent Variable	Delta (Difference)
HE10_4R	<---	Recognition	-.04
HE10_3	<---	Recognition	.002
HE10_12	<---	Tolerance	-.006
HE10_14	<---	Tolerance	-.016
HE10_16R	<---	Tolerance	-.011
HE10_9	<---	Interpersonal	.011
HE10_15	<---	Interpersonal	.009
HE10_10R	<---	Confidence	-.005
HE10_13	<---	Confidence	-.017
HE10_8	<---	Recognition	.007
HE10_5	<---	Recognition	-.033
HE10_2	<---	Tolerance	.003
HE10_6R	<---	Interpersonal	.02
HE10_11	<---	Interpersonal	0
HE10_1R	<---	Confidence	-.007
HE10_7	<---	Confidence	-.007

Overall, the tests explored in the current study showed that common method bias had no effect on the OSPH items used in the current research.

7.3.13 Overall Conclusion: Optimal OSPH Measurement Model

In exploring the 16-item OSPH model using the whole sample data, a modified 9-item model was derived, consisting of the following items:

- *Recognition*: HE010_3 and HE010_8
- *Tolerance*: HE010_2; HE010_14
- *Interpersonal*: HE010_9; HE010_11 and HE010_15
- *Confidence*: HE10_7 and HE10_10R

As with Chapter 6, the optimal model was arrived at through various investigations that confirmed: structural validity and internal coherence of the model; the factor structure across genders and age groups and the dataset was not biased to any external factors, unrelated to the OSPH measure. It was made sure that the modified model was consistent and applicable for the whole data set.

The 4-factor 9-item measurement model shown in Figure 7.10. Please see Appendix 13 for the list of items included in and excluded from the final OSPH CFA model. In refining this model, there was a balance between ensuring indices of good fit, and so ‘over-fitting’ the model was avoided.

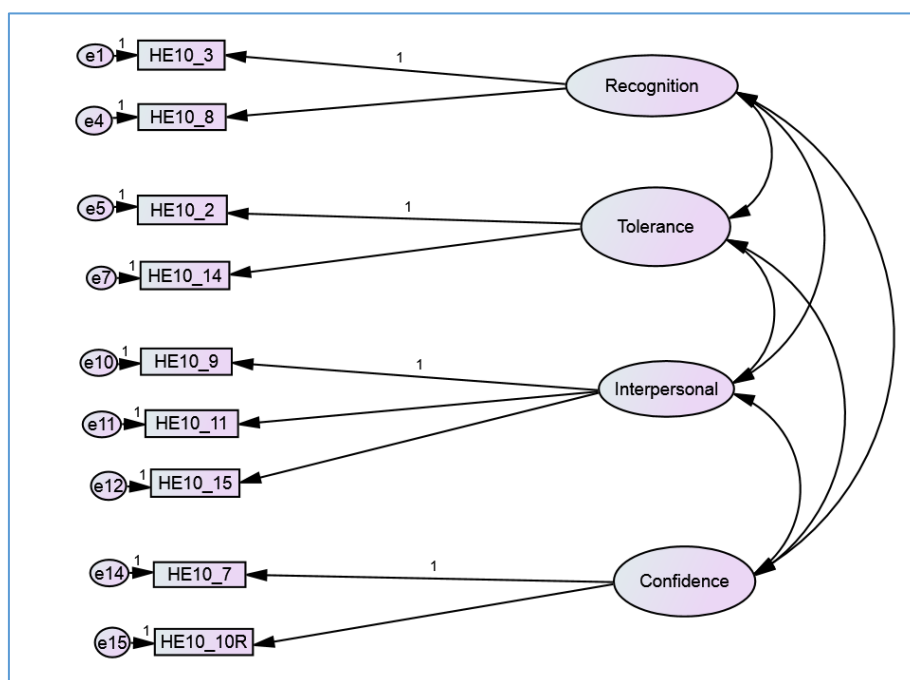


Figure 7.10: The Optimal OSPH Model in the Study

7.4 Discussion

The current study is a confirmatory factor analytic investigation of the OSPH scale in a sample drawn from a Syrian population. The model fit was not good for the Syrian sample data but the modified model produced a better fit. Based on several goodness-of-fit indicators the results showed that a four-factor 9-item model produced excellent fit to the data.

Similar to the original study by Fischer and Turner (1970) there were gender differences on items in the OSPH scale. An important finding was that for the Syrian sample there was also significant differences in items between age groups.

The current study adopted an etic approach to investigating opinions towards seeking psychological help. In utilizing a scale developed in the USA for global use on a Syrian Arab sample, it showed that this scale was not entirely appropriate or relevant in the Syrian context. The four-factor 16-item model did not fit the data well for all groups based on genders and age and the internal consistency for the sub-scales used was very low (see Section 7.3 Results). The EFA analyses for the OSPH scale yielded similar results to Chapter 6. While the same number of components were found to the original scale, namely four components. Items belonging to the same sub-scale did not load together in one component and items were mixed in their factorial loadings. In applying CFA modifications to the model when running it for each group of genders and ages separately, a good model fit to the data was obtained. The optimal model adopted in the study (as shown in Figure 7.10) had good internal consistency. The mean scores on the retained factors were later used in path analysis models in Chapter 9.

A total of 11 items were omitted from the scale and only 9 items spread over four-factors were a good fit to the Syrian sample data. This suggested that in measuring opinions about seeking psychological help not all elements of the scale were relevant and applicable to Syrian young people. In taking a closer look at the Syrian context, potential explanations for the findings in the current study became clear.

For the sub-scale 'Recognition' two items were omitted and two items were retained in the final measurement model. Item HE10_4 was omitted as it was not a good fit for the Syrian data: "There are times when I have felt completely lost, and would have welcomed professional advice for a personal or emotional problem". It could be that this item was not culturally relevant in this context because this statement connotes feelings of despair and losing the way forward. In Syrian culture when someone has feelings of despair or needs guidance then it is mostly common that they resort to seeking guidance from God and from religion to find the path forward (El-Azayem and Zari, 1994). Furthermore, in cases where people are having grave problems and find no ways out then Syrians would generally seek

help from someone of authority in their life like the head of household or a community leader (Sherer, 2007). Seeking the help from a professional is generally an alien concept in this culture (Latzer et al., 2008).

Item HE10_5 from the 'Recognition' sub-scale was also omitted: "Considering the time and expense involved in psychotherapy, it would have doubtful value for a person like me". Responses to this statement could not have been relevant for the purpose of the scale, namely, whether someone is open to seeking psychological help and whether they believe it has any "value." This is because, in Syria, psychotherapy is very expensive and rarely affordable, especially when related to standards of living and income (Okasha, Karam, Okasha, 2012). Moreover, in Syria, due to the scarcity of psychotherapists, it would be very time consuming for someone to commute to seek their help, assuming they could locate one.

For the sub-scale 'Tolerance' two items were also omitted from the final OSPH model. Item HE10_12 was omitted: "Having been a psychiatric patient is a blot on a person's life". If someone became a psychiatric patient in Syria, they would be hospitalized in one of the two psychiatric hospitals which remains psychiatric asylums. People who are hospitalized in such places are usually with very severe cases of mental illness, deemed untreatable and where they generally have no family or have family which have disowned them. So if someone is a psychiatric patient in Syria then this is genuinely "a blot on a person's life" and alone in a place of questionable safety and standards of treatment.

Due to the poor reputation these asylums maintain amongst society there is much stigma associated in receiving care in such facilities and generally people who engage there are shunned out of society and rejected from common social interactions like marriage, child bearing and even employment (Al-krenawi et al., 2009). The statistical poor fit of this item could be because of its relevance to the Syrian situation.

Item HE10_16 from the 'Tolerance' sub-scale was also omitted: "Had I received treatment in a mental hospital, I would not feel that it ought to be covered up". The notion of concealing hospitalization in a mental hospital in Syria is likely to be very different to that in Western countries like the USA, where the original scale was developed. As mentioned, seeking treatment in a mental hospital carries with it a lot of risk in terms of negative familial and public attitudes and this has led to grave stigma and rejection of those who do seek this kind

of help in Syria (Okasha, 1996). In the Syrian context, concealing hospitalization history is a matter of survival in a society that is unfamiliar with and afraid of mental health treatment, especially like that offered in the psychiatric asylums. Revealing one's history of hospitalization will most probably resort to hostile reactions from others in the community and outright social rejection. Moreover, it is seen as tarnishing the family name and reputation and people wishing to openly reveal their history of hospitalization may run the risk of their family keeping them locked up in these asylums for fear of anyone finding out.

Only one item was omitted from sub-scale 'Interpersonal' (HE10_6R): "I would willingly confide intimate matters to an appropriate person if I thought it might help me or a member of my family". The problematic issue with this item could be the concept of revealing "intimate matters" to another person. This could connote to matters of sexual or personal nature, which are fundamentally frowned upon in Syrian society, or implying sensitive familial problems like parental marital problems or domestic violence, which are rarely exposed outside of the home (Dwairy and Sickle, 1996). Sharing intimate details with others is viewed as an invasion of privacy and a betrayal of the family name and honour. In some parts of Syria people believe that it is unorthodox or not Islamic to reveal intimate details about yourself or others to anyone and people are taught to be reserved so not to "shame" themselves or their family. Therefore, the relevance of this statement to the Syrian context is questionable and the cultural factors may have had a role in deeming this item statistically not a good fit for the Syrian sample.

For the sub-scale 'Confidence' a total of two items were omitted and the other two items were retained. Item HE10_1 was omitted from the final OSPH model: "If a good friend asked my advice about a mental problem, I might recommend that he see a psychiatrist". The problematic issue of this statement is with the concept of recommending a psychiatrist, a foreign concept to most in Syria. As mentioned, mental health specialists are not readily available in Syria as they are in the West, where people can access them through General Practitioners, educational institutions and so on. So for Syrian people, recommending a psychiatrist is not the first point of call to make when discussing help seeking to a friend. In Syria there are several sources of help that one can seek that are appropriate with the social culture. People commonly seek the help of their family, friends, religious leaders, community

leaders, teachers and God (Okasha, 1999; Tishby et al., 2001). Thus, recommending to see a psychiatrist is not part of the culture and it is plausible that this item is not applicable to the Syrian context.

Item HE10_13 from the 'Confidence' scale was also omitted: "I would rather be advised by a close friend than by a psychologist, even for an emotional problem". The issue with this statement is that it asks participants to compare the help seeking of a close friend to a psychologist, and these two sources are not necessarily close in comparison in the Syrian context. Seeking help from a close friend would be better likened to seeking help from a family member (Grinstein-Weiss et al., 2005). Seeking the help from a mental health professional would commonly be the last resort. Furthermore, advising someone to seek the help from a mental health specialist can be seen as indirectly telling someone they are "crazy" or in the Arabic term "majnoon". In this social context people generally are very sensitive to another's opinion even if it is a close friend, and connoting that someone is not well mentally carries with it a great deal of cultural taboo.

The OSPH scale was developed in context to the American Western culture, which is highly different to the Syrian culture. In line with an emic approach to research it can be argued that a scale to measure opinions on seeking professional help needs to be developed in view of the cultural and social factors of that target population. Kleinman (1978); Hwang, Myers, Abe-Kim and Ting (2008) noted that the social meanings of mental illness and the way in which difficulties are communicated or expressed are different across cultures. It can therefore be thought that the OSPH scale as a whole does not take into account the dynamics of help seeking in the Syrian culture and does not accurately determine opinions on psychological help seeking in reference to other help seeking options available there.

The OSPH scale does not account for differing help seeking methods and does not determine participants' order of preference in a hierarchy of help seeking. If it did then this would help determine opinions on psychological help seeking in contrast to common culturally appropriate help seeking methods. Identifying the degree to which opinions are positive or negative would be more informative in this context than asking participants to express their preferences.

The scale does not take into consideration religious orientations or beliefs in mental health help seeking. Many of the items make reference to feelings of desperation or confusion and the need for support and advice; for the Syrian context people resort to God or religious healing. In future, items in the scale could be modified to determine the extent to which participants would be willing to seek psychological help if they have exhausted all avenues of social and religious support.

The OSPH used in the current study was shortened from a 29-item scale to a 16-item scale. The construct of the OSPH may have been affected as there were fewer statements measuring each sub-scale and then translated into the Arabic language. It is reasonable to suggest that the use of Arabic language may have given rise to a different factor structure for the OSPH. However, like with the CAMI scale, the statements were translated and back-translated from English to Arabic, and rigorous testing and piloting were conducted to ensure that the statements captured the correct meanings in Arabic as they are in English.

To summarize, an etic approach to understanding opinions about seeking professional psychological help in Syria using the OSPH scale was adopted. The findings show that this universal scale is not entirely applicable in the Syrian context. Modifications to the OSPH model were made and the model became a good fit to the Syrian sample data. This optimal OSPH model developed was used in the development of path analysis models in Chapter 9 which further adopt an etic approach to the research to investigate the relationship between seeking professional psychological help, attitudes towards mental illness and coping styles in Syria.

Chapter 8: Confirmatory Factor Analysis of the Coping Styles Scale.

Similar to Chapter 6 and 7, the current chapter outlines the CFA for the Coping Styles (CS) scale. This chapter provides background understanding on the scale, and outlines methodology in conducting this investigation and the process in which the scale was amended for the study.

8.1 Introduction

The way in which people perceive, interpret and deal with events in their life is thought to play an important part of understanding mental well-being and recovery (Spilka and McIntosh, 1995). Butt and Katz (1988) defined coping as an effort made in response to stressful stimuli. They argue that efforts to deal with the experience have the aim of reducing anxiety. Katz, Ritvo, Irvine and Jackson (1996) suggested that another definition is an individual's cognitive and behavioural efforts to manage stress.

Differing definitions on coping have been put forward because it is common in literature to find that researchers have used different terms to refer to the same coping strategies (Falkum, Olff and Aasland, 1997). Coping structures and taxonomies often differ from sample to sample (Dunkel-Schetter, Feinstein and Falke, 1992). Coping instruments have many psychometric inadequacies so no one coping strategy is exclusively the correct one (Folkman, 1992). For the purpose of this study coping refers to an individual's cognitive and behavioural efforts to manage life stress and problems (Roesch and Weiner, 2001).

Research on coping with life stressors has been focused around three major classifications of coping approaches. The first is a basic classification of coping that makes a distinction between two strategies of coping that lie on opposite sides of a continuum: approach coping (active, attention) versus avoidance coping (passive, withdrawal) (Smith, Wallston, Dwyer and Dowdy, 1997). This theory argues that an individual facing a problem or a stressful life event will either actively deal with the stress to overcome it or will avoid the problem as a way to deal with and manage it (Krohne, 1993).

A second classification commonly found in the literature was originally proposed by Holohan and Moos (1987) and later updated by Moos and Schaefer (1993). This approach is a broader more integrative approach that brings together the basic classification of coping (approach,

avoidance) with a method of coping which has two approaches: a cognitive (change in one's perceptions and thoughts on problematic or stressful events) and a behavioural (actively dealing with the problem or stress). In bringing in the two kinds of classifications the authors came up with four coping strategies: 1. *Cognitive Approach*: coping strategies that give attention to and cognitive restructuring of the problem or stressful situation to find positive aspects of the situation; 2. *Behavioural Approach*: seeking help and support so that action can be taken to cope with the problem or stress; 3. *Cognitive Avoidance*: coping strategies that deny or pay less attention to the problem or stress; 4. *Behavioural Avoidance*: strategies that seek alternative rewards and resigned acceptance to the problem or stressful situation.

A third suggested classification is one which seeks to either alter the stressful event or problem or to reduce the stressful emotional reaction raised by the situation itself. Originally put forward by Lazarus and Folkman (1984), and later developed further by Smith, Wallston, Dwyer and Dowdy (1997), it is proposed that coping can be classified in two ways: 1. *Problem-focused coping*: an active change of one's environment to alter the source of stress. Sub-types of this coping include planning, seeking social support and active coping. 2. *Specific emotion-focused coping*: an attempt to reduce the negative emotions related to the problem or stress in order to cope. Sub-types of this coping include acknowledging and understanding the problem and finding ways to express emotions as well as positive reappraisal or reinterpretation of the problem and seeking emotional social support.

The adoption of differing coping styles depends on individual preference, where one of the most influential factors for choice of strategy is social environment and culture (Amirkhan and Auyeung, 2007). Social support (informal help from family, friends or others close to the person) has been shown to help people cope with stress and operate like a buffer against life stressors (McCorkle et al., 2008) and serves as a protective factor against negative events (Friedlander, Reid, Shupak, and Cribbie, 2007). In the Middle-east, social support from family and friends is readily available. In fact, societies in the Arab world operate in a context of high support and acceptance of others, especially the family. There are unspoken agreements for the family and community to provide social support to one another especially in times of distress (Dwairy and Sickle, 1996). Therefore, social support is not only available to Arabs but it is prescribed as part of Arab culture, particularly authoritative response to individual decision-making.

In the Arab world most Arabs are Muslims, with the second most dominant religion being Christianity (The Levant Ethnic Composition, 2014). Arabs live in a society where they are required to abide by traditional laws governed by norms of the society that are predominantly based on religious teachings, 'Sharía' and scripture. Therefore, religion is central to and intertwined with social norms and culture in the Arab world (Moughrabi, 1978; Okasha, 1999). Mainstream religions like Islam and Christianity encourage individuals to turn to God and strengthen their religious beliefs in difficult times. Hardship is reinterpreted to give meaning and purpose as there is a belief that God has a plan for everyone. Individuals are encouraged from a young age by their family and religious and community leaders to seek solace in God in times of distress and to practice religious rituals to cope with and overcome problems.

In more recent years there has been a renewed interest in the study of religion within the discipline of psychology. Tsang and McCullough (2003) focused on the impact of religion on mental health in various populations. The subject has generated much debate amongst researchers as to whether religion has a positive constructive or a detrimental effect on mental well-being (Maltby and Day, 2003), in that whether religion adequately helps people overcome distress or acts as a barrier to adequate help seeking for mental illness. Growing research on religion and spirituality has found links with positive mental well-being (Koenig and Larson, 2001), with specific links to religion and depression (Braam et al., 1998), anxiety (Taylor, 2002), and self-esteem (Commerford and Reznikoff, 1996). There is a huge body of research that attempts to identify the role of religion in coping with issues of loss like death and failure (e.g. Pargament, 1997).

8.1.1 Religious Coping Styles

One perspective used in contemporary studies of the psychology of religion is the model of religious coping styles (Pargament, 1996; Pargament and Park, 1995). Pargament (1990) argued that by addressing the complex and continuous process by which religion intermingles with an individual's life and empowers them to deal with life's stressors, the relationship between religiosity and mental well-being would be better clarified. The appraisals and strategies used by individuals in the face of stressful situations have been studied by psychologists (Carver, Scheier and Weintraub, 1989). Research into coping strategies demonstrated a distinction between individuals who adopt strategies designed to reduce the negative emotions related to the stressor 'emotion-focused coping' and those who adopt

coping strategies that entail direct action to tackle the stressor 'problem-focused coping' (Lazarus and Folkman, 1984).

Pargament (1997) extends coping theory by proposing that religion is integral to the coping process in a number of ways, firstly in terms of using religious coping to appraise the cause of stressful events; secondly using religious coping to cope with the actual stressful events, and thirdly using religious coping to come to terms with distress e.g. accept critical life events. Religious coping therefore, describes the way in which an individual utilizes their faith in order to solve problems (Pargament et al., 1988).

Various dispositional styles of religious coping based on the individual's perception of control with regards to their relationship to God have been put forward (e.g. Wong-McDonald and Gorsuch, 2000). Pargament et al. (1988) described three styles of religious coping which are in essence three different approaches to dealing with problems or stressors: a Self-directing style, a Collaborative style and a Deferring style. The Self-directing coping-style is typified by the reliance on one's self as opposed to reliance on God in dealing with life's problems. The Collaborative coping-style describes individuals who have a mutually active partnership with God when dealing with problems or stressors (i.e. the responsibility is fifty-fifty). The Deferring coping-style is one that is characterized by complete reliance on God to resolve one's problems and distress, with the individual remaining completely passive.

A fourth style of religious coping was later added to Pargament et al.'s religious coping styles paradigm by Wong-McDonald and Gorsuch (2000), namely a 'Surrender' coping style. This style describes the individual's choice to seek and follow God's ways by self-relinquishment and submission to God when one's will is in conflict to God's will. This approach is thought to be different from the 'Deferring' coping style as it does not negate the individual's own sense of responsibility, choice, and control over the distressing problem. 'Surrender' is thought to give individuals who are feeling overwhelmed the feeling that another has control and is protecting them (Cole and Pargament, 1999). The Surrender coping style can be thought to be especially relevant in the Muslim Arab context. Not only was this religious coping style developed with all religions, including the Muslim one, in mind. But research shows that such style of coping is often utilised by Arab Muslims. Muslims are found to feel great comfort in being obedient to God's way especially during times of distress (Youssef and Deane. 2006). A

great body of research on religious coping was reported by Walpole et al. (2013) in a systematic review on interventions to treat Muslim patients with depression. They found that Muslim patients often resort to religion for matters of the “soul”, especially through the help of religious healers.

Pargament and Brant (1998) argued that the religious orientation and mental well-being literature is dominated by the view that religion is a simple dimension, acting as either a means or an end (Wulff, 1997). Pargament’s theory strongly emphasizes the importance of religious acts such as attendance at a place of worship and personal prayer, which, it is argued, cover a wide range of feelings, beliefs and practices and are integral to the maintenance of coping strategies.

8.1.2 The Original Religious Coping Styles Scale (Three-Factor Scale)

Pargament et al. (1988) proposed three styles of coping by conducting qualitative interviews with people in the USA. A total of 15 adults were asked to respond to a number of qualitative open-ended questions about the role of religion and problem-solving. Participants were required to describe particular problems where religion played a role. From their responses, three coping styles emerged: Self-Directing, Deferring and Collaborative. They put forward that the three styles of coping varied on two dimensions underlying one’s relationship with God: 1. the locus of responsibility for problem-solving processes; and 2. the level of activity in the problem-solving process. From their preliminary research six dimensions of problem-solving arose: 1. Defining the problem; 2. Alternative solutions; 3. Selecting a solution; 4. Implementing the solution; 5. Redefining the problem; and 6. Maintaining stable emotions.

Taking into consideration their own findings with those reported in the literature, Pargament et al (1988) developed a scale for measuring coping styles. Two scale items were generated for each of the six phases of problem-solving, reflecting each of the three coping styles. Each religious coping style consisted of 12 scale items. Responses were measured on a 5-point Likert scale. Scores for each coping style were calculated by summing up each of the 12 items corresponding to that coping style. A total of 197 participants took part in their study. All of the participants were adults (average age of 46 years) who were regular members of the local church in the USA.

The coping styles items were entered into a factor analysis and the factor structure pointed to three distinct factors; accounting for 86% of the common variance in the sample. All the items in the scale loaded greater than .40 on its corresponding factor; in fact, the authors showed that 31 out of 36 items loaded greater than .60 on their appropriate factor. The three factors were shown to be moderately inter-correlated: Collaborative – Self-Directing ($r = -.61$); Collaborative – Deferring ($r = .47$); and Self-Directing – Deferring ($r = -.37$). The original scale showed good internal consistency as reported by the reliability estimates: Collaborative = .94; Self-Directing = .94; and Deferring = .91.

8.1.3 The Updated Religious Coping Styles Scale (Four-Factor Scale)

Wong-McDonald and Gorsuch (2000) wanted to expand on the three-factor religious coping style scale by adding a fourth factor, ‘Surrender’ coping style, which is the active choice to surrender to the will of God. It is the collaboration between the individual and God to actively solve the problem, and when one’s solution is different to that of God’s then the individual surrenders to God’s way. The authors aim was to represent an additional coping style to the original Pargament et al.’s religious coping style scale; a style which was distinct from the other styles and was negatively correlated with the ‘Self-directing’ coping style and positively correlated with the ‘Collaborative’ and the ‘Deferring’ coping styles.

Adopting the same approach as Pargament et al., the authors utilised the six dimensions of problem-solving to develop 30 preliminary statements to measure ‘Surrender’. A research team was recruited to modify and rate the items on content validity and in the end two items on each of the six dimensions were selected and a 12-item ‘Surrender’ coping styles scale was developed. The ‘Surrender’ items were interspersed within the items from the original Pargament et al. religious coping styles scale and the questionnaires were self-administered or group administered anonymously. 151 participants of mixed gender and ethnicity took part in the study (mean age = 21 years), all of which were university students in the USA, recruited from conservative Christian colleges and mainline churches.

A factor analysis was conducted and showed one primary factor of ‘Surrender’. Internal consistency for the scale was excellent (.96) and the reliability estimated was high (.94). Inter-correlations with the other coping styles were moderate to good: Collaborative ($r = .49$, $p <$

.0001); Self-Directing ($r = -.66, p < .0001$); and Deferring ($r = .39, p < .0001$). The 'Surrender' coping style accounted for 36% of the common variance in the sample.

8.1.4 The aim of the Current Study

Similar to Chapter 6 and 7, the aim of the current chapter is to examine the CS scale to understand styles of coping in Syria. The CS scale was developed and validated in the USA for global use, and used in past research in the English language. But unlike the CAMI and OSPH scales, the current coping styles scale has not been used in an Arab context, and this research will be the first to explore the coping styles dimensions in the Syrian Arab context.

In an etic approach, the present investigation is designed to assess the CS scale on a sample of young Syrian people. This investigation will help determine the relationship between concepts being measured and the applicability and appropriateness of this scale for the Syrian Arab context. The aim is also to produce and make available for future research an Arabic translation for the CS, which is appropriate for a young Syrian population.

As in Chapter 6 and 7, a CFA approach was chosen to develop a measurement model for the CS scale for later use in path analysis models in Chapter 9, which investigate psychological help seeking and its relationship with attitudes towards mental illness and coping styles.

8.2 Method

A cross-sectional survey was conducted using a stratified cluster sample of 683 participants (please see Chapter 4 for details on methodology).

8.2.1 Measures

Participants completed an amended Coping Styles scale.

8.2.2 The Amended Coping Styles Scale

The scale was a self-report measure of styles of coping. In its original form it consisted of 36-items to measure religious coping styles developed by Pargament et al. (1988) and Wong-McDonald and Gorsuch (2000). For the purpose of this study the scale was amended and translated and back-translated to Arabic and consisted of 16-items.

The process of shortening and amending the scale took place before and after the piloting phase. The decision to shorten and amend the scale was, as with Chapter 6 and 7, first *pragmatic*.

Further, prior to amending the scale, the Syrian government authorities denied the use of the original scale in data collection. This prompted the scale amendments before the piloting phase, and the scale was presented to officials with justifications of its use and permissions were obtained for data collection. Due to government restrictions that prohibited anyone in Syria to speak of or question others about their religious sect or orientation, the scale had to be tailored to incorporate coping styles that were both religious and non-religious. Government approvals to use the coping styles scale were based on the premise that the scale was looking to measure styles of coping and one of which was seeking the help of God, but the scale was not solely looking at religiousness. Any questioning of religiousness, religious participation or religious orientation were prohibited in Syria at the time of data collection.

Based on past research on coping styles (e.g. Smith, Wallston, Dwyer and Dowdy, 1997; Krohne, 1993; Holohan and Moos, 1987; Moos and Schaefer, 1993) and on Arab culture and social (informal) support (e.g. Dwairy and Sickle, 1996; Okasha, Karam and Okasha, 2012) the religious coping styles scale was amended to capture coping through self, others as well as religion. Therefore, amendments were based on past research that documented notions of coping in relation to Arab culture which ensured that the scale would be culturally relevant and appropriate for the Syrian culture and context. These changes also ensured that that the Syrian government authorities gave permission to administer the scale to participants. Please see Appendix 1 for a full list of the survey items used in the current study categorized by sub-scale in data collection.

The scale retained the four-factor structure of coping styles: Self-directing; Collaborative; Deferring; and Surrender. However, the items to measure these constructs were amended. The '*Self-directing*' coping style was amended so it measured the style of coping using the help of self without other people. The '*Collaborative*' coping style measured the style of coping using self-help and the help of other people. The '*Deferring*' coping style measured help and sole reliance on other people. The '*Surrender*' coping style measured the

collaboration between the individual and God to actively cope and solve the problem, and when one's solution is different to that of God's then the individual surrenders to God's way.

In the original theory of religious coping styles there were 6 dimensions of problem-solving theorised. In this study, statements only pertained to 4 out of the 6 dimensions: 1. 'Self-maintenance'; 2. 'General Alternatives'; 3. 'Select Solution'; and 4. 'Implement Solution'. Further, only one item was used to measure each of these dimensions for each corresponding coping style, and some wordings of statements were amended to suit the Syrian context. Therefore, a total of 16-amended items were used in the CS scale.

The decision to amend wordings of items and select only two-thirds of the problem-solving dimensions measured by one item per coping style was made due to time constraints. But after the piloting phase the decision to amend the wording of items was *contextual* – after piloting the scale, items were phrased appropriately for the Syrian language and context. Two problem-solving dimensions were eliminated: 'Defining the Problem' and 'Redefining the problem' as they proved confusing to Syrian participants. Most respondents requested a specific example to a problem, and this prompted the request for specific examples of problems for the remainder of the scale. This was problematic as the coping styles scale was not meant to be problem-specific but general. So the scale was amended to exclude these dimensions through piloting and this helped overcome previous problems of administration of the scale. Please see Appendix 14 for a list of the original coping styles items, with an indication of the items amended and selected for use in data collection in the current study.

In its original form the scale was measured on a 5-point scale, however the scale was amended so it became a 4-point scale. Feedback from the pilot phase showed that respondents were more comfortable to respond to their preferences when they were not given a middle-point or an indifferent preference. On several occasions in the piloting the 'neither agree nor disagree' option posed some confusion for participants and some participants requested an explanation for the possibility of one holding an indifferent preference of coping. So for the purpose of clarity, responses to all items were scored on a 4-point Likert scale ranging from 'strongly disagree' to 'strongly agree', scored from 1 to 4.

The overall score for each coping style for each participant was calculated by summing up the scores on the items for each coping style (ranging from a low of 4 and high of 16; mid-point 10) as follows, high scores indicated more orientation on that coping style:

Self-directing: $\sum PE04_5R, PE04_6R, PE04_7R, PE04_8R$ (Original scale items: 5, 6, 7, 8). High scores indicated high preference to use the self-directing coping style.

Collaborative: $\sum PE04_1R, PE04_2R, PE04_4R, PE04_11R$ (Original scale items: 1, 2, 4, 11). High scores indicated a high preference to use the collaborative coping style.

Surrender: $\sum PE04_13R, PE04_14R, PE04_15R, PE04_16R$ (Original scale items: 3, 9, 10, 12). High scores indicated a high preference to use the surrender coping style.

Deferring: $\sum PE04_3R, PE04_9R, PE04_10R, PE04_12R$ (Original scale items: 13, 14, 15, 16). High scores indicated a high preference to use the deferring coping style.

It was not appropriate to add the overall scores on all the sub-scales as conducted previously in Chapter 6 and 7. This is because the purpose of the scale is to measure orientation to coping styles, and obtaining an overall score on the scale would be meaningless. The factor structure in the CS scale used in data collection for the purpose of this study is illustrated in Appendix 1.

8.3 Results

In the same as in Chapter 6 and 7, the CS scale was tested in a gradual process to test model fit using CFA.

8.3.1 Descriptive and Inferential Findings

The descriptive findings were calculated for the four-factor 16-item coping styles model. As shown in Table 8.1 the findings indicated that the highest mean score was found for the 'Collaborative' CS (M = 11.2, S.D. = 1.8), the highest preference to adopt this CS when considering difficult situations or coming up with solutions to problems. The next highest mean score was found for the 'Surrender' CS (M = 10.8, S.D. = 2.6); a second preference to adopt this CS. Mean scores on the 'Self-directing' CS indicated a third preference to this CS (M = 10.0, S.D. = 2.9). The 'Deferring' CS (M = 8.8, S.D. = 1.9) had the lowest mean scores. Figure 8.1 shows the spread of the data; the boxplot indicates that the variation of coping styles scores is similar. There were a small number of outliers.

Table 8.1: Means, Standard Deviation and Independent Samples t-test of Gender Differences for CS Variables

	All Participants (N = 683)		Males (N = 334)		Females (N = 349)		Gender Differences		
	Mean	S.D.	Mean	S.D.	Mean	S.D.	t	df	p
Collaborative Coping Style	11.2	1.8	10.9	1.8	11.4	1.7	-3.516	681	0
Self-Directing Coping Style	10	2.9	10.3	3	9.7	2.8	2.94	681	0.003
Deferring Coping Style	8.8	1.9	8.8	1.9	8.8	1.9	0.168	681	0.867
Surrender Coping Style	10.8	2.6	10.5	2.7	11.1	2.6	-2.888	681	0.004

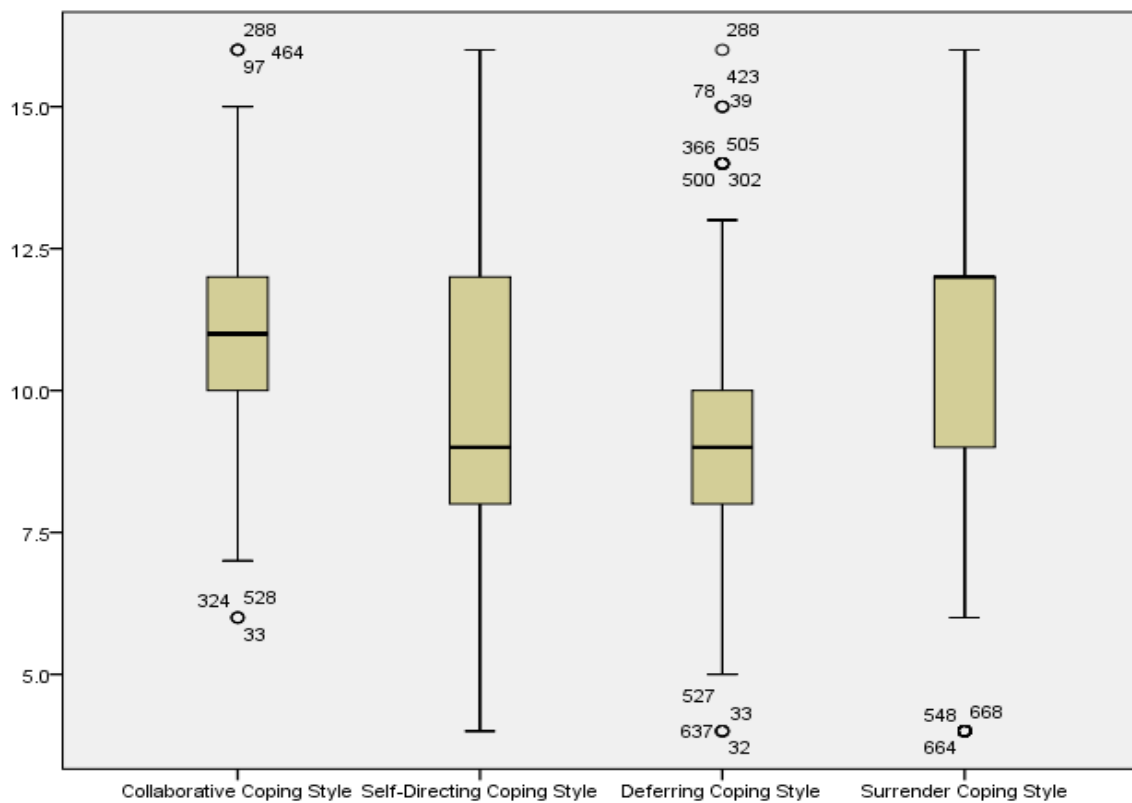


Figure 8.1: Boxplot Graph – The Spread of CS Sub-Scale Scores, Median

There were gender differences in all of the styles of coping, with the exception of the Deferring coping style ($t(683) = .20, p = .87$). Female participants had a higher mean score than males on the Collaborative CS $t(683) = 3.5, p < .001$, and the Surrender CS $t(683) = 2.9, p = .004$. Male participants has a higher mean score than females on the Self-directing CS $t(683) = 2.9, p = .003$.

8.3.1.1 Assumption Checks

Normal Distribution

Normal distribution was assessed in the same as the CAMI and OSPH data. As before, assessments of normal distribution using Kolmogorov-Smirnov (K-S) and the Shapiro-Wilk (S-W) tests found that the assumption of normality has to be rejected because the p-value for both tests was found to be less than 0.05 (please see Appendix 15). Using the same rule of thumb in Chapter 6 and 7, Appendix 15 shows the normal distribution of the sub-scales indicating that the data is normally distributed. This is further illustrated in Appendix 16 of histogram plots showing normally distributed data.

Internal Consistency

As with Chapter 6 and 7, internal consistency of the coping styles scale was assessed. The Cronbach's Alpha for the scale was good = 0.69. The Cronbach's Alpha for each sub-scale were good: Collaborative = 0.60; Surrender = 0.89 and Deferring = 0.69. The Alpha level for the Self-Directing coping style (0.90) may be reflecting high item homogeneity related to internal consistency (Boyle, Saklofske, and Matthews, 2014).

Item Analysis

Appendix 17 shows the response distribution for the Coping Styles sub-scales in a 4-point scale, measured in the same way as the OSPH scale. As shown in the table, response distributions were mixed. There was a higher frequency of agreement and strong agreement responses to the following items: Collaborative (PE04_1R; PE04_2R; PE04_4R; PE04_11R); Deferring (PE04_3R); Surrender (PE04_13R; PE04_15R; PE04_16R). There was a higher frequency of disagreement and strong disagreement responses to the following items: Deferring (PE04_9R; PE04_10R; PE04_12R); Self-directing (PE04_6R; PE04_7R; PE04_8R). There was only one time (Surrender = PE04_14R) that showed mixed distribution in responses.

8.3.2 Factor Analysis

As with Chapter 6 and 7, the data for the coping styles scale was analysed by means of a principal component analysis, with direct oblimin rotation. Four components with an eigenvalue equal to or greater than 1.0 were found. Please see Appendix 18 for the components with the variables that load on them. As shown, Component 1 consisted of the

'Self-directing' items, and Component 3 consisted of the 'Surrender' items. Component 2 and 4 were a mix of the 'Collaborative' and 'Deferring' items. The four components together explain 75.5% of the variance.

8.3.3 Confirmatory Factor Analysis

The proposed factor structure, hypothesized from previous work by Pargament et al (1988) and Wong-McDonald and Gorsuch (2000) is presented in Figure 8.2.

When the Syrian data was fitted to the CS model the fit was very poor: $\chi^2(98, N = 683) = 2132.7, p < .005$ and not acceptable (CFI = .702). Other values of model fit were also poor (CMIN = 21.76; GFI = .69; AGFI = .56; RMSEA = .174; PCLOSE = .00).

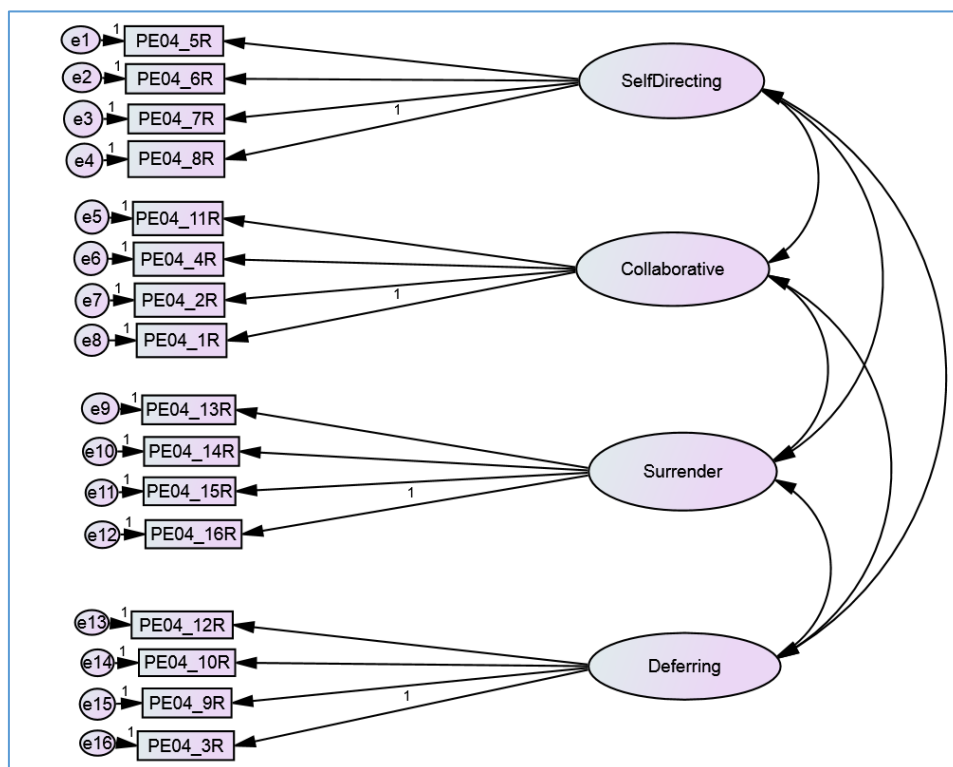


Figure 8.2: A Basic Model of the CS Scale in the Study

In modifying the model using factor loadings, a good model fit was achieved. Chi-square was significant $\chi^2(40, N = 683) = 111.9, p < .005$. Other values showed good fit (CMIN = 2.80; CFI = .98; GFI = .97; AGFI = .95; RMSEA = .051; PCLOSE = .404). Please see Table 8.2 for the modifications made to achieve a good model fit.

Table 8.2: Whole Sample – CS Model Modifications Using Factor Loading Item Deletion

Modification	M.I/ Factor Loading	χ^2	CMIN	CFI	GFI	AGFI	RMSEA	PCLOSE
None	–	2132.7	21.762	.702	.685	.562	.174	0
PE04_10R	-.03	1287.3	15.324	.799	.791	.701	.145	0
PE04_9R	-.03	762.1	10.734	.874	.869	.807	.119	0
PE04_12R	-.03	347.2	6.567	.91	.916	.884	.095	0
PE04_3R	.24	279.6	5.482	.95	.936	.902	.081	0
PE04_11R	-.05	223	5.438	.959	.943	.908	.081	0
e13 <--> e15	61.883	111.9	2.797	.984	.969	.949	.051	.404

Figure 8.3 illustrates the best model to fit the data in the study. In total, 5 items in the scale structure were eliminated and covariance of two error terms e13 and e15 were conducted. After modifications to the model the CS ‘Deferring’ was eliminated, and thus a good model fit was achieved. While it is generally not desirable to covary error terms, in this case applying this modification helped obtain a better model fit.

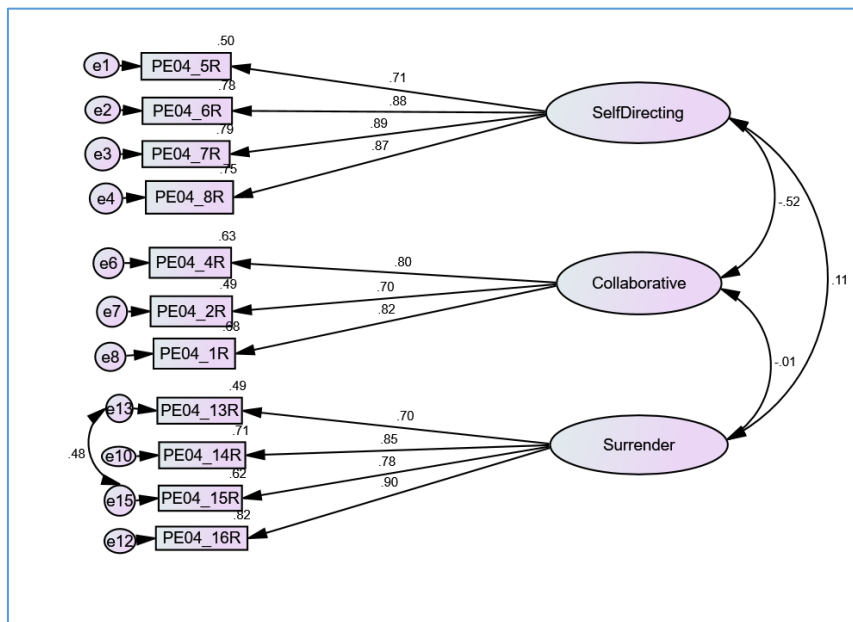


Figure 8.3: Whole Sample – The Standardized Estimates of the Modified CS Model

8.3.4 Split Half Sample

Similar to Chapter 6 and 7, the findings on the CS were compared between split sample 1 and split sample 2 to determine the reliability of the scale used.

SS1 the fit of the model to SS1 was poor $\chi^2(98, N = 342) = 1185.9, p < .005$; with other values showing poor model fit too (CMIN = 12.10; CFI = .69; GFI = .67; AGFI = .55; RMSEA = .181; PCLOSE = .00). Through factor loading item deletion a good fit of the modified model to SS1 was achieved. Chi-square was significant $\chi^2(40, N = 342) = 74.8, p < .005$. Other values of model fit were very good (CMIN = 1.87; CFI = .98; GFI = .96; AGFI = .94; RMSEA = .051; PCLOSE = .45). Table 8.3 shows the modifications made to indicate how model fit was obtained for SS1.

Table 8.3: Split Sample 1 – CS Model Modifications Using Factor Loading Item Deletion

Modification	M.I/ Factor Loading	χ^2	CMIN	CFI	GFI	AGFI	RMSEA	PCLOSE
None	–	1185.9	12.101	.69	.672	.545	.181	0
Deferring Coping style	All items load close to 0	160.9	3.154	.951	.925	.886	.08	0
PE04_11R	-.02	136.5	3.33	.957	.929	.886	.083	0
e13 <--> e15	MI: 44.002	74.8	1.87	.984	.962	.937	.051	.452

The modified model appears to be consistent for the Syrian data. Please see Figure 8.4 for the factor structure for SS1.

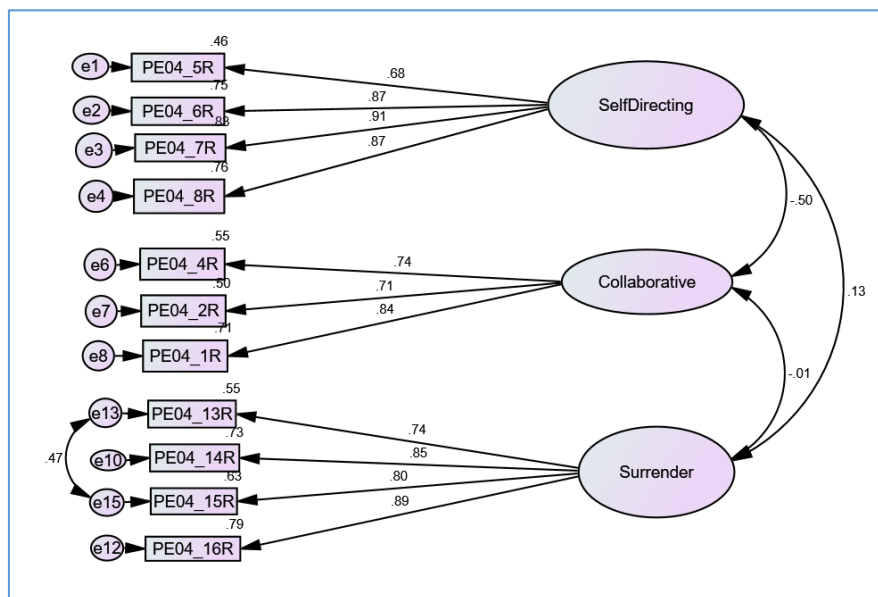


Figure 8.4: Split Sample 1 – The Standardized Estimates of the Modified CS Model

In running the modified SS1 model on the data for SS2, a good model fit was also achieved. Chi-square was significant $\chi^2(40, N = 341) = 75.69, p < .005$. Other values of model fit were very good (CMIN = 1.89; CFI = .98; GFI = .96; AGFI = .93; RMSEA = .051; PCLOSE = .437). Figure 8.5 shows the model fit using the SS2 data.

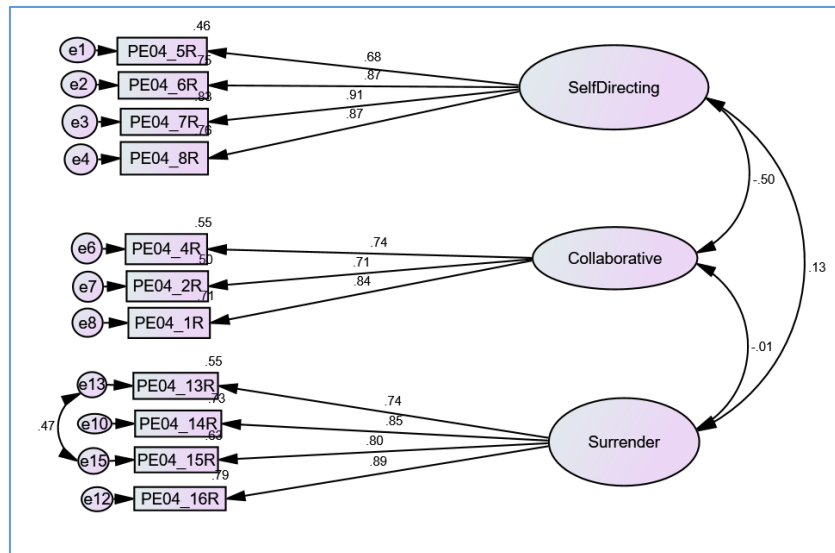


Figure 8.5: Split Sample 2 – The Standardized Estimates of the Modified CS Model

8.3.5 Measurement Model Invariance

Configural invariance was tested in the same way in Chapter 6 and 7.

8.3.6 Gender Invariance

The invariance test for genders showed that the resultant model did not achieve good fit $\chi^2(98, N = 683) = 2132.7, p < .005$, indicating configural variance between the data for males and females. The CFA model was calculated for males (N = 334) and females (N = 349) samples separately, addressing the modifications to improve the model fit.

8.3.7 Male Sample

For males the model fit was poor, in fact, the model did not run. After item deletion using factor loadings a good model fit was achieved. Chi-square was significant $\chi^2(32, N = 334) = 70, p < .005$. Other values of model fit were very good (CMIN = 2.19; CFI = .98; GFI = .96; AGFI = .93; RMSEA = .06; PCLOSE = .187). Table 8.4 shows the modifications made to the model, to indicate item deletions made to achieve a good model fit for the male sample.

Table 8.4: Male Sample – CS Model Modifications Using Factor Loading Item Deletion

Modification	M.I./ Factor Loading	χ^2	CMIN	CFI	GFI	AGFI	RMSEA	PCLOSE
None	–	1136.6					<i>model did not run</i>	
PE04_2R	CA: .68 --> .698	1109.2	13.205	.707	.666	.522	.191	0
Deferring Coping Style	All items loading close to 0	93.5	2.281	.977	.953	.924	.062	.111
PE04_11R	-.05	70	2.187	.983	.96	.932	.06	.187

As described for the model using the whole sample data, similar modifications were necessary and were applied to the model for the male sample. However, with the exception here of omitting the observed variable PE04_2R in the latent variable ‘Collaborative’, there was no need to covary error terms e9 and e11. Again, this is indicating that the factor structure of the CS model was more or less consistent and sufficient for the Syrian data. Figure 8.6 illustrates the model fit for the male sample.

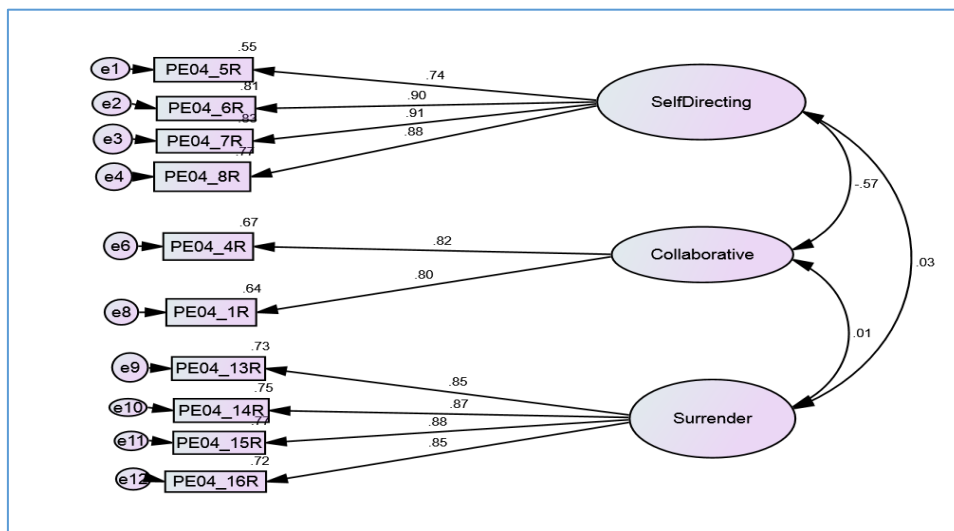


Figure 8.6: Male Sample – The Standardized Estimates of the Modified CS Model

8.3.8 Female Sample

The model for the female sample was a poor model fit $\chi^2(98, N = 349) = 1136.8, p < .005$. However, through factor loading item deletion to modify the model for better fit, a good model fit was achieved. Chi-square was significant $\chi^2(40, N = 349) = 78.5, p < .005$. Other values of model fit were good (CMIN = 1.96; CFI = .98; GFI = .96; AGFI = .94; RMSEA = .053;

PCLOSE = .38). Please see Table 8.5 for the modifications made to the model to achieve a good model fit for female participants. Figure 8.7 illustrates the model of fit for the female sample.

Table 8.5: Female Sample – CS Model Modifications Using Factor Loading Item Deletion

Modification	M.I/ Factor Loading	χ^2	CMIN	CFI	GFI	AGFI	RMSEA	PCLOSE
None	—	1136.8	11.6	.673	.68	.556	.175	0
PE04_12R	-.08	875.6	10.424	.73	.753	.647	.165	0
PE04_10R	-.07	483	6.803	.838	.846	.773	.129	0
PE04_9R	-.06	398.8	5.78	.879	.898	.803	.107	0
PE04_3R	.36	228.3	4.476	.915	.905	.855	.1	0
PE04_11R	-.07	190.9	4.656	.927	.909	.854	.103	0
e13 <--> e15	85.58	78.4	1.96	.98	.96	.94	.053	.38

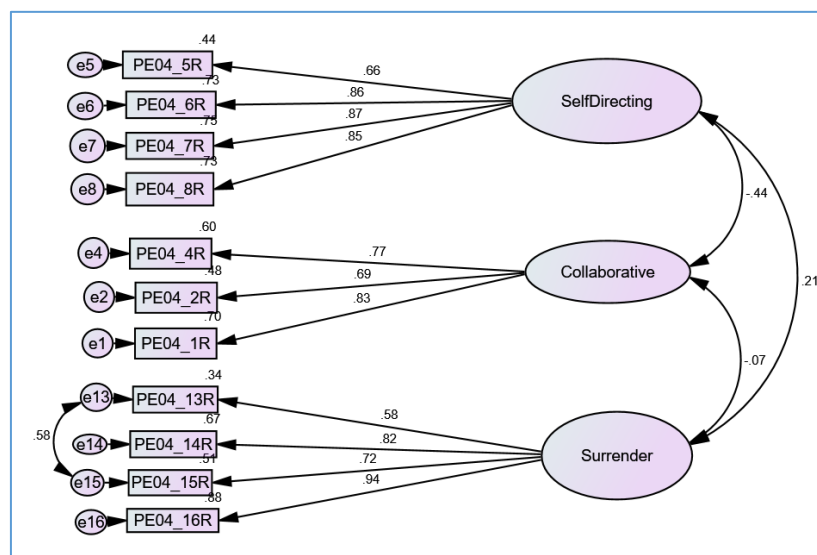


Figure 8.7: Female Sample – The Standardized Estimates of the Modified CS Model

8.3.9 Age group Invariance

Configural invariance was tested between age groups in the same as in Chapter 6 and 7. The resultant model for age groups did not achieve good fit $\chi^2(98, N = 683) = 2112.3, p < .005$, indicating configural variance between the data for the different age groups.

8.3.10 15-21 Year Olds

For the sample aged 15-21 years (N = 338), the model showed poor fit to the data: $\chi^2(98, N = 338) = 1036.5, p < .005$, with other values showing poor fit to the data (CMIN = 10.58; CFI = .71; GFI = .69; AGFI = .56; RMSEA = .169; PCLOSE = .00).

Through item deletion using factor loadings a good model fit was achieved. Chi-square was significant $\chi^2(41, N = 342) = 89.5, p < .005$. Other values of good model fit were evident (CMIN = 2.18; CFI = .98; GFI = .96; AGFI = .93; RMSEA = .059; PCLOSE = .171). Table 8.6 shows the modifications made to achieve a good model fit for this age group.

Table 8.6: 15-21 Year Olds – CS Model Modifications Using Factor Loading Item Deletion

Modification	M.I./ Factor Loading	χ^2	CMIN	CFI	GFI	AGFI	RMSEA	PCLOSE
None	–	1036.5	10.577	.71	.686	.564	.169	0
Deferring Sub-scale	Factor loadings close to 0	124.6	2.444	.966	.943	.913	.065	.04
PE04_11R	-.02	89.5	2.184	.978	.955	.928	.059	.171

The model fit for 15-21 year olds in the sample was similar to that of the previous models in the current study. However, there was no need to covary the error terms e13 and e15. This further makes case that this modified model is well suited for the Syrian sample in the study. Please see Figure 8.8 for the modified model for the sample of 15-21 year olds.

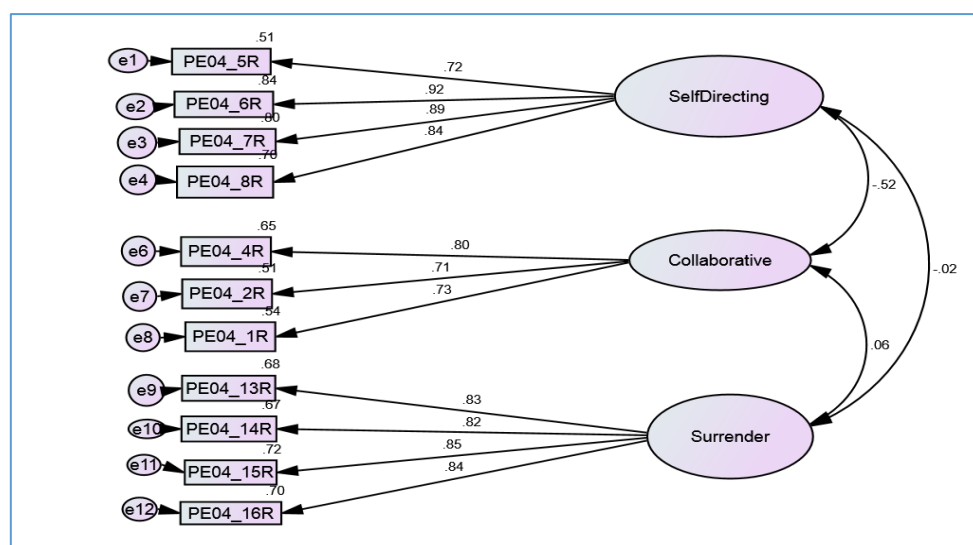


Figure 8.8: 15-21 Year Olds – The Standardized Estimates of the Modified CS Model

8.3.11 22-29 Year Olds

The model fit for the sample of 22-29 year olds (N = 345) was poor: $\chi^2(98, N = 345) = 1252.2$, $p < .005$. Other values of model fit were also poor (CMIN = 12.78; CFI = .69; GFI = .67; AGFI = .54; RMSEA = .185; PCLOSE = .00).

After modifications, the Chi-square was significant $\chi^2(40, N = 345) = 99$, $p < .005$. Other values for model fit were good (CMIN = 2.47; CFI = .98; GFI = .95; AGFI = .92; RMSEA = .065; PCLOSE = .057). Table 8.7 shows the modifications made to the original model, indicating how model fit was obtained.

Table 8.7: 22-29 Year Olds – CS Model Modifications Using Factor Loading Item Deletion

Modification	M.I./ Factor Loading	χ^2	CMIN	CFI	GFI	AGFI	RMSEA	PCLOSE
None	—	1252.2	12.778	.686	.669	.54	.185	0
Deferring Sub-scale	Factor loadings close to zero	212.8	4.173	.932	.908	.859	.096	0
PE04_11R	-.07	183.7	4.48	.94	.912	.858	.101	0
e13 <-> e15	52.527	99	2.474	.975	.949	.916	.065	.057

The modified model was similar to the other modified models in the current study as shown in Figure 8.9.

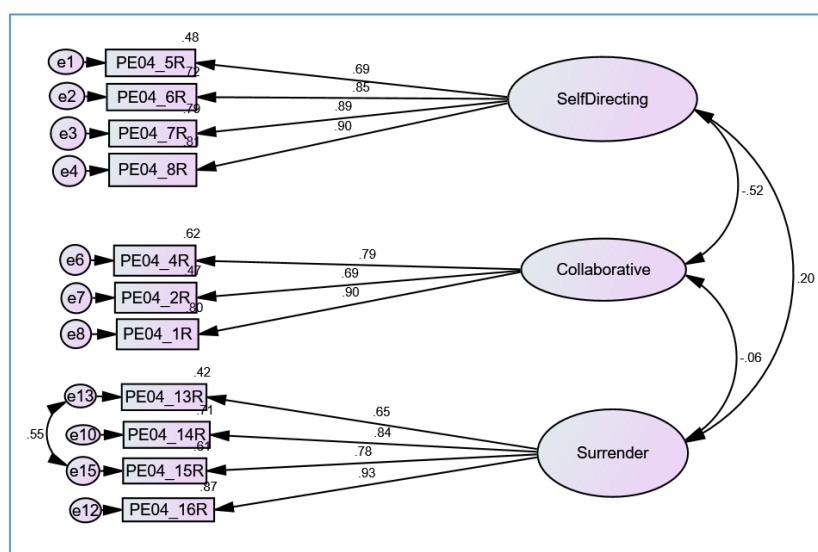


Figure 8.9: 22-29 Year Olds – The Standardized Estimates of the Modified CS Model

8.3.12 Common Method Bias

As in Chapter 6 and 7, some methods to test CMB were explored. For the Harman Single Factor test, the percentage of variance explaining this single factor of CS needed to be less than 50%; for the current study the EFA showed that 28% of variance was explained by this single variable, hence no CMB was evident.

Similar to Chapter 6 and 7, the marker variable technique was used to assess CMB. Again, a latent variable named 'common factor' was added to the model (shown in Figure 8.2). In the model all the regression weights were found to be 0.34 (unstandardized estimates) and in squaring this, it was shown that only 11.6% of common variance was accounted for by CMB. The findings were, therefore, largely unaffected by factors unrelated to the research findings.

As with Chapter 6 and 7, a marker variable 'Locus of Control' was added to the model (shown in Figure 8.2) to test common variance. The test showed that the CMB decreased after adding the marker variable; the regression weight paths increased to 0.33. This indicated that only 10.9% of the variance in the findings was due to common method variance, again reaffirming that the findings were unaffected by CMB. The model (shown in figure 8.2) was run with and without the CLF variable in a similar way to Chapter 6 and 7. Please see the Table 8.8 for delta, this shows that some of the paths in the model were affected by CMB.

Table 8.8: Difference in Standardised Regression Weights for the CMB – the CS Scale

Observed Item	Pathway	Latent Variable	Delta
PE04_16R	<---	Surrender	.068
PE04_15R	<---	Surrender	.052
PE04_14R	<---	Surrender	.065
PE04_13R	<---	Surrender	.049
PE04_8R	<---	Self-Directing	.024
PE04_3R	<---	Deferring	.04
PE04_9R	<---	Deferring	.59
PE04_10R	<---	Deferring	.667
PE04_12R	<---	Deferring	.529
PE04_1R	<---	Collaborative	.233
PE04_2R	<---	Collaborative	.226
PE04_4R	<---	Collaborative	.239
PE04_11R	<---	Collaborative	.549
PE04_5R	<---	Self-Directing	-.03

PE04_6R	<---	Self-Directing	.027
PE04_7R	<---	Self-Directing	.029

As shown in Table 8.8, 7 pathways were affected by common method bias. For the ‘Collaborative’ CS all of its items were shown to be slightly affected by CMB, as well as three out of four items for the ‘Deferring’ CS. Overall, the tests explored in the current study showed that common method bias had limited effect on the coping styles items used in the current research.

8.3.13 Overall Conclusion: Optimal CS Measurement Model

In exploring the 16-item CS scale using the whole sample data, a modified 11-item model was developed, consisting of the following items:

- *Self-directing CS*: PE04_5R; PE04_6R; PE04_7R; PE04_8R
- *Collaborative CS*: PE04_4R; PE04_2R; PE04_1R
- *Surrender CS*: PE04_13R; PE04_14R; PE04_15R; PE04_16R

Similar to Chapter 6 and 7, to ensure the consistency and applicability of this model for the whole dataset, further explorations were conducted to select the optimal model. As before, investigations ensured that the modified model: had structural validity and internal coherence and the model was equivalent across genders and age groups. It was also made sure that the dataset was not biased by external factors unrelated to the measure.

The 3-factor 11-item CS measurement model shown in Figure 8.10. Please see Appendix 19 for the list of items included in and excluded from the final OSPH CFA model. This was the CS model used in path analysis models in the thesis in Chapter 9 to investigate the relationships between opinions on seeking professional help, attitudes towards mental illness and coping styles.

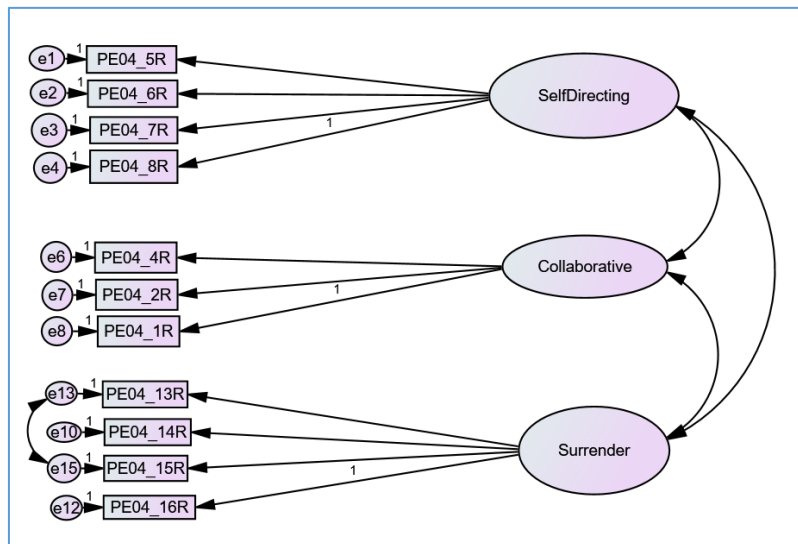


Figure 8.10: The Optimal CS Model in the Study

8.4 Discussion

The CS scale was used to investigate coping styles in Syria. The scale was amended for use in the current study in the light of existing theories on coping styles, social support and religious coping styles for the Syrian context.

On the whole, participants showed that when facing problems or stress in their life they had a preference to cope through self-help, especially for male participants. A second preference for coping is to cope with the help of others, female participants showed a stronger preference for this coping style than male participants. Closely to follow, participants indicated that they have a preference to cope with the help of religion to cope with their problems, this was more so for female than male participants. And least of all did participants try to cope with their problems by sole reliance on other people.

This study used a CFA investigation of the CS scale using a sample drawn from a Syrian population. Despite high levels of internal consistency, shown by Cronbach Alpha levels (see Section 6.3 Results), the model fit was not good for the Syrian sample dataset. After modifications to the model, it produced a better fit to the data, with some limitations. Based on several goodness-of-fit indicators, the results showed that a three-factor 11-item model produced good fit to the data (see Figure 8.10). In taking a closer look at the Syrian context, potential explanations for the findings in the current study became clear.

The coping style 'Deferring' was not a good fit to the Syrian data and was eliminated in all of the models, and was excluded from the final optimal model. Poor fit of the items to the Syrian data were further demonstrated through EFA investigations. The factor structure for the 'Deferring' coping style did not fit the Syrian data well. It was found that items belonging to this scale did not load together in one component, and were loading mixed with items from the 'Collaborative' coping style across two components. The reason for this is unknown and further exploration of the scale in the Syrian context is needed.

However, a potential explanation to this finding is that it could be that items measuring the 'Deferring' coping style indicated full reliance on other people to solve an individual's problems and to find and implement solutions. This style of coping also specified a kind of coping that resulted in the reliance on others for self-maintenance of stressful life events. It was clear from the findings that such coping style was not relevant to the Syrian context, as the items did not fit the Syrian data well. This could have been because such mindset on coping do not go well with Syrian culture. In general, Arab culture is achievement-orientated and survival is dependent on the relationship with the family and the community (Dwairy, 1997; Hofstede, 2010) and this promotes a sense of 'togetherness' rather than deference to others.

Item PE04_11 from the 'Collaborative' coping style was omitted from the optimal CS model: "when I feel nervous or anxious about a problem, I work together with others who I am close to, to find a way to relieve my worries". This item did not fit the data well in both EFA and CFA investigations. In the EFA, this item loaded on Component 2 with three other 'Deferring' coping styles items. The other 'Collaborative' coping styles items loaded on Component 4. So it is clear that this item did not fit the factor structure well using the Syrian data.

The reasons for such findings are unclear and need further investigations. However, it could have been because this was the only item in the scale that expressed emotional support and guidance with the help of others. This kind of coping is not widely used in the Syrian context. Generally, Arabs maintain distinct communication styles that are restrained, formal and impersonal and while help from others is sought after for problem-solving and decision-making, expression of emotions or emotional comforting are not common in this culture (Liebert and Spiegler, 1994; Dwairy and Sickle, 1996; Monte, 1995). Coping with problems

with the help of others is generally categorized as impassive, and emotional social support is not so common.

There was a covariance between two error terms (e13 and e15) for items PE04_13R and PE04_15R in some of the CS models reported in the current study. Similar to Chapter 6, this shows that these two scale items have variance in common other than what is explained by the shared latent variable 'SurrenderCS'. Alternatively, the error covariance could have been due to the items being similar in meaning: "When thinking about a difficulty, spirituality guides me to possible solutions" (PE04_13R) and "When I feel troubled or anxious, I seek spiritual guidance to help me deal with my feelings" (PE04_15R). Both these items measure spiritual guidance when facing *difficult times or emotions*. Further investigation into these scale items is needed to determine the reason for the error covariance.

The CS scale used in the current study was shortened and amended from a 36-item scale to a 16-item scale for the purpose of data collection and investigations using CFA. The construct of the scale could have been stronger if, in future research, the scale contains more items to measure each coping style. It is also important to note that the terminology for coping, problem-solving and guidance are not easily translated from the English to the Arabic language. Therefore, it is essential to note that in constructing a coping styles scale the terminology or meaning of sentences will need to be proposed in an appropriate way in Arabic. Language alternations must be made to an Arabic scale with the culture and context in mind to be able to encourage and capture people's viewpoints and orientations on coping. Frequent and stringent piloting are essential for testing coping styles scales in the Arab context that will help overcome problems in data collection.

In future it is advisable to obtain information on religiosity and level of religious practicing as this would help determine the role of religion in coping. It would be useful to learn the extent to which religious following or practices are sufficient or perhaps negate other forms of coping or help seeking for problems or life stressors. Moreover, questioning on religion needs to be able to overcome socially desirable responses. In a culture that is dominated and highly influenced by religion, participants might feel ashamed or judged if they were to express low religious beliefs or practice. So questionings on religion needs to give room for participants to express their attitudes on this in a comfortable and safe manner.

To summarize, an etic approach to understanding coping styles in Syria using the CS scale was adopted. The findings show that this scale was not entirely applicable in the Syrian context. Modifications to the CS scale were made and the model became a good fit to the Syrian sample data. The optimal CS model developed was used in the development of path analysis models in Chapter 9. That investigate the relationship between seeking professional psychological help, attitudes towards mental illness and coping styles in Syria.

Chapter 9: Cognitive Psychological Help Seeking using Path Analysis

Models

The current chapter makes use of the final CFA models derived from Chapters 6-8 in the path analysis models. This chapter describes and explains the relationships between the person-related predictor variables of attitudes towards mental illness, coping styles, social support and mental wellbeing with the outcome variable recognition of the need to seek psychological help. Discussion of culture is made relating to cognitive help seeking and person-related barriers to help seeking in the Syrian context.

9.1 Introduction

The current study aims to discover the relationships between opinions of psychological help seeking and attitudes towards mental illness, and to determine how they relate to alternative sources of help such as coping styles and social support. Patterns in attitudes and opinions may be culturally unique to the Syrian Arab context and differ to proposed Western theories on mental health. The findings are designed to illuminate the best ways to approach mental health for Syrians. The following sections bring together literature to support the hypothesised models in which pathways to measure relationships were formed.

9.1.1 Culture and Mental Health

The influence of culture has gained much attention in psychological research in the past few decades (Wahlsten, Ahmad and Von Knorring, 2001; Hovey, Kim and Seligman, 2006; Veling et al., 2006; Hwang, Chun, Takeuchi, Myers and Siddarth, 2005) and it has been articulated that great attention must be placed on the role of culture in mental health so that the needs of diverse societies of various cultures are better met (Shatkin and Belfer, 2004).

The cultural background and environment have been proposed (Marsella, 1980) to act as contextual frameworks that guide cultural perceptions of mental illness: symptom identification and tolerance of illness, and the recognition of the need for informal and formal sources of help. Understanding mental health across different cultures would serve to benefit illness identification and diagnosis, as well as approaches to help seeking and treatment methods.

Investigations into the role of culture on mental health can be made in terms of etic (culture-universal) phenomena and emic (culture-specific) phenomena (Pike, 1967; Fischer, Jome, and Atkinson, 1998). In line with emic phenomena, cultural beliefs and norms have been proposed to serve as guidelines and filters to the expression of distress. So while the experience of mental illness in terms of symptomology and profiling of mental disorders are predominantly the same across all cultures (etic phenomena), the manifestation of mental health difficulties (e.g. social meanings of different symptom groups; communicating and expressing problems; language) can be different (Kleinman, 1978; Hwang, Myers, Abe-Kim and Ting, 2008; McCabe and Priebe, 2004).

9.1.2 Cultural Perspectives on Help Seeking

The manner in which distress is experienced within the culture is thought to affect help seeking sources and mechanisms (Hwang et al., 2006). In some cultures, where mental health is highly stigmatized, the choice to seek treatment from a primary care doctor rather than a psychiatrist or psychologist is often preferred (Borowsky et al., 2000; Al-Krenawi et al., 2000). There is an emphasis on certain types of symptoms, especially somatic symptoms like heart pains or headaches, which are not typically included in diagnostic manuals like the DSM or ICD but are common in non-Western cultures (Chun, Enomoto, and Sue, 1996; Hwang, Wood, Lin, Cheung, and Wood, 2006). This preference has been linked to the social understandings of mental distress in the given culture (Chun et al., 1996); in non-Western cultures emotional reactions or expressions often elicit many negative social responses. Expressions of physical symptoms gains social support and sympathy, hence lowered recognition of the need to seek psychological treatment (Hwang et al., 2007; Okasha, 1999).

Furthermore, unlike beliefs about physical symptoms, less interpersonal openness of mental distress has been found to protect sufferers from negative emotions and reduces personal feelings of shame or weakness (Chun et al., 2006). Guiding frameworks to know how culture functions in these situations are needed to understand the effects, mechanisms and outcomes of culture on mental health (Smedley, Smith and Nelson, 2003). Otherwise, although professionals will not be able to acknowledge the pivotal role of culture, they will be unable to know how to address the cultural needs in research, diagnosis and treatment (Patel, Saraceno and Kleinman, 2006). The research summarized above led to the predicting of the pathways, in the current study (see Section 9.3), from the predictor variable

interpersonal openness (predictor variable 'Interpersonal) to recognising the need to seek psychological help from a professional (outcome variable 'Recognition').

Globally, lowered mental wellbeing has been found to be associated with underutilization of mental health care; in that people who suffer from mental illness generally do not recognize or have the desire to seek help (Davydov, Stewart, Ritchie and Chaudieu, 2010). So while sufferers are in need of psychological help, they express little interest and desire to seek professional help for their problems and are often encouraged by others to seek help. Further, as discussed in Chapter 3 (Sections 3.5.3 – 3.5.4) religious coping has been found to reduce mental health problems and enhance wellbeing (Warpole et al., 2013; George et al., 2000; Myers and Hwang, 2004; Klocket, Trenetry and Webstet, 2011). What's more, research indicates that religious help seeking can negate or discourage professional psychological help seeking (Ali, Liu and Humedian, 2004; Youssef and Deane, 2006; Leavey, Loewenthal and King, 2007). Therefore, past research led to the predicting of the pathway from religious coping ('Surrender' coping style) to recognising the need to seek psychological help from a professional (outcome variable 'Recognition') but mediated by mental health wellbeing (predictor variable 'Wellbeing') (see Section 9.3).

Research has found that people exhibiting suicidal tendencies tend to avoid psychological help seeking (Batterham, Calear, and Christensen, 2013; Carlton and Deane, 2000). In the past people diagnosed with eating disorders have been found to be more likely to recognise the need for their friends to seek psychological help than themselves (Raviv, Raviv, Vago-Gefen and Fink, 2009). Mental health sufferers have been shown to endorse levels of stigma related to negative attitudes towards mental illness, which in turn reduces help seeking behaviours (Eisenberg, Downs, Golberstein and Zivin, 2009). Past research led to the predicting of the pathway from mental health wellbeing (predictor variable 'Wellbeing') to recognising the need to seek psychological help from a professional (outcome variable 'Recognition') (see Section 9.3).

9.1.3 Attitudes towards Mental Illness and Help Seeking

Mental health stigma has received much attention in international research. Stigma has been found to be a prominent influencing (person-related) factor to seeking psychological help and a leading cause of underutilization of mental health care worldwide (Desai, Rosenheck, Druss

and Perlin, 2002; Corrigan, Kerr and Knudsen, 2005). Low help seeking has been found to be associated with negative attitudes towards mental illness, particularly the stigma of mental illness (Vogel, Wade and Hackler, 2007; Reynders et al., 2014). Social stigma regarding help seeking as well as negative attitudes towards mental illness have also been found to influence cognitive aspects of help seeking (Chandra and Minkovitz, 2007; Angermeyer and Matschinger, 2005; Slone, Meir and Tarrasch, 2013).

Al-Krenawi, Graham, Dean and Eltaiba (2004) believe that, regardless of the poor availability and the limited quality of mental health care available in the Arab region, seeking help would not be sought if mental health stigma exists. Pity, sympathy and empathy have been linked to openness to seeking psychological help amongst Arabs; if mental illness is thought to be self-preventable then seeking help would be more welcomed (Al-Krenawi, Graham and Kandah, 2000; Al-Krenawi, 2005). Past research led to the predicting of the pathway from the predictor variable 'Benevolence' to recognising the need to seek psychological help from a professional (outcome variable 'Recognition') (see Section 9.3).

Conceptualising mental illness as dangerous elicits emotional responses of fear and can result in avoidance behaviours and a desire to segregate sufferers (Pinto-Foltz, Logsdon and Myers, 2011). Research led to the predicting of pathways in the models (see Section 9.3) from: opinions on social restrictiveness (predictor variable 'Social Restrict') and the predictor variable community integration of sufferers (predictor variable 'Community'), both to recognising the need to seek psychological help from a professional (outcome variable 'Recognition').

There have been few studies of Arab help seeking in the Middle-east. Of those that have been published, Arabs have been found to underutilize mental health services throughout the Middle-east region, despite having some access to services (Okasha, Karam, Okasha, 2012; Feinson, Popper, and Handelsman, 1992; Savaya and Spiro, 1990). Explanations for these behaviours have been explained by Arab person-related factors linked to cultural norms. Arab mind-sets tend to reinforce that personal matters should not be disclosed, and community or religious leaders are more highly respected as sources of help than professional sources (Savaya, 1998).

Generally, Arabs are discouraged from seeking formal sources of help as part of their social norms (Sherer, 2007; Sherer and Karnieli-Miller, 2007). Yet at the same time mental health treatment is becoming more and more readily available in the Arab world, including Syria (see Chapter 2) due to continued unrest in the region (Okasha and Okasha, 2012). So understanding the processes behind cognitive help seeking that may lead to actual help seeking that will be of widespread benefit in the Middle-east.

9.1.4 Gender, Culture and Help seeking

Cross-cultural research has indicated that attitudes and opinions about seeking help sometimes arise from social conceptions rooted in the cultural context (Rusch et al., 2004; Reynders, Kerkhof, Molenberghs and Audenhove, 2005). This may then explain why there are disparities in mental health service use across regions and different socio-demographic groups. Gender is thought to be one of the central factors globally influencing attitudes toward help seeking. International research has found that females universally are more likely to hold more positive attitudes towards and seek more professional help than males (Garland and Zigler, 1994; Moller-Leimkuhler, 2002; Addis and Mahalik, 2003; Vogel and Wester, 2003). They thus utilize health services more than males (Ang, Lim, Tan and Yau, 2004; Morgan, Ness, and Robinson, 2003). Males tend to exhibit less tolerance to mental illness and have been found to stigmatize mental health help seeking more than women (Chandra and Minkovitz, 2006). Even when men express high levels of distress it has been found that they generally do not seek help from social networks or professionals but have a preference to self-coping and self-help (Moller-Leimkuhler, 2002). Past research led to the predicting of the pathway in the current study (see Section 9.3) from tolerance to mental illness (predictor variable 'Tolerance') to recognising the need to seek psychological help from a professional (outcome variable 'Recognition').

Some research has suggested that gender differences is related to traditional cultural male roles encouraging the male need for autonomy, independence and control (Vogel, Webster, and Larson, 2007; Dwairy and Sickle, 1996). Social norms relating to strength and minimal emotional expressiveness affect openness to seeking help and these attributes are more likened to male characteristics than females (Nam et al., 2010). Generally, males are taught

to ignore distress symptoms and hold high emotional restrictions on sensitivity (Leong and Zacher, 1999).

Cultural dimensions of masculinity and femininity (Hofstede, 2010) have been suggested to influence help seeking. Negative affectivity has been likened with femininity and males are socialized to believe that this is a threat to masculinity (Grossman and Wood, 1993; Traue, 1998). Traditional masculinity found in Arab culture (Dwairy and Sickle, 1996) does not allow for emotional exposure or recognizing the need for help seeking. Whether formal or informal, seeking help threatens traditional masculine role expectations (Wijk and Kolk, 1997). Females have been found to fear mental illness more than males, and this affects opinions on seeking psychological help (Moller-Leimkuhler, 2002). In the Arab world this fear has been linked to social repercussions of mental illness and mental health stigma (Al-Krenawi and Graham, 1998; Al-Krenawi, Graham, Kandah and Opher, 2000).

Unfortunately, gender-related research on help seeking and attitudes towards mental illness has not been made available in Syria but nonetheless is important to document these, given the rising need for mental health care. Exploring gender differences is likely to have important implications for approaches to Syrian mental health in the future.

9.1.5 Informal Help Seeking

An additional choice for addressing distress is whether to seek help from formal or informal sources. Alternative sources to formal help are more associated with non-Western cultures (Eisenberg et al., 1998). They are more relevant and complementary to non-Western cultures as a whole (Barnes, Powell-Griner, McFann and Nahin, 2004; Koss-Chioino, 2000).

International research has found that young people often prefer seeking help from informal sources of help like family and friends than formal sources of help like physicians or mental health professionals (Gilat, 1993; Slone, Meir and Tarrasch, 2013). Formal help seeking and self-help have been found to be associated with older rather than younger age groups (Sears, 2004; Ciarrochi, Wilson, Dean and Rickwood, 2003; Al-Krenawi, 2004), where young people show preference to seeking advice and support from the family (Sherer and Karnieli-Miller, 2007). Past research led to the predicting of the pathway social support (predictor variable 'Social_Helpseek') to recognising the need to seek psychological help from a professional (outcome variable 'Recognition') (see Section 9.3).

9.1.6 Religious Coping and Help Seeking

Some researchers have argued that religion is a powerful source to help people cope with their distress (e.g. Warpole et al., 2013; George, Larson, Koenig and McCullough, 2000). Those who adopt religion as a means of coping with their problems have expressed great satisfaction (McAuley, Pecchioni and Grant, 2000; Myers and Hwang, 2004). Community-based clergy have often been found to have direct contact with sufferers of mental illness and there seems to be a preference amongst people who seek this source for help over professional help seeking (Weaver, Flannelly, Flannelly and Oppenheimer, 2003). Moreover, religious-based beliefs about mental illness (e.g. religious kindness to look after those who are unfortunate) have been found to positively influence opinion on help seeking (Chadda, Agarwal, Singh and Raheja, 2001; Cinnirella and Loewenthal, 1999; Leavey, Loewenthal and King, 2007). Past research led to the prediction of the pathway from religious coping style (variable 'SurrenderCS') to recognising the need to seek psychological help from a professional (outcome variable 'Recognition'), as outlined in Section 9.3.

9.1.7 The Current Study

The overall aim of the current study is to expand research and develop path analysis models, in the Syrian context. The aim is also to offer descriptions of and explanations about Syrian psychological help seeking and how it relates to attitudes towards mental illness, coping styles, social support and mental health wellbeing.

The goal of the current chapter is to assess the relationship between the person-related predictor variables and the outcome variable recognising the need to seek professional psychological help. The predictor variables were explored in Chapters 6, 7 and 8 and the following variables were included in path analysis models: Benevolence; Social Restrictiveness; Community Mental Health Ideology; Tolerance (with stigma associated with psychiatric help); Interpersonal (openness regarding one's problem); Confidence (in mental health professionals); Self-directing coping style; Collaborative coping style; and Surrender coping style. Other factors related to the person were also investigated: social support and mental health well-being. The outcome variable was measured by 'Recognition' (of the need to seek psychological help).

In line with an etic approach to research, the models were developed with the view that, while the experience of mental health in terms of prognosis or treatment may be universal, patterns of cognitive help seeking, attitudes towards mental illness and coping styles may be different in the Syrian context to patterns found from past research in the West. The models were developed to understand further the relationships between different person-related factors of mental health in the cognitive psychological help seeking process in the Syrian Arab context. Variables that predict cognitive help seeking will help indicate factors that may encourage or discourage actual help seeking in the future.

9.2 Method

The current study was part of the YAS study. A cross-sectional survey design was employed using a stratified cluster sample. Please see Chapter 4 for further details on the methodology.

9.2.1 Participants

Participants were 683 Syrian young people aged 15-29 years (mean age = 22 years, S.D. = 4.40). There was an equal distribution of male (N = 334; mean age = 22 years, S.D. = 4.40) and female (N = 349; mean age = 22 years, S.D. = 4.40) participants across the sample. The sampling in the study covered three areas: urban Damascus, urban Aleppo and Al Sweida (urban and rural). The sample was a stratified cluster sample and was selected using the Household Census (2004) which was updated in 2009 (CBS, 2009).

9.2.2 Measures

The variables used in the path analysis models were based on the optimal measurement models derived from previous Chapters 6-8. In particular, the variable 'Recognition' from the OSPH scale was used as the outcome (endogenous) variable to determine participants' recognition of the need to seek professional psychological help. A brief description of the scales is provided.

9.2.3 The Shortened CAMI Scale

Through CFA the CAMI scale was amended for the Syrian sample. From the shortened 4-factor 20-item scale used in the study, a 3-factor 8-item measurement model was arrived at and used in the path analysis models as outlined in Chapter 6.

The three factors that remained in the measurement model and were used in current analyses were: 'Benevolence'; Social Restrictiveness ('SocialRestrict'); and 'Community' Mental Health

Ideology. Please see Appendix 1 for a list of the CAMI variables used, together with the corresponding items and the minimum and maximum possible scores. The mean scores for each CAMI variable were used in the path analysis models.

9.2.4 The Shortened OSPH Scale

Through CFA the OSPH scale was amended for the current sample and from the four-factor 16-item scale used in the study, a four-factor 9-item measurement model was retained as outlined in Chapter 7.

The four factors that remained in the measurement model and were used in current analyses were: 'Recognition' of the need to seek professional psychological help; 'Tolerance' with stigma associated with psychiatric help; 'Interpersonal' openness regarding one's problem; and 'Confidence' in mental health professionals. The variable 'Recognition' was used as the endogenous outcome variable to determine participants' openness to recognize the need to seek psychological for distress.

Appendix 1 makes list of OSPH variables used, together with the corresponding items and the minimum and maximum possible scores. The mean scores for each OSPH variable were used in the path analysis models.

9.2.5 The Syrian Coping Styles Scale (CS scale)

Using CFA, the CS scale was amended for the current sample and from the four-factor 16-item scale used in the study, a three-factor 11-item measurement model was retained as outlined in Chapter 8. The three factors that remained in the measurement model and used here for analyses were: Self-directing coping style ('SelfDirectCS'); 'Collaborative' coping style ('CollaborativeCS'); and 'Surrender' coping style ('SurrenderCS').

A list of the CS variables used can be found in Appendix 1, together with the corresponding items and the minimum and maximum possible scores. The mean scores for each CS variable were used in the path analysis models.

9.2.6 General Mental Health Well-Being

The Self-Reporting Questionnaire (SRQ-20) was used to screen for common mental disorders in the current study. The SRQ-20 was a group of twenty dichotomously scored questions; high scores indicate high mental illness. The total score on the SRQ-20 was calculated for

participants and used as a single observed (direct or mediating) predictor variable 'Wellbeing' in the path analysis models (please Chapter 4 for further details).

9.2.7 Social Support

The social support variable was a combined score on three items measuring social support. The total score was calculated by combining the scores on all three items into one overall score which was used as a single observed predictor variable called 'Social_Helpseek' in the path analysis models (please Chapter 4 for further details).

Gender was the main demographic variable of interest for the path analysis models.

9.3 Conceptual Models

Past research, as outlined in the 'Introduction' section 9.1, indicates a relationship between person-related factors of mental health in the cognitive psychological help seeking process, where gender and other influencing factors like mental health well-being and informal help seeking play an important role in deciding to seek professional help. The literature reviewed in Chapter 3 and Section 9.1 informed the development of the hypothesised conceptual models. The hypothesised models have not been tested in this way in past research and the current chapter aims to make an original contribution to research.

Person-related factors were investigated in relation to recognition of the need to seek psychological help (measured by 'Recognition' of the need to seek psychological help). A total of 8 models were hypothesised and explored in path analysis models to investigate Syrian psychological help seeking and show how it relates to attitudes towards mental illness, coping styles, social support and mental wellbeing.

It was important to test the models in a gradual process and build on from one model to the other to know the effects the person-related predictor variables were having on the outcome variable 'Recognition'. To start, only the variables measuring CAMI and OSPH were assessed and then predictor variables 'Wellbeing' and 'Social_Helpseek' were examined in later models. The coping styles characteristics were then examined with the CAMI and OSPH variables and a further examination of the effects 'Wellbeing' and 'Social_Helpseek' had on the outcome variable were assessed. The findings were outlined in accordance to hypothesised Models 1 to 8.

Hypothesised Conceptual Model 1: Community attitudes towards mental illness and opinions on seeking professional help.

In order to understand the factors that significantly affected one's 'Recognition' of the need to seek psychological help, it was predicted that the following factors would have a relationship with 'Recognition':

- **Benevolence** (a moral responsibility of society to care and have sympathy for the mentally ill) – a positive relationship between 'Benevolence' and 'Recognition' was predicted.
- **Community** (mental health ideology) – a positive relationship between 'Community' and 'Recognition' was predicted.
- **Tolerance** with mental health stigma – a positive relationship was predicted between 'Tolerance' and 'Recognition'.
- **Confidence** (in mental health professionals) – a positive relationship was predicted between 'Confidence' and 'Recognition'.
- **Social restrictiveness** (of those mentally ill) – a positive relationship was predicted between 'SocialRestrict' and 'Recognition'.
- **Interpersonal** (openness to own problems) – a positive relationship was predicted between 'Interpersonal' and 'Recognition'.

Figure 9.1 indicates the factor structure for Model 1, where model fit and significant pathways were assessed. Gender differences for this and all other models were examined and outlined in the 'Results' section 9.4.

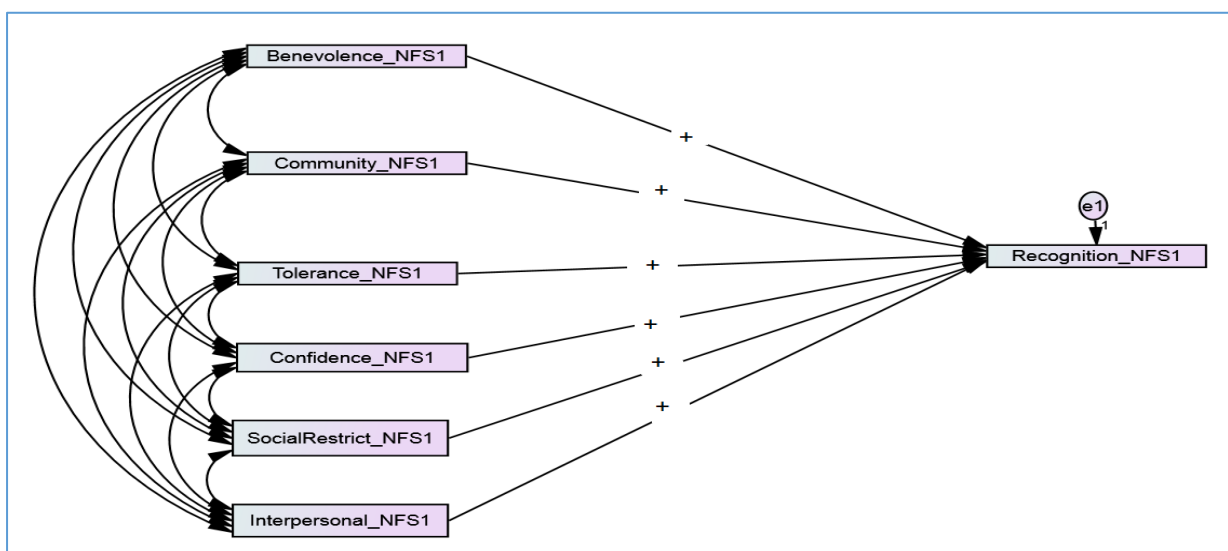


Figure 9.1: Hypothesised Path Model 1

Therefore, it was hypothesized that there will be a significant relationship between the exogenous variables (Benevolence, Community, Tolerance, Confidence, Social Restrictiveness, Interpersonal), with the endogenous variable 'Recognition' to seeking professional psychological help.

Hypothesised Conceptual Model 2: Community attitudes towards mental illness, opinions on seeking professional help and social support.

The same factor structure outlined in Model 1 was used in Model 2, but with the addition of 'Social_Helpseek' as an exogenous variable affecting the endogenous variable 'Recognition'. A negative relationship was predicted between 'Social_Helpseek' and 'Recognition' (please see Figure 9.4 in the Results section 9.4 for factor structure of Model 2).

Therefore, it was hypothesised that there will be a significant relationship between the exogenous variables (Benevolence, Community, Tolerance, Confidence, Social Restrictiveness, Interpersonal and Social_Helpseek), with the endogenous variable 'Recognition' to seeking professional psychological help.

Hypothesised Conceptual Model 3: Community attitudes towards mental illness, opinions on seeking professional help and mental health wellbeing.

The same factor structure outlined in Model 1 was used in Model 3, but with the addition of mental health 'Wellbeing' as an exogenous variable affecting the endogenous variable 'Recognition'. A negative relationship was predicted between 'Wellbeing' and 'Recognition', where high scores on the wellbeing scale indicate high mental illness (please see Figure 9.6 in section 9.4 for factor structure of Model 3).

Therefore, it was hypothesised that there will be a significant relationship between the exogenous variables (Benevolence, Community, Tolerance, Confidence, Social Restrictiveness, Interpersonal and Wellbeing), with the endogenous variable 'Recognition' to seeking professional psychological help.

Hypothesised Conceptual Model 4: Community attitudes towards mental illness, opinions on seeking professional help, social support and mental health wellbeing.

The same factor structure outlined in Model 1 was used in Model 4, but with the addition of mental health 'Wellbeing' and 'Social_Helpseek' both as exogenous variables affecting the

endogenous variable 'Recognition'. A negative relationship was predicted between 'Wellbeing' and 'Recognition' and between 'Social_Helpseek' and 'Recognition' (please see Figure 9.8 in section 9.4 for factor structure of Model 4).

Therefore, it was hypothesised that there will be a significant relationship between the exogenous variables (Benevolence, Community, Tolerance, Confidence, Social Restrictiveness, Interpersonal, Social_Helpseek and Wellbeing), with the endogenous variable 'Recognition' to seeking professional psychological help.

Hypothesised Conceptual Model 5: Community attitudes towards mental illness, opinions on seeking professional help and coping styles.

The same factor structure outlined in Model 1 was used in Model 5, but with the addition of the following variables as exogenous variables affecting the endogenous variable 'Recognition':

- **Self-directing** coping style – A negative relationship was predicted between 'SelfDirectCS' and 'Recognition'.
- **Collaborative** coping style – A negative relationship was predicted between 'CollaborativeCS' and 'Recognition'.
- **Surrender** coping style – A negative relationship was predicted between 'SurrenderCS' and 'Recognition'.

Please see Figure 9.10 in the 'Results' Section 9.4 for factor structure of Model 5.

Therefore, it was hypothesised that there will be a significant relationship between the exogenous variables (Benevolence, Community, Tolerance, Confidence, Social Restrictiveness, Interpersonal, Self-directing coping style, Collaborative coping style and Surrender coping style), with the endogenous variable 'Recognition' to seeking professional psychological help.

Hypothesised Conceptual Model 6: Community attitudes towards mental illness, opinions on seeking professional help, coping styles and social support.

The same factor structure outlined in Model 5 was used in Model 6, but with the addition of 'Social_Helpseek' as an exogenous variable affecting the endogenous variable 'Recognition'. Again, a negative relationship was predicted between 'Social_Helpseek' and 'Recognition' (please see Figure 9.12 in Section 9.4 for factor structure of Model 6).

Therefore, it was hypothesised that there will be a significant relationship between the exogenous variables (Benevolence, Community, Tolerance, Confidence, Social Restrictiveness, Interpersonal, Self-directing coping style, Collaborative coping style, Surrender coping style and Social_Helpseek), with the endogenous variable 'Recognition' to seeking professional psychological help.

Hypothesised Conceptual Model 7: Community attitudes towards mental illness, opinions on seeking professional help, coping styles and mental health wellbeing.

The same factor structure outlined in Model 5 was used in Model 7, but with the addition of the following pathways:

- **Surrender** to **Wellbeing** – a negative relationship was predicted between 'SurrenderCS' and 'Wellbeing'.
- **Wellbeing** to **Recognition** – a negative relationship was predicted between 'Wellbeing' and 'Recognition'.

It was predicted that 'Wellbeing' would significantly and partially mediate the negative relationship between 'Surrender' coping style and 'Recognition'. Please see Figure 9.14 in section 9.4 for factor structure of Model 7.

Therefore, it was hypothesised that there will be a significant relationship between the exogenous variables (Benevolence, Community, Tolerance, Confidence, Social Restrictiveness, Interpersonal, Self-directing coping style, Collaborative coping style, Surrender coping style and Wellbeing), with the endogenous variable 'Recognition' to seeking professional psychological help. Wellbeing will also significantly mediate the relationship between Surrender coping style and the exogenous variable 'Recognition'.

Hypothesised Conceptual Model 8: Community attitudes towards mental illness, opinions on seeking professional help, coping styles, social support and mental health wellbeing.

The same factor structure outlined in Model 7 was used in Model 8, but with the addition of 'Social_Helpseek' as an exogenous variable affecting the endogenous variable 'Recognition'. Again, a negative relationship was predicted between 'Social_Helpseek' and 'Recognition' (please see Figure 9.16 in the Results section 9.4 for factor structure of Model 8).

Therefore, it was hypothesised that there will be a significant relationship between the exogenous variables (Benevolence, Community, Tolerance, Confidence, Social Restrictiveness, Interpersonal, Self-directing coping style, Collaborative coping style, Surrender coping style, Social_Helpseek and Wellbeing), with the endogenous variable 'Recognition' to seeking professional psychological help. Wellbeing will also significantly mediate the relationship between Surrender coping style and the exogenous variable 'Recognition'.

9.4 Results

9.4.1 Descriptive and Inferential Findings

The descriptive analyses were conducted on the modified variables that were derived from CFA modifications in Chapter's 6 to 8 – variables found in the optimal models. The mean and standard deviations for variables can be found in Table 9.1. The findings indicate that there were no significant differences between males and females on any of the CAMI or OSPH variables. However, there were significant gender differences found in the coping styles variables. There was a significant difference between males ($M = 10.32$, $S.D. = 3.04$) and females ($M = 9.67$, $S.D. = 2.76$) on the 'Self-direct' coping style: $t(681) = 2.94$, $p = .003$. There was a significant difference between males ($M = 8.93$, $S.D. = 1.66$) and females ($M = 9.40$, $S.D. = 1.56$) on the 'Collaborative' coping style: $t(681) = -3.87$, $p < .001$. There was a significant difference between males ($M = 10.49$, $S.D. = 2.70$) and females ($M = 11.07$, $S.D. = 2.55$) on the 'Surrender' coping style than males; $t(681) = 2.89$, $p = .004$.

There was a significant difference between males ($M = 17.89$, $S.D. = 2.43$) and females ($M = 16.90$, $S.D. = 3.07$) on mental health wellbeing $t(681) = 4.64$, $p < .001$; where males exhibited slightly poorer mental health wellbeing than females. Furthermore, there was a significant difference between males ($M = 6.69$, $S.D. = 1.69$) and females ($M = 8.00$, $S.D. = 1.29$) on seeking social support $t(681) = 11.43$, $p < .001$; where females indicated slightly more social support seeking than males. Please see Table 9.1. Appendix 20 indicates the correlations between scores on all 12 variables explored in the path analysis models. The findings show that the variables do not correlate with one another, and the highest correlation was found between the variables Benevolence-interpersonal (0.585). The correlations do not exhibit multicollinearity as they are all correlate below cut-off point 0.8.

Table 9.1: Mean, Standard Deviation and Independent Samples t-test of Gender Differences on all Variables

	Variable	Male (N = 334)		Female (N = 349)		t	df	p	Mean Min-Max
		Mean	S.D.	Mean	S.D.				
CAMI	Benevolence	7.29	1.57	7.41	1.55	-0.998	681	0.319	2-10
	Community	10.14	2.55	10.14	2.61	-0.01	681	0.989	3-15
	SocialRestrict	8.32	2.4	8.38	2.25	-0.33	681	0.745	3-15
OSP	Recognition	3.79	1.12	3.85	1.22	-0.61	681	0.541	2-8
	Tolerance	5.43	1.29	5.54	1.21	-1.06	681	0.288	2-8
	Confidence	5.4	1.31	5.52	1.32	-1.11	681	0.269	2-8
	Interpersonal	7.53	1.19	7.62	1.23	-0.96	681	0.336	2-8
CS	SelfDirectCS	10.32	3.04	9.67	2.76	2.94	681	0.003	4-16
	CollaborativeCS	8.93	1.66	9.4	1.56	-3.87	681	.00	3-12
	SurrenderCS	10.49	2.7	11.07	2.55	-2.89	681	0.004	4-16
	Wellbeing	17.89	2.43	16.9	3.07	4.64	681	.00	0-2
	Social_Helpseek	6.69	1.69	8.0	1.29	-11.43	681	.00	3-9

As shown in Appendix 20 there were significant correlations between sub-factors of the CAMI scale and also within the OSPH sub-factors of OSPH. Other correlations for the whole sample were also found. Correlations for male participants and for female participants separately were similar to the whole sample data. Please see Appendix 21 for zero-order correlations for males and females separately.

9.4.2 Path Analysis Models

Path analysis models, were used to assess model fit to the available data (N = 683). Multi-group analyses for gender differences were assessed and path analysis models were presented to indicate significant pathways that illustrated gender differences. Please see Appendix 22 for a full list of significant pathways.

9.4.3 Model 1: Community attitudes towards mental illness and opinions on seeking professional help

The overall fit for Model 1 using the path analysis model, estimated for males and females together, was very poor for the data used in the current study; $\chi^2(2, N = 683) = 1073, p < .005$ and not acceptable. Other values of model fit were also very poor (CMIN/DF = 536.5; CFI = .000; GFI = .82; AGFI = -4.17; RMSEA = .89; PCLOSE = .00); 41% of variance in 'Recognition' was explained by this model.

As shown in Figure 9.2, three predictor variables were found to have a significant effect on scores of 'Recognition'; indicating that while the overall model fit was poor, three predictors 'Benevolence' ($p < .001$), 'Community' ($p < .001$) and 'Social Restrict' ($p < .001$) affected scores on 'Recognition'.

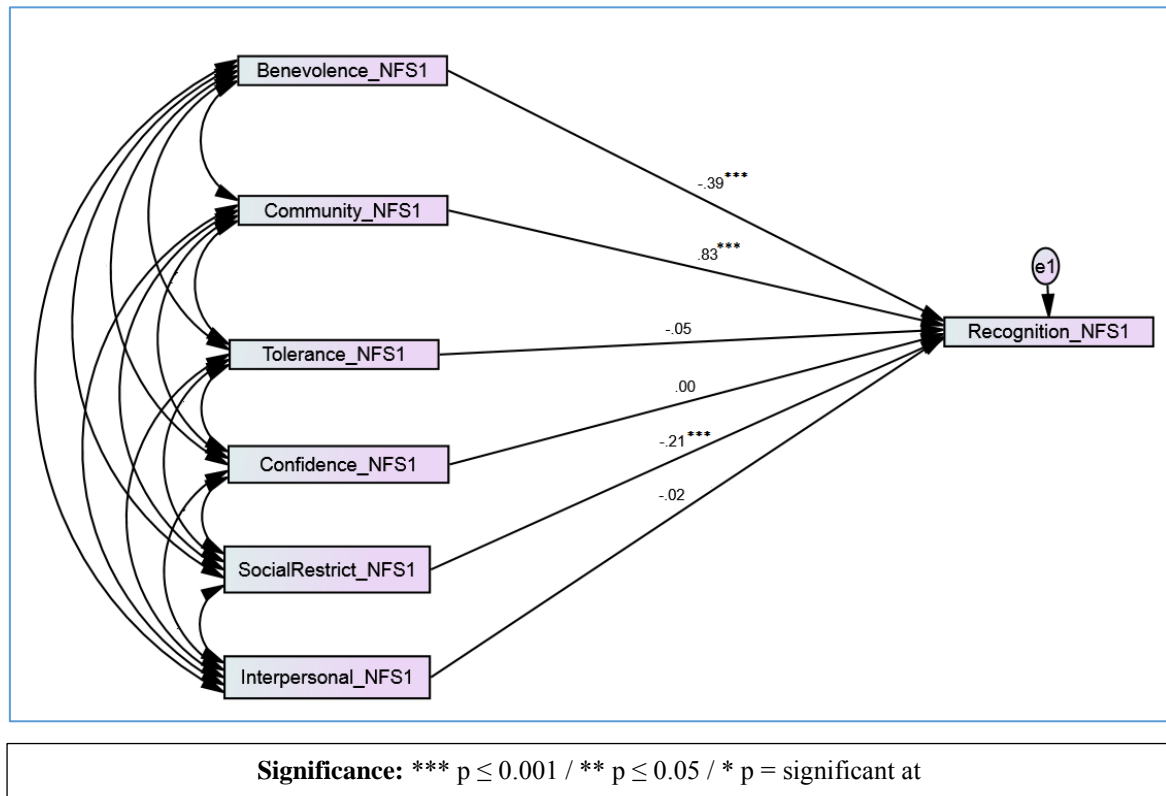


Figure 9.2: Path Model 1 – Standardized Estimates

Unlike predicted, 'Social Restrict' negatively impacted scores on 'Recognition', however the strength of the effect was small (-.21). For 'Benevolence' it was predicted that it would affect scores on 'Recognition' positively, but the findings showed that it was in fact a negative relationship – thus the lower the score on 'Benevolence' the higher the score on 'Recognition'. Moreover, the effect of 'Benevolence' was average in size (-.39). The effect size for 'Community' was high (.83).

9.4.4 Gender Differences

A multi-group analysis was conducted to determine the fit of pathway models for male and female samples separately and to find significant differences in path coefficients between genders.

The findings showed that the model fit for the male path analysis model was poor $\chi^2(1, N = 334) = 532.7, p < .005$; CMIN/DF = 532.7; CFI = .000; GFI = .81; AGFI = -4.2; RMSEA = 1.26; PCLOSE = .00; 45% of variance in 'Recognition' was explained by this model. The female sample data fitted on the path analysis model was also poor $\chi^2(1, N = 349) = 540.4, p < .005$; CMIN/DF = 540.4; CFI = .000; GFI = .82; AGFI = -4.15; RMSEA = 1.25; PCLOSE = .00; 42% of variance in 'Recognition' was explained by this model.

There were no significant differences between males and females on the coefficient for any of the predictor variables. This was assessed by the Critical Ratio for differences between parameters. However, there were four predictor variables that were significantly affecting scores on 'Recognition' for males and females separately: 'Benevolence' ($p < .001$), 'Community' ($p < .001$), 'Social Restrict' ($p < .001$) and 'Interpersonal' ($p < .001$ for males and for females $p = .002$). Figure 9.3 indicates the effects of the pathways for males and females, and significant coefficients of predictor variables were indicated.

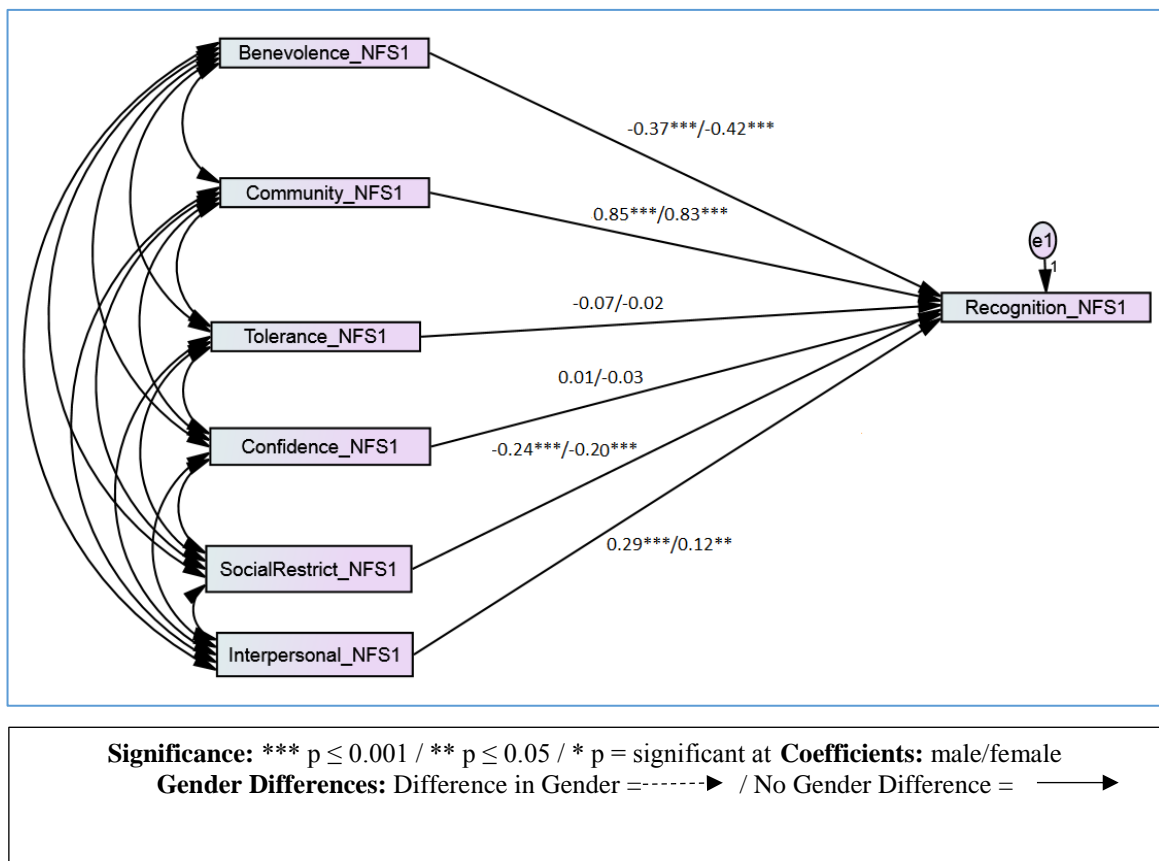


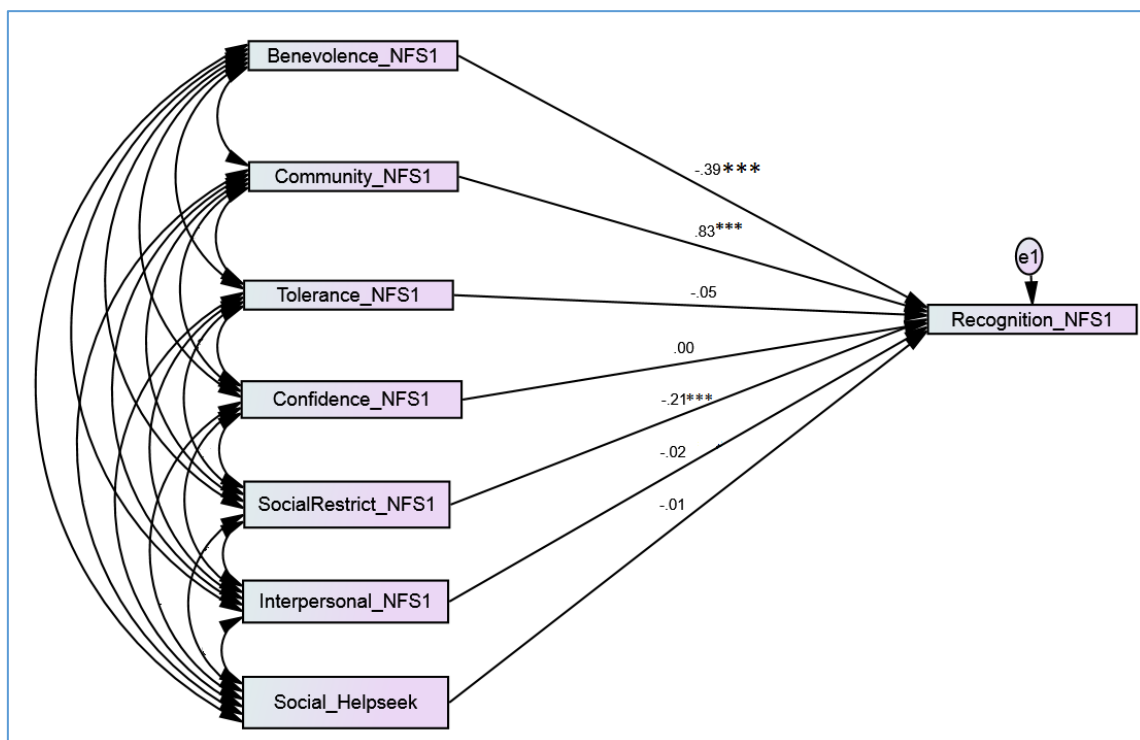
Figure 9.3: Path Model 1 – Standardized Estimates for Males and Females and Significant Gender Differences

Although there were no gender differences on any of the predictor variable coefficients in the model, significant effects of the four indicated predictors were the same for both genders. The findings indicated that the strength of the relationship between the predictor variables and 'Recognition' were the same for both genders.

9.4.5 Model 2: Community attitudes towards mental illness, opinions on seeking professional help and social support

The overall fit for Model 2 using the path analysis model (indicated in Figure 9.4), estimated for males and females together, was very poor $\chi^2(2, N = 683) = 1072, p < .005$. Other values of model fit were also very poor (CMIN/DF = 536; CFI = .000; GFI = .84; AGFI = -4.95; RMSEA = .89; PCLOSE = .00; 41% of variance in 'Recognition' was explained by this model).

Similar to Model 1 three predictor variables were significantly affecting scores on 'Recognition'; again indicating that while the overall model fit was poor, some pathways were significant. Again the three predictors 'Benevolence' ($p < .001$), 'Community' ($p < .001$) and 'Social Restrict' ($p < .001$) had some effect on scores of 'Recognition, and showed the same effect size on 'Recognition' as in the findings of Model 1.



Significance: *** $p \leq 0.001$ / ** $p \leq 0.05$ / * $p =$ significant at

Figure 9.4: Path Model 2 – Standardized Estimates

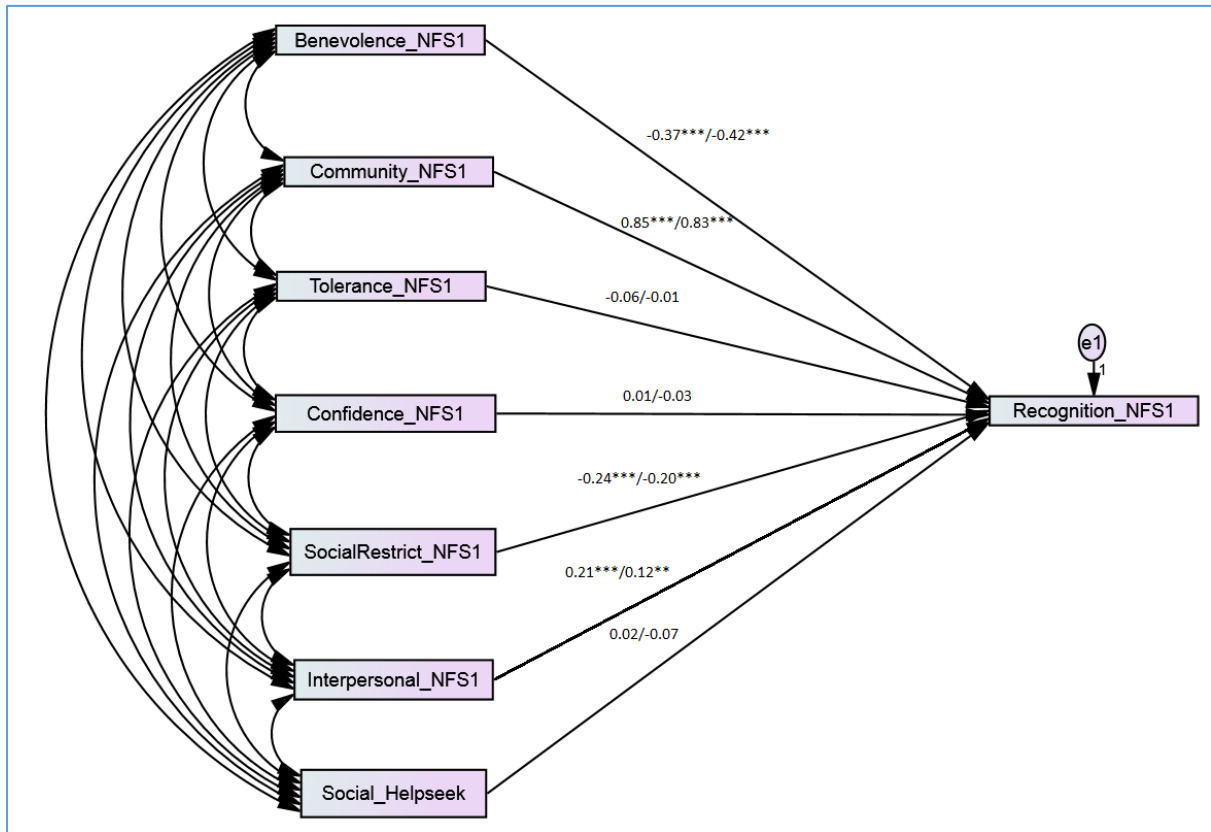
The addition of the predictor variable 'Social_Helpseek' had no impact on the model and thus indicates that social support here did not impact the outcomes for participants' recognition of the need to seek psychological help.

9.4.6 Gender Differences

The findings indicated that the model fit for the male path analysis model was poor $\chi^2(1, N = 334) = 533.6, p < .005$; CMIN/DF = 533.6; CFI = .000; GFI = .83; AGFI = -4.9; RMSEA = 1.27; PCLOSE = .00; 45% of variance in 'Recognition' was explained by this model. The female data fitted on the path analysis model was also poor $\chi^2(1, N = 349) = 538.5, p < .005$; CMIN/DF = 538.5; CFI = .000; GFI = .84; AGFI = -4.9; RMSEA = 1.24; PCLOSE = .00; 42% of variance in 'Recognition' was explained by this model.

There were no gender differences on the coefficients for any of the predictor variables. However, parallel to Model 1 the same four predictor variables were found to significantly affect scores on 'Recognition' for males and females separately: 'Benevolence' ($p < .001$), 'Community' ($p < .001$), 'Social Restrict' ($p < .001$) and 'Interpersonal' ($p < .001$ for males and for females $p = .002$). However, the effect of most of the significant coefficients of predictor variables were relatively weak, especially for 'SocialRestrict' (males = -.24, females = -.20) and 'Interpersonal' (males = .21, females = .12). However, the effect of the coefficients for males and females for the predictor variable 'Community' (males = .85, females = .83) was large.

Figure 9.5 indicates the effects of the pathways for males and females and significant coefficients for males and females separately.



Significance: *** $p \leq 0.001$ / ** $p \leq 0.05$ / * $p =$ significant at
Gender Differences: Difference in Gender = -----▶ / No Gender Difference = ———▶

Figure 9.5: Path Model 2 – Standardized Estimates for Males and Females and Significant Gender Differences

9.4.7 Model 3: Community attitudes towards mental illness, opinions on seeking professional help and mental health wellbeing

Good model fit was not achieved for Model 3 and was a poor fit for the data used in this study; $\chi^2(2, N = 683) = 991.9, p < .005$ and not acceptable. Other values of model fit were also very poor (CMIN/DF = 496; CFI = .000; GFI = .84; AGFI = -4.79; RMSEA = .85; PCLOSE = .00); 41% of variance in ‘Recognition’ was explained by this model.

Four predictor variables were found to significantly affect scores on ‘Recognition’; again indicating that while the overall model fit was poor some pathways were individually having a significant effect. Like the previous models ‘Benevolence’ ($p < .001$), ‘Community’ ($p < .001$) and ‘Social Restrict’ ($p < .001$) were found to have a significant effect on ‘Recognition’. Again the effect sizes were relatively weak especially for ‘SocialRestrict’ (-.21), but the effect size for the variable ‘Community’ was large (.84).

The predictor variable 'Wellbeing' was also found to have a significant (but weak) effect on 'Recognition' ($p = .001$); indicating that participants that scored low on the mental health wellbeing scale (hence good mental health wellbeing) recognized more the need for psychological help. Please see Figure 9.6 for significant pathways.

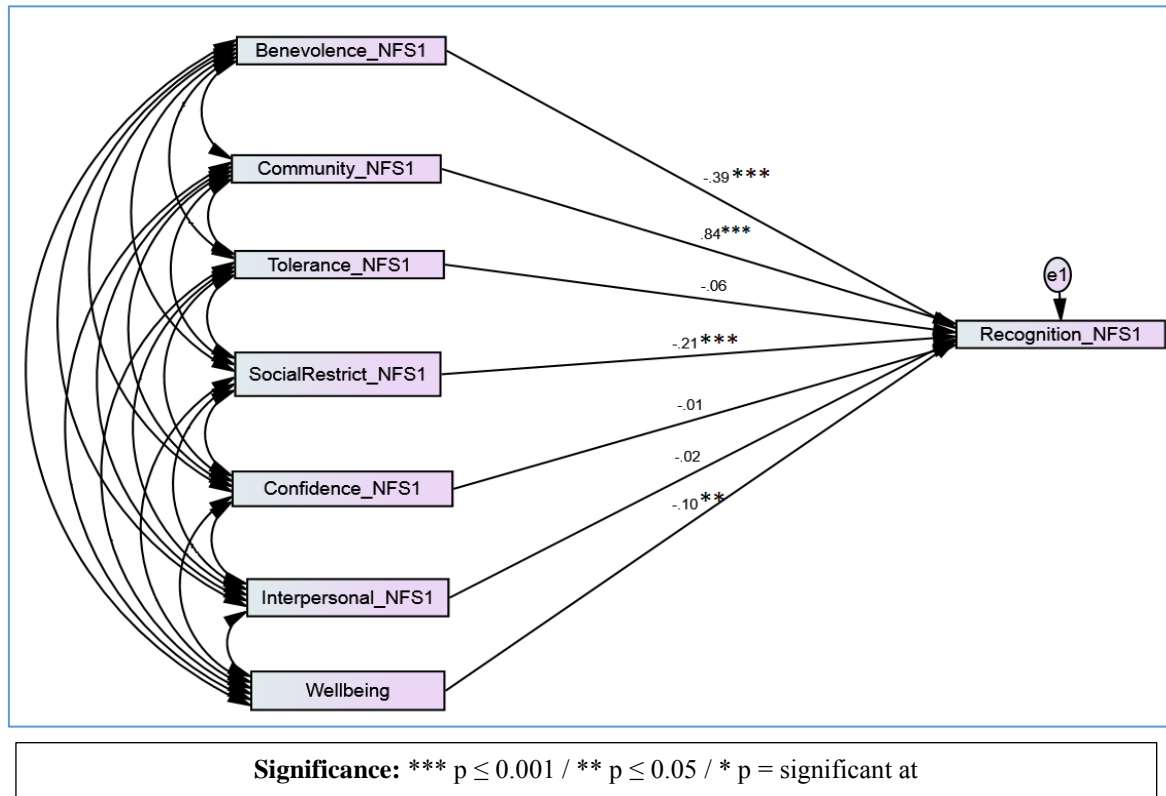


Figure 9.6: Path Model 3 – Standardized Estimates

9.4.8 Gender Differences

The model fit for males and for females were both poor. For males: $\chi^2(1, N = 334) = 494.2, p < .005$; CMIN/DF = 494.2; CFI = .000; GFI = .84; AGFI = -4.83; RMSEA = 1.22; PCLOSE = .00; 41% of variance in 'Recognition' was explained by this model. For females: $\chi^2(1, N = 349) = 497.7, p < .005$; CMIN/DF = 497.7; CFI = .007; GFI = .84; AGFI = -4.75; RMSEA = 1.19; PCLOSE = .00; 41% of variance in 'Recognition' was explained by this model.

Similar to previous models four predictor variables were found to significantly affect scores on 'Recognition' for males and females separately: 'Benevolence' ($p < .001$), 'Community' ($p < .001$), 'Social Restrict' ($p < .001$) and 'Wellbeing' (male $p = .047$; females $p = .011$). In addition, for males 'Tolerance' was significantly affecting scores on 'Recognition' ($p = .027$); and for females 'Interpersonal' was significantly affecting scores on 'Recognition' ($p = .032$).

There was a significant difference between males and females on one coefficient for the predictor variable 'Interpersonal' (CR = 2.64; $p < .005$). Again the effect sizes for significant pathways were relatively weak, with the exception of the predictor variable 'Community'. Please see Figure 9.7 which illustrates significant pathways for males and for females and gender differences.

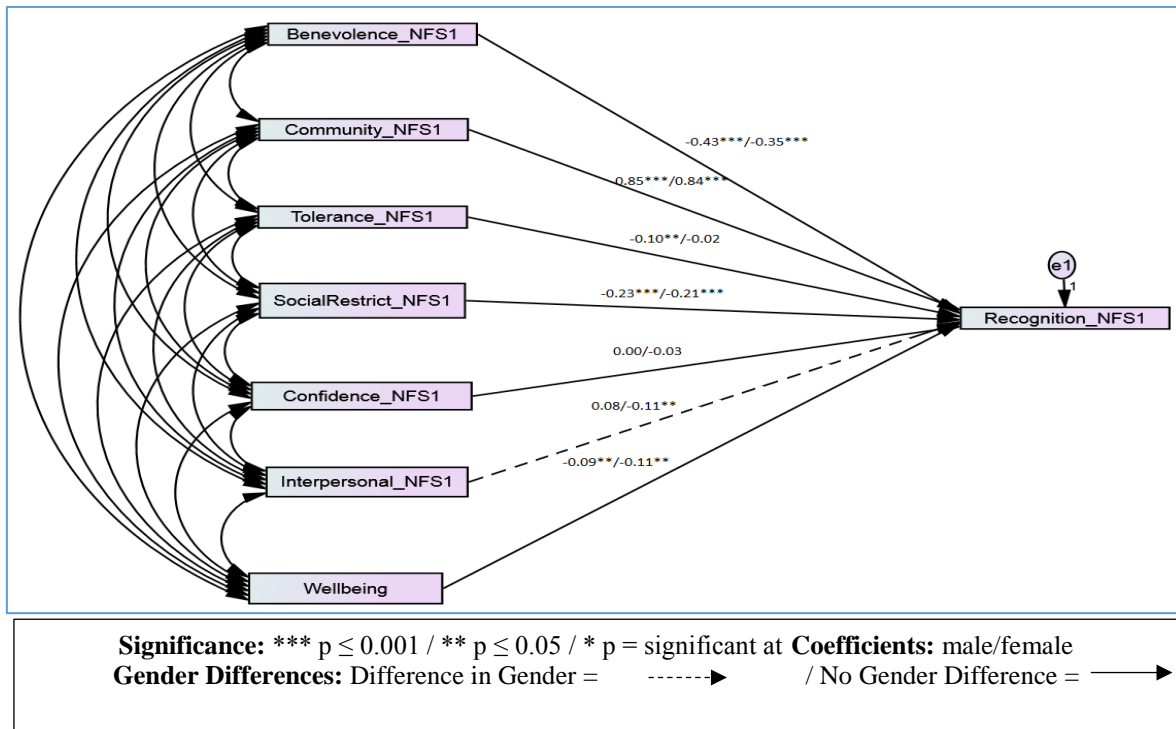
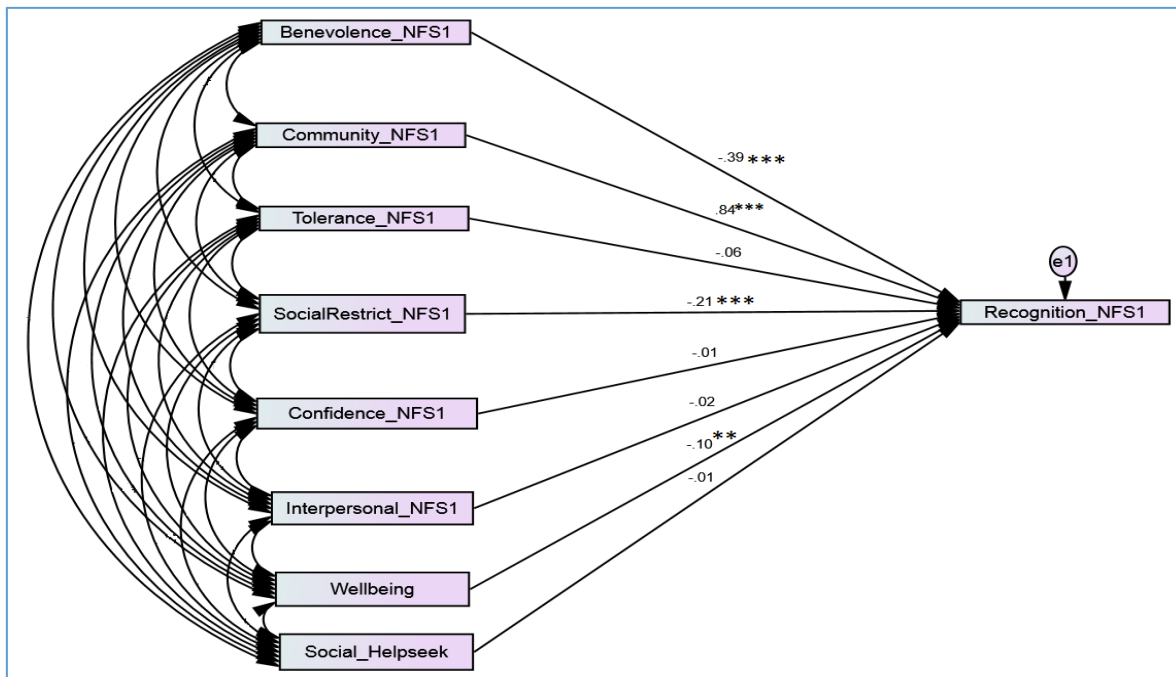


Figure 9.7: Path Model 3 – Standardized Estimates for Males and Females and Significant Gender Differences

9.4.9 Model 4: Community attitudes towards mental illness, opinions on seeking professional help, social support and mental health wellbeing

Similar to previous models, the fit for Model 4 was very poor and not acceptable $\chi^2(2, N = 683) = 991, p < .005$. Other values of model fit were also very poor (CMIN/DF = 495.5; CFI = .000; GFI = .85; AGFI = -5.55; RMSEA = .85; PCLOSE = .00); 41% of variance in 'Recognition' was explained by this model.

Similar to previous models, shown in Figure 9.8, four predictor variables were found to significantly affect scores on 'Recognition' for both genders together: 'Benevolence' ($p < .001$), 'Community' ($p < .001$), 'Social Restrict' ($p < .001$) and 'Wellbeing' ($p = .001$) affected scores on 'Recognition', all effects were relatively weak, with the exception of the predictor variable 'Community'.



Significance: *** $p \leq .001$ / ** $p \leq .05$ / * $p =$ significant at

Figure 9.8: Path Model 4 – Standardized Estimates

9.4.10 Gender Differences

The findings indicated that the model fit for the male path analysis model was poor $\chi^2(1, N = 334) = 494.8, p < .005$; CMIN/DF = 494.8; CFI = .000; GFI = .85; AGFI = -5.6; RMSEA = 1.22; PCLOSE = .00; 41% of variance in ‘Recognition’ was explained by this model. The female data fitted on the path analysis model was also poor $\chi^2(1, N = 349) = 496.2, p < .005$; CMIN/DF = 496.2; CFI = .010; GFI = .86; AGFI = -5.5; RMSEA = 1.19; PCLOSE = .00; 41% of variance in ‘Recognition’ was explained by this model.

The same four predictor variables were found to significantly affect scores on ‘Recognition’ for males and females separately: ‘Benevolence’ ($p < .001$), ‘Community’ ($p < .001$), ‘Social Restrict’ ($p < .001$) and ‘Wellbeing’ ($p = .001$). Similar to Model 3, ‘Tolerance’ ($p = .027$) was significantly affecting scores on ‘Recognition’ for males; and for females ‘Interpersonal’ was significantly affecting scores on ‘Recognition’ ($p = .037$). Again, all effects were relatively weak, with the exception of the coefficients for the predictor variable ‘Community’ which had a large effect size for both genders (male = .85, female = .84). Figure 9.9 indicates the effects of the pathways for males and females; significant pathways for males and females separately; and the pathway with significant differences between genders.

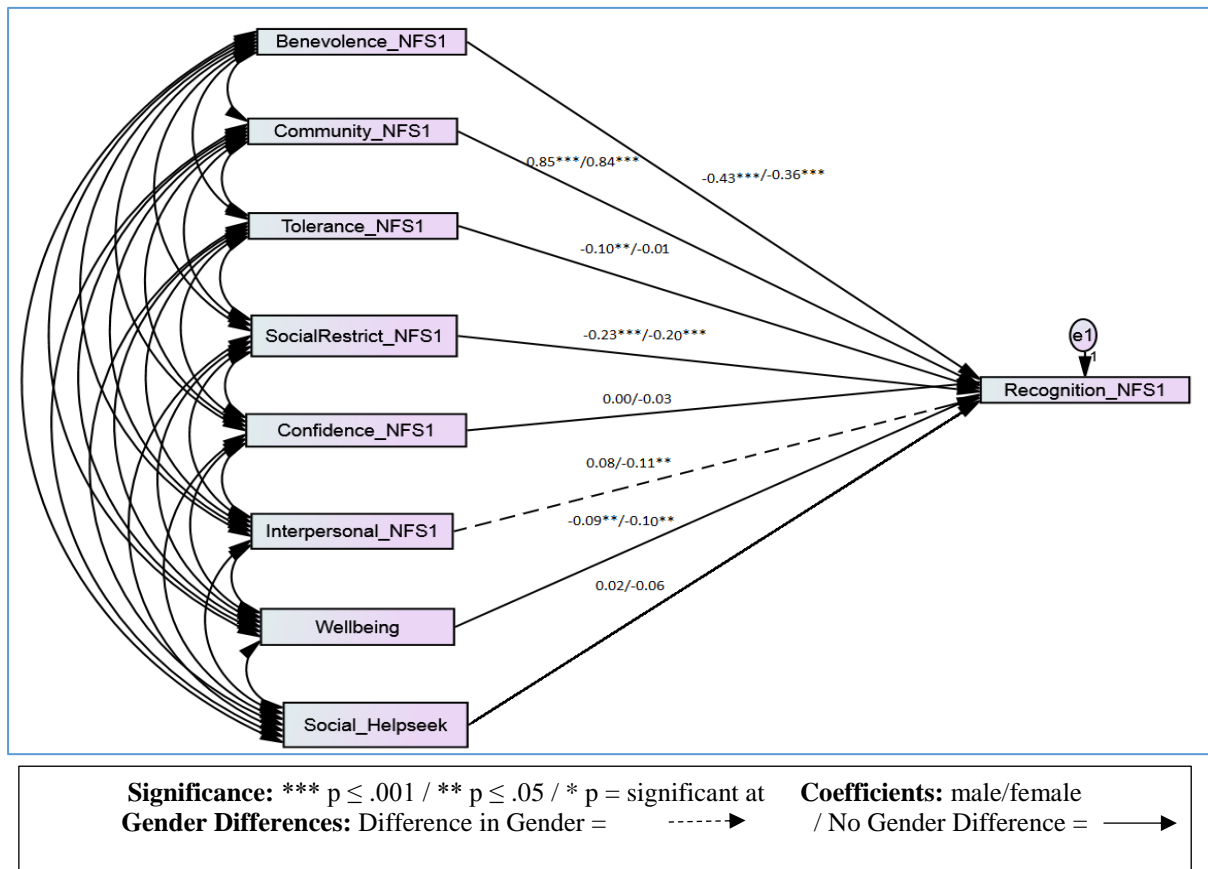


Figure 9.9: Path Model 4 – Standardized Estimates for Males and Females and Significant Gender Differences

Similar to Model 3 there was a significant difference between males and females on one coefficient for the predictor variable ‘Interpersonal’, assessed by the Critical Ratio for differences between parameters: ‘Interpersonal’ (CR = 2.58; $p < .005$).

9.4.11 Model 5: Community attitudes towards mental illness, opinions on seeking professional help and coping styles

The fit for Model 5 was also poor $\chi^2(2, N = 683) = 1019.2, p < .005$. Other values of model fit were poor (CMIN/DF = 509.6; CFI = .135; GFI = .87; AGFI = -6.39; RMSEA = .86; PCLOSE = .00); 42% of variance in ‘Recognition’ was explained by this model.

As shown in Figure 9.10, four predictor variables were significantly affecting scores on ‘Recognition’ for males and females together; indicating again that while the overall model fit was poor, four predictors ‘Benevolence’ ($p < .001$), ‘Community’ ($p < .001$), ‘Social Restrict’ ($p < .001$) and ‘Collaborative’ Coping Style ($p < .001$) affected scores on ‘Recognition’. As before,

the effect for significant pathways was relatively weak for all, with the exception of the predictor variable ‘Community’.

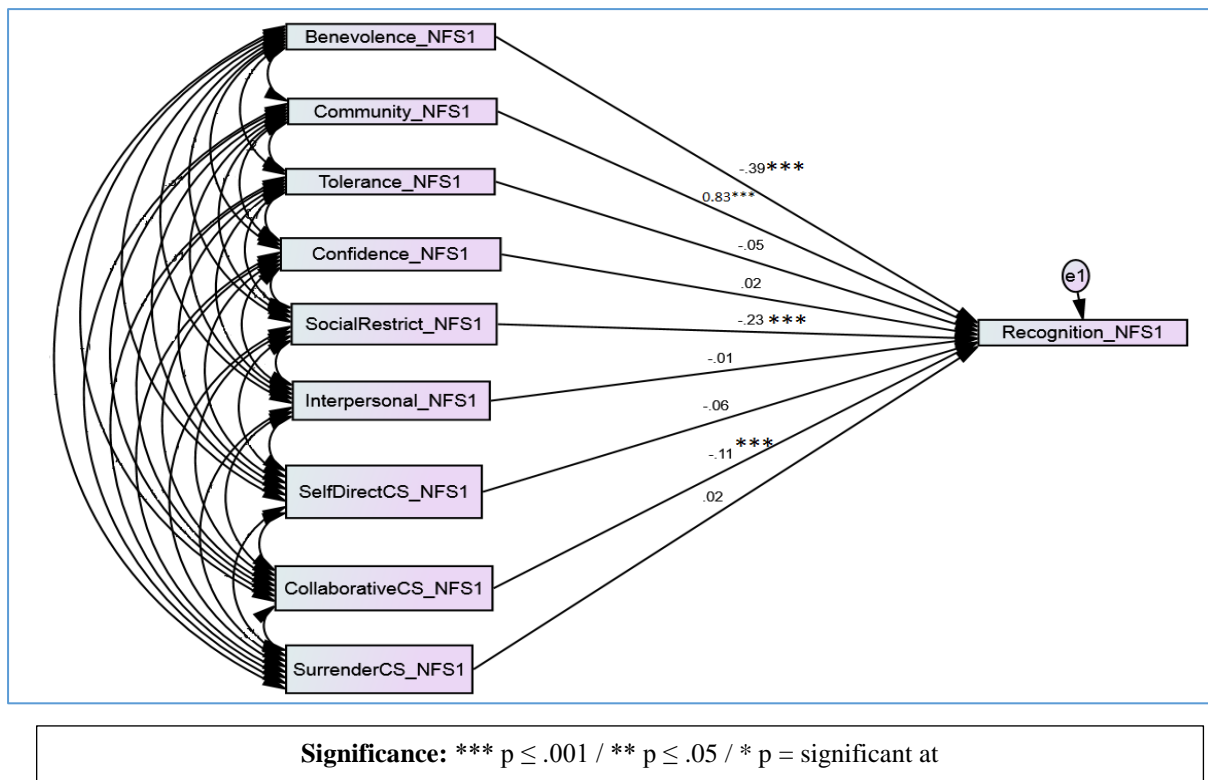


Figure 9.10: Path Model 5 – Standardized Estimates

9.4.12 Gender Differences

The fit for the male model path analysis was poor $\chi^2(1, N = 334) = 507.8, p < .005$; CMIN/DF = 507.8; CFI = .136; GFI = .87; AGFI = -6.44; RMSEA = 1.23; PCLOSE = .00; 42% of variance in ‘Recognition’ was explained by this model. The female data fitted on the path analysis model was also poor $\chi^2(1, N = 349) = 511.4, p < .005$; CMIN/DF = 511.4; CFI = .134; GFI = .87; AGFI = -6.34; RMSEA = 1.21; PCLOSE = .00; 42% of variance in ‘Recognition’ was explained by this model.

Similar to the previous model, four predictor variables were found to significantly affect scores on ‘Recognition’ for males and females separately: ‘Benevolence’ ($p < .001$), ‘Community’ ($p < .001$), ‘Social Restrict’ ($p < .001$) and ‘Collaborative’ Coping Style (for males $p = .05$; for females $p = .037$). There was one significant coefficient found for males but not for females on the predictor variable ‘Tolerance’ ($p = .02$). There were three pathways found to have affected scores on ‘Recognition’ for females but not for males: ‘Interpersonal’ ($p =$

.042); ‘Self-Directing’ Coping Style ($p = .05$); and ‘Surrender’ Coping Style ($p = .042$). Please see Figure 9.11.

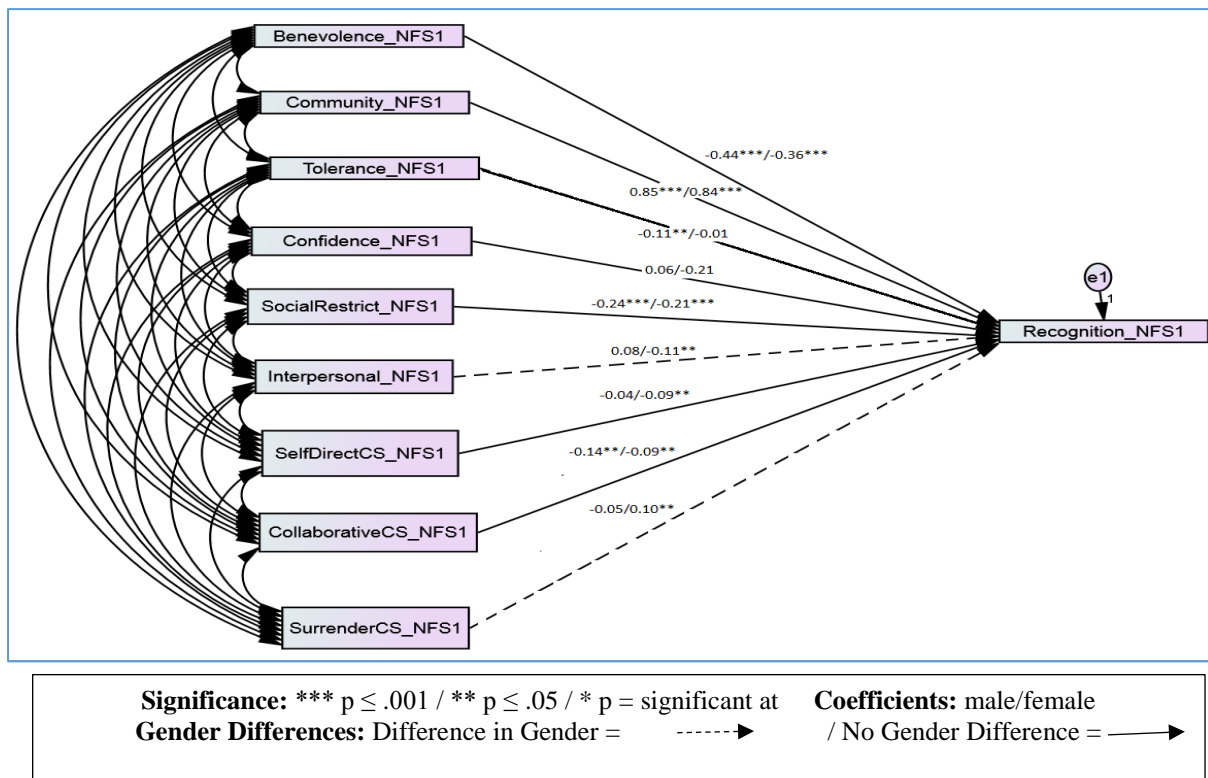


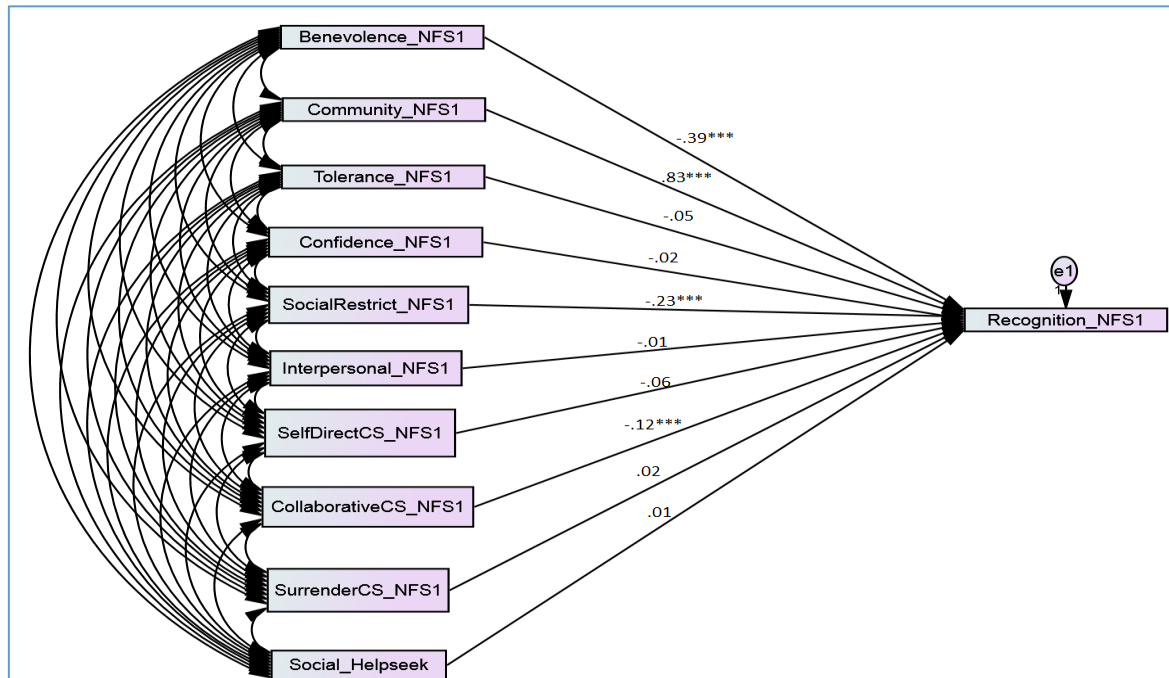
Figure 9.11: Path Model 5 – Standardized Estimates for Males and Females and Significant Gender Differences

As shown in Figure 9.11, there was a significant difference between males and females on one coefficient for the predictor variable ‘Interpersonal’ ($CR = 2.55$; $p < .005$) and ‘Surrender’ Coping Style ($CR = -2.63$; $p < .005$). Two pathways that were found to have a significant difference between males and females were not significant for both genders when examined separately. The predictors ‘Interpersonal’ and ‘Surrender’ Coping Style were only found to affect scores on ‘Recognition’ for female participants and not males.

9.4.13 Model 6: Community attitudes towards mental illness, opinions on seeking professional help, coping styles and social support

The overall fit for Model 6 estimated for the whole sample, was very poor $\chi^2(2, N = 683) = 1017$, $p < .005$. Other values of model fit were also very poor (CMIN/DF = 508.5; CFI = .173; GFI = .88; AGFI = -7.15; RMSEA = .863; PCLOSE = .00); 42% of variance in ‘Recognition’ was explained by this model.

As shown in Figure 9.12 four predictor variables were found here to have a significant effect on scores on 'Recognition'; indicating that again while the overall model fit was poor, four predictors 'Benevolence' ($p < .001$), 'Community' ($p < .001$), 'Social Restrict' ($p < .001$) and 'Collaborative' Coping style ($p < .001$) had significant effect on scores of 'Recognition'.



Significance: *** $p \leq .001$ / ** $p \leq .05$ / * $p =$ significant at

Figure 9.12: Path Model 6 – Standardized Estimates

9.4.14 Gender Differences

The fit for the male model path analysis was poor $\chi^2(1, N = 334) = 507.8, p < .005$; CMIN/DF = 507.8; CFI = .152; GFI = .88; AGFI = -7.22; RMSEA = 1.23; PCLOSE = .00; 42% of variance in 'Recognition' was explained by this model. The female data fitted on the path analysis model was also poor $\chi^2(1, N = 349) = 509.3, p < .005$; CMIN/DF = 509.3; CFI = .194; GFI = .88; AGFI = -7.092; RMSEA = 1.21; PCLOSE = .00; 42% of variance in 'Recognition' was explained by this model.

Three predictor variables were found to significantly affect scores on 'Recognition' for males and females separately: 'Benevolence' ($p < .001$), 'Community' ($p < .001$) and 'Social Restrict' ($p < .001$). The two predictor variables 'Tolerance' ($p = .020$) and 'Collaborative' Coping Style ($p = .004$) were found to significantly affect scores on 'Recognition' for males alone. For females, three predictor variables were found to affect scores on 'Recognition' for females and not males: 'Interpersonal' ($p = .044$), 'Surrender' Coping Style ($p = .014$) and 'Self-

directing' Coping style ($p = .034$). Again, all effects for significant pathways were weak, with the exception of the predictor variable 'Community'. See Figure 9.13 for the effects of the predictor variables for males and females; significant coefficients of predictor variables for males and females separately; and the coefficients with significant differences between genders.

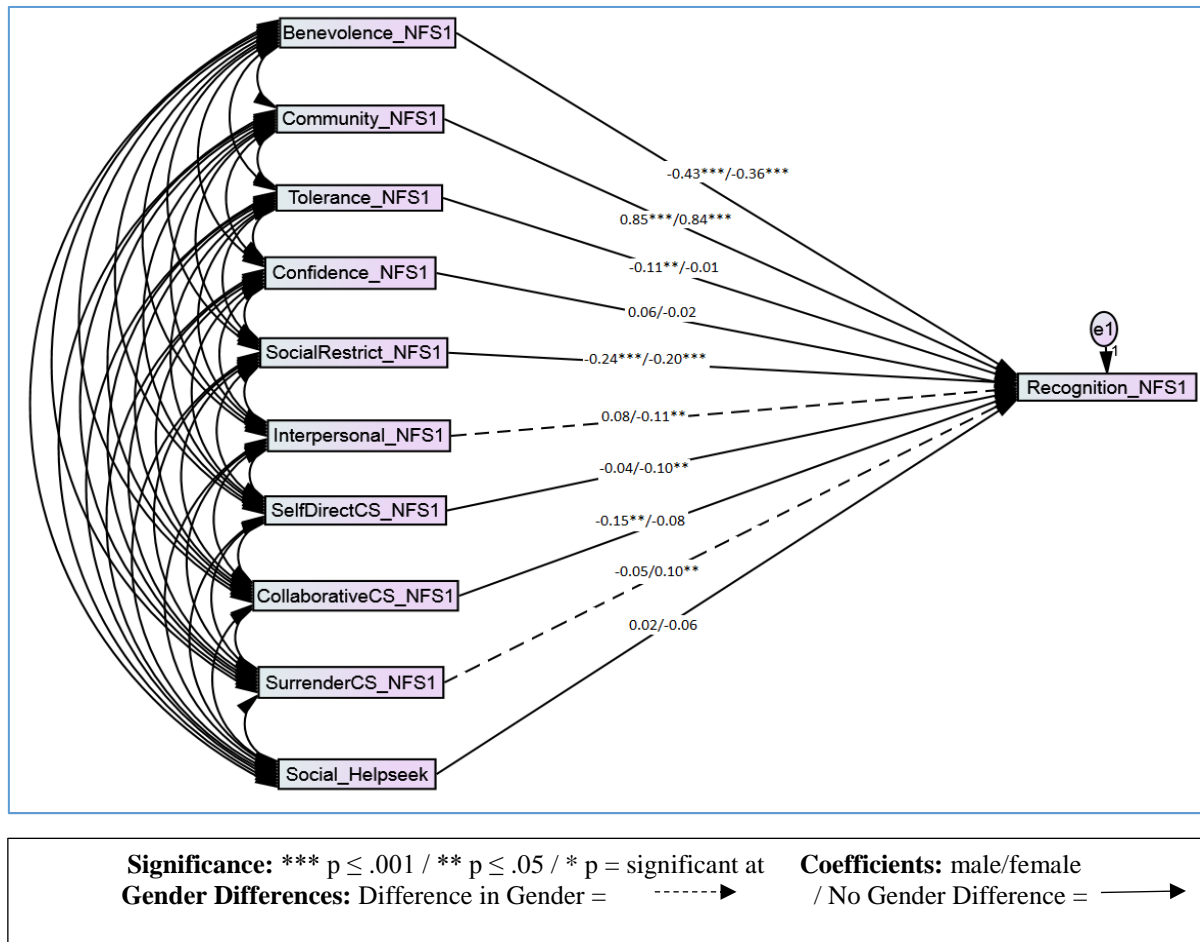


Figure 9.13: Path Model 6 – Standardized Estimates for Males and Females and Significant Gender Differences

There was a (weak) significant difference between males and females on two pathways: 'Interpersonal' ($CR = 2.51$; $p < .005$) and 'Surrender' Coping Style ($CR = -2.67$; $p < .005$).

9.4.15 Model 7: Community attitudes towards mental illness, opinions on seeking professional help, coping styles and mental health wellbeing

The overall fit for Model 7, estimated for males and females together, was a better fit than previous models but on the whole it was not a very good fit to the data; $\chi^2(18, N = 683) = 1072, p < .005$. Other values of model fit were close to a good fit but still the model was not

very good (CMIN/DF = 60; CFI = .143; GFI = .87; AGFI = .022; RMSEA = .29; PCLOSE = .00); 42% of variance in 'Recognition' was explained by this model.

Comparable to Model 5, four predictor variables were found to have a weak but significant effect on scores of 'Recognition': 'Benevolence' ($p < .001$), 'Social Restrict' ($p < .001$) and 'Collaborative' Coping Style ($p = .001$). The predictor variable 'Community' ($p < .001$) was found to have a strong significant effect on scores of 'Recognition'.

'Wellbeing' negatively mediated the negative relationship between 'Surrender' Coping Style and 'Recognition' ('Surrender' Coping style \rightarrow 'Wellbeing' ($p = .001$); 'Wellbeing' \rightarrow 'Recognition' ($p = .003$)). Please see Figure 9.14.

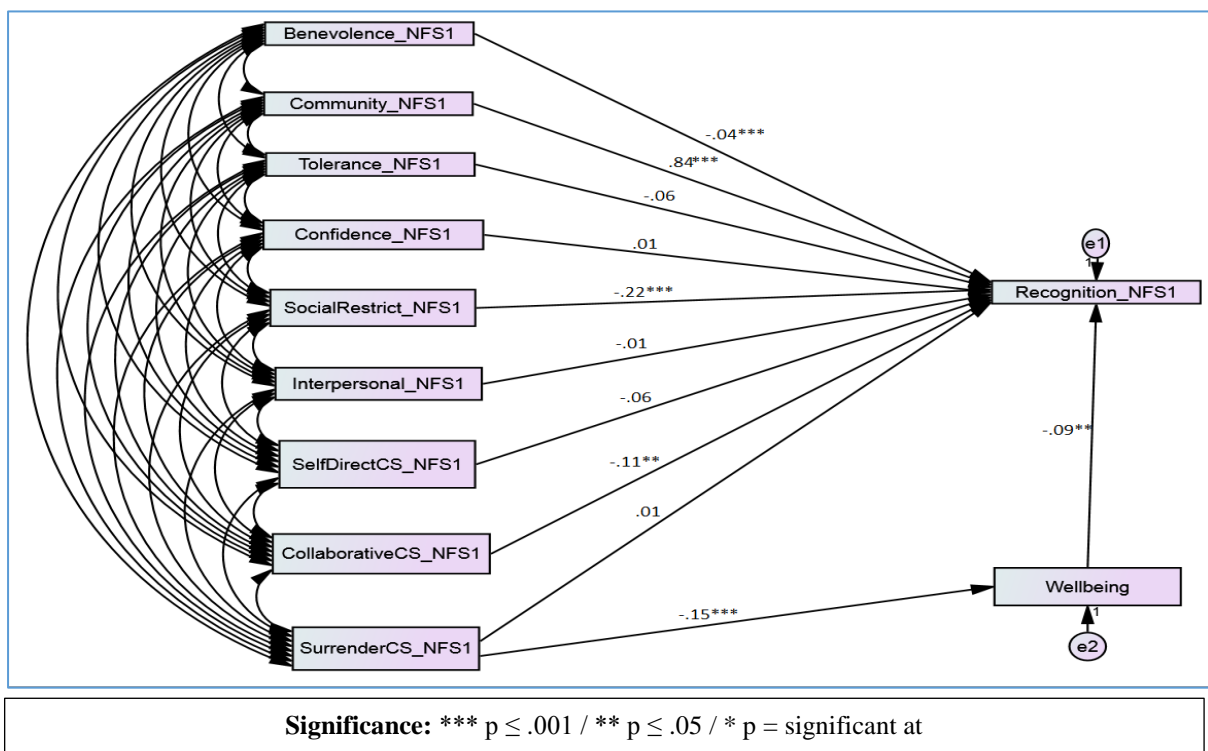


Figure 9.14: Path Model 7 – Standardized Estimates

9.4.16 Gender Differences

The fit for the male model path analysis was poor $\chi^2(9, N = 334) = 548.2, p < .005$; CMIN/DF = 61; CFI = .131; GFI = 0.86; AGFI = -.028; RMSEA = .425; PCLOSE = .00; 43% of variance in 'Recognition' was explained by this model. The female data fitted on the path analysis model was also poor $\chi^2(9, N = 349) = 522.7, p < .005$; CMIN/DF = 58; CFI = .155; GFI = .87; AGFI = .071; RMSEA = .405; PCLOSE = .00; 42% of variance in 'Recognition' was explained by this model.

As before, there were three predictor variables that were significantly affecting scores on 'Recognition' for males and females separately: 'Benevolence' ($p < .001$), 'Community' ($p < .001$) and 'Social Restrict' ($p < .001$). There were two significant coefficients of predictor variables found to be affecting 'Recognition' scores for males and not females, namely 'Tolerance' ($p = .011$) and 'Collaborative' Coping Style ($p = .09$). There were two significant coefficients of predictor variables found to be affecting scores on 'Recognition' for females and not males: 'Interpersonal' ($p = .039$) and 'Surrender' Coping Style ($p = .048$). The indirect relationship between 'Surrender' Coping Style and 'Recognition' mediated by 'Wellbeing' was significant for females and not for male participants ('Surrender' Coping style \rightarrow 'Wellbeing' ($p < .001$); 'Wellbeing' \rightarrow 'Recognition' ($p = .0044$)).

Again, effects of all significant pathways were found to be weak, with the exception of the predictor variable 'Community'. Figure 9.15 indicates the effects of the coefficients for the predictor variables for males and females; significant coefficients for males and females separately; and those with significant differences between genders.

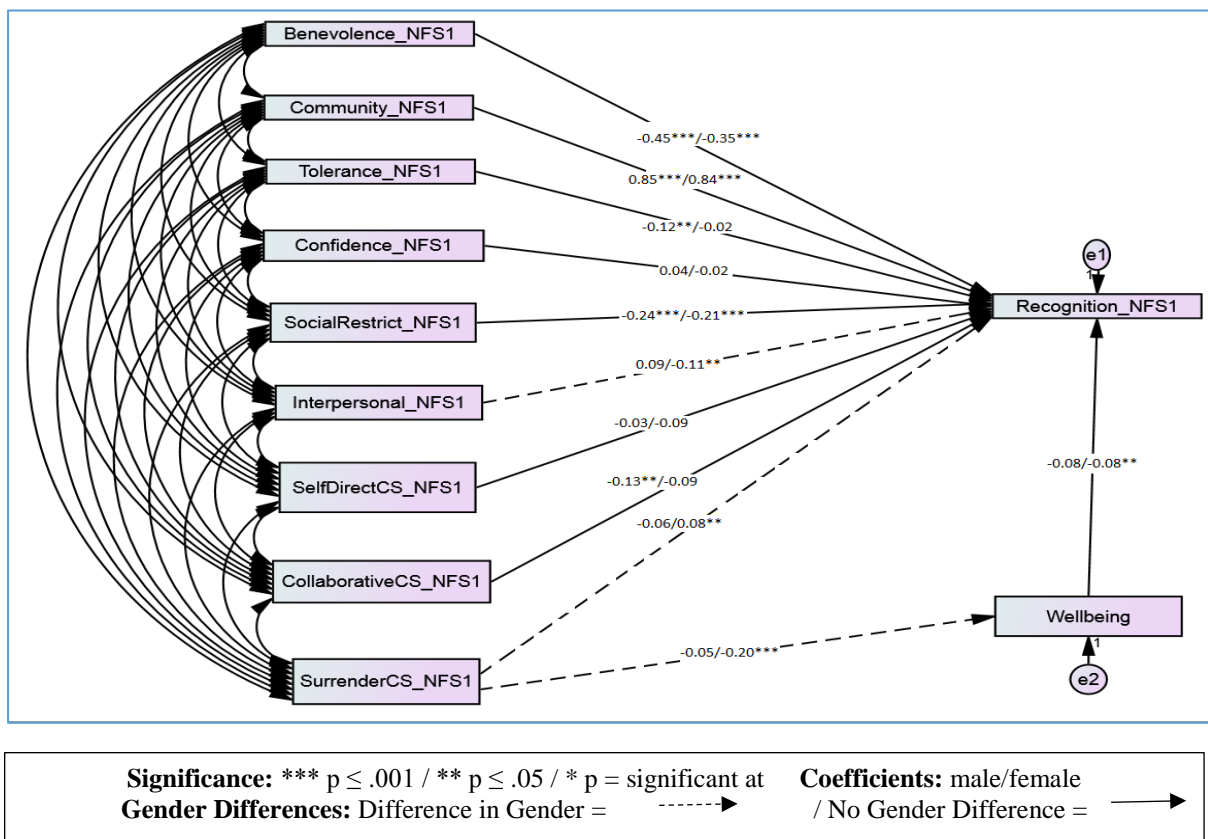


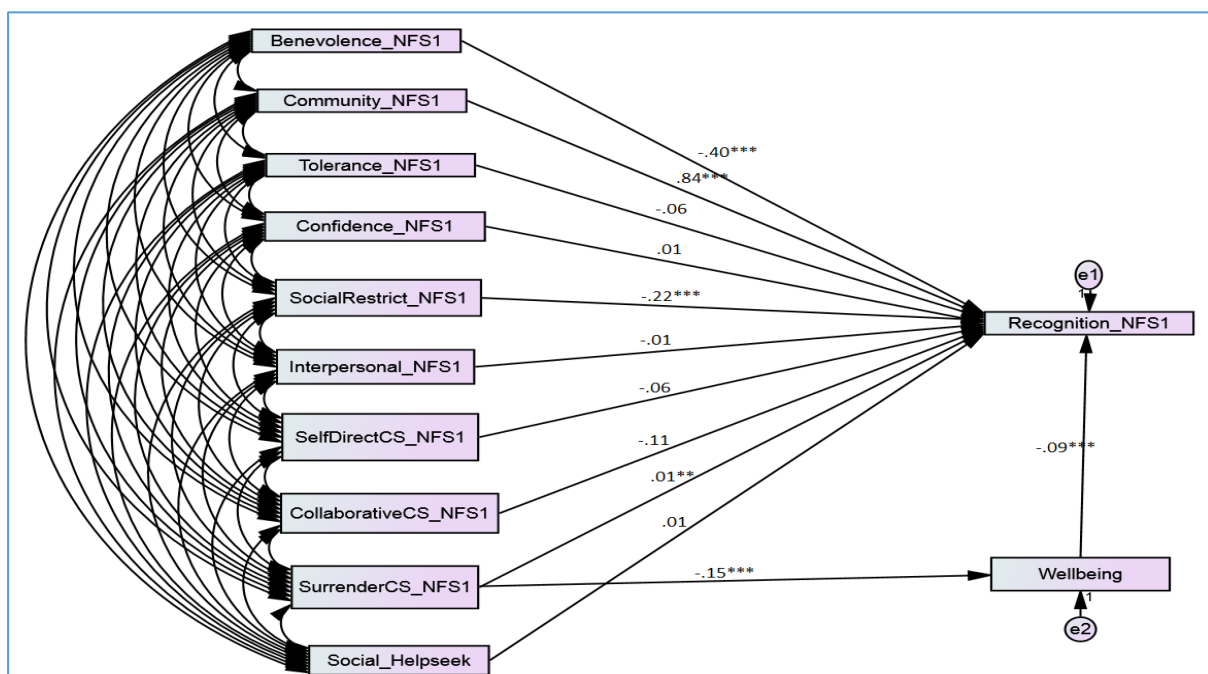
Figure 9.15: Path Model 7 – Standardized Estimates for Males and Females and Significant Gender Differences

There was a significant difference between males and females on the coefficient of the predictor variable ‘Surrender’ Coping style (CR = -4.41; $p < .005$) and for ‘Interpersonal’ (CR = -2.43; $p < .005$) on scores for ‘Recognition’. What’s more, there was a significant difference between males and females on the coefficient of the predictor variable ‘Surrender’ Coping style to the mediator variable ‘Wellbeing’ (CR = 2.40; $p < .005$).

9.4.17 Model 8: Community attitudes towards mental illness, opinions on seeking professional help, coping styles, social support and mental health wellbeing

The overall fit for Model 8 (indicated in Figure 9.16) estimated for the whole sample was a poor fit $\chi^2(20, N = 683) = 1078, p < .005$. Other values of model fit were also poor (CMIN/DF = 53.9; CFI = .179; GFI = .88; AGFI = .027; RMSEA = .279; PCLOSE = .00); 42% of variance in ‘Recognition’ was explained by this model.

There were six pathways that were found to have a significant but weak effect on scores of ‘Recognition’: ‘Benevolence’ ($p < .001$), ‘Social Restrict’ ($p < .001$) and ‘Surrender’ Coping Style ($p < .001$). The predictor variable ‘Community’ ($p < .001$) was found to have a strong positive significant effect on scores of ‘Recognition’. ‘Wellbeing’ was found to negatively mediate the negative relationship between ‘Surrender’ Coping Style and ‘Recognition’ (‘Surrender’ coping style → ‘Wellbeing’ ($p < .001$); ‘Wellbeing’ → ‘Recognition’ ($p < .001$)).



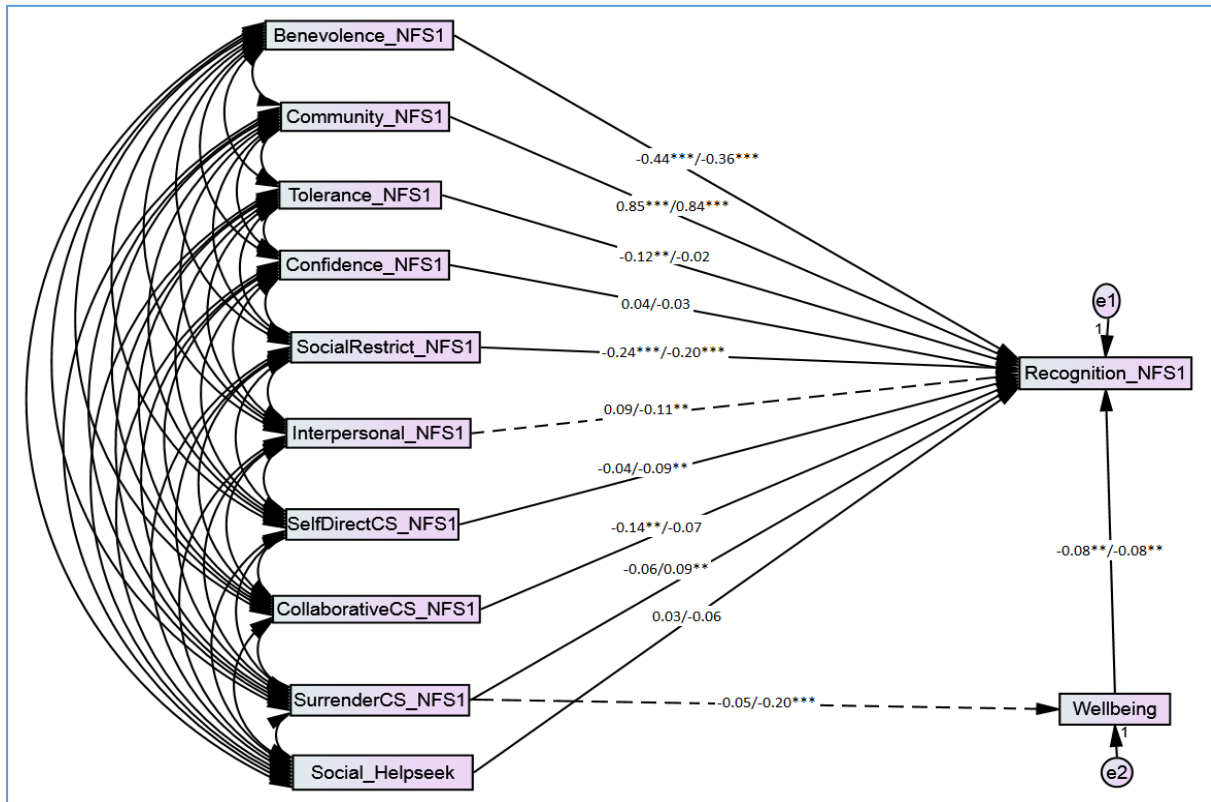
Significance: *** $p \leq .001$ / ** $p \leq .05$ / * $p =$ significant at

Figure 9.16: Path Model 8 – Standardized Estimates

9.4.18 Gender Differences

The fit for the male model path analysis was again a poor fit $\chi^2(10, N = 334) = 556.9, p < .005$; CMIN/DF = 55.7; CFI = .145; GFI = .87; AGFI = -.033; RMSEA = .405; PCLOSE = .00; 43% of variance in 'Recognition' was explained by this model. The female data fitted on the path analysis model was also poor $\chi^2(10, N = 349) = 521.3, p < .005$; CFI = .212; CMIN/DF = 52.1; GFI = .88; AGFI = .084; RMSEA = .383; PCLOSE = .00; 42% of variance in 'Recognition' was explained by this model.

Similar to Model 3, there were four predictor variables that were found to significantly affect scores on 'Recognition' for males and females separately: 'Benevolence' ($p < .001$), 'Community' ($p < .001$), 'Social Restrict' ($p < .001$) and 'Wellbeing' (for males $p = .048$, for females $p = .05$). Like before, two predictor variables 'Tolerance' ($p = .011$) and 'Collaborative' Coping Style ($p = .007$) were found to significantly affect scores on 'Recognition' for males and not females. For females three predictor variables were found to affect scores on 'Recognition': 'Interpersonal' ($p = .041$), 'Surrender' Coping Style ($p = .039$) and 'Self-direct' coping style ($p = .039$). 'Wellbeing' was found to negatively and partially mediate the negative relationship between 'Surrender' Coping Style and 'Recognition' for females only ('Surrender' Coping style \rightarrow 'Wellbeing' ($p < .001$); 'Wellbeing' \rightarrow 'Recognition' ($p = .05$)). Again, effects for all significant coefficients of predictor variables were relatively weak. See Figure 9.17 for the significant coefficients of predictor variables for males and females.



Significance: *** $p \leq .001$ / ** $p \leq .05$ / * $p =$ significant at
Gender Differences: Difference in Gender = -----> / No Gender Difference = ——>

Figure 9.17: Path Model 8 – Standardized Estimates for Males and Females and Significant Gender Differences

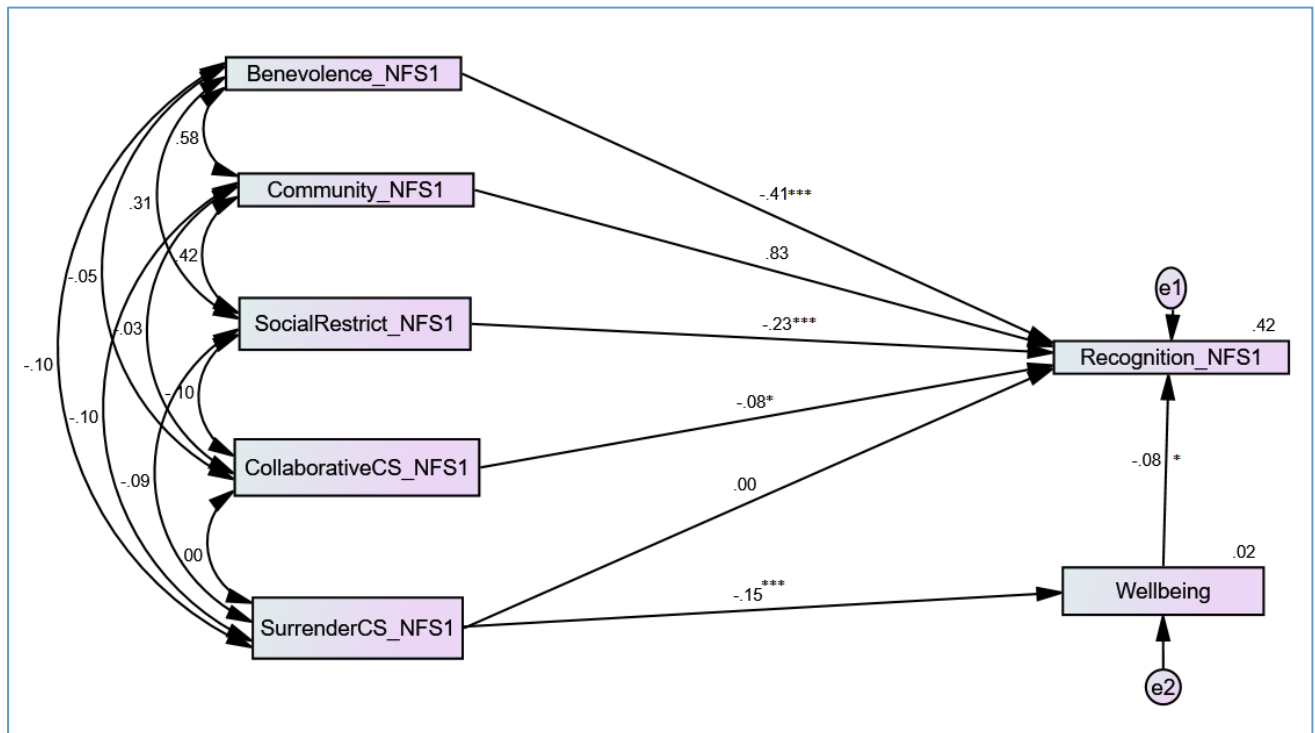
There was a significant difference found between males and females on the effect ‘Interpersonal’ had on ‘Recognition’ scores ($CR = 2.69$; $p < .005$). Also, gender differences were found on the effect the predictor variable ‘Surrender’ coping style had on the mediating variable ‘Wellbeing’ ($CR = 2.40$; $p < .005$).

9.4.19 The Final Model Measuring Significant Pathways

For the final model, only significant pathways were selected and tested in one model for psychological help seeking. Mediating processes were not added in the final model, or other models (with the exception of ‘Wellbeing’), because there is no theoretical rationale to add in mediating paths in the current study. Further, there is no evidence to suggest that the findings were due to different factors cancelling each other out.

The fit for the path analysis model was a poor fit $\chi^2(5, N = 683) = 997, p < .005$; CMIN/DF = 199.4; CFI = .000; GFI = .82; AGFI = -.012; RMSEA = .54; PCLOSE = .000; 42% of variance in 'Recognition' was explained by this model.

However, as with the previous models, all pathways to 'Recognition' were found to be significant, with the exception of 'Surrender' ($p = .92$). See Figure 9.18 for the significant coefficients of predictor variables.



Significance: *** $p \leq .001$ / ** $p \leq .05$ / * $p =$ significant at

Figure 9.18: Final Path Model for Significant Pathways – Standardized Estimates

9.5 Summary of Findings

The overall findings indicate that all the models were a poor fit with the data, although they all explained 41-45% of the variance in the outcome variable. However, there were some direct pathways and one indirect pathway that were shown to have a significant effect on the outcome variable 'Recognition'. Please see Appendix 22 for a full list of significant pathways. Consistently, the predictor variables 'Benevolence', 'Community' and 'Social restrict' were found to effect scores on the outcome in all the models. Other variables were found to significantly affect scores on 'Recognition' for most but not all the models: namely, 'Collaborative' coping style and 'Surrender' coping style. In some of the models there was a

significant difference between males and females on the coefficients of the predictor variables 'Interpersonal' and 'Surrender' coping style.

In some of the models some of coefficients of predictor variables were found to be significant for male participants only: for instance, the predictor variable 'Tolerance'. The same was found for females: for instance, 'Self-direct' coping style. Other variables were found to significantly affect scores of the outcomes variables in some of the models for males and females separately: namely; 'Wellbeing', and other predictor variables 'Collaborative' coping style and 'Surrender' coping style.

When all the significant pathways were tested in one model, the overall model was not a good fit. However, the individual pathways showed a significant relationship with the outcome 'Recognition'- with the exception of 'Surrender'. Potential explanations of the findings, introspective reports and recommendations for the future are explored in the discussion.

9.6 Discussion

The current study is a path analysis investigation into the relationships between opinions on seeking professional psychological help, attitudes towards mental illness and coping styles to discover factors that predict the outcome variable: one's 'Recognition' of the need to seek psychological help. The hypothesized path analysis models were tested on the Syrian sample data and based on several goodness-of-fit indicators, the results show that all the hypothesised models were a poor fit. However, there were several direct pathways and one indirect pathway that show significant relationship to the outcome variable. In testing the models, mediating paths were not tested because, other than 'Wellbeing', there is no theoretical rationale to add in mediating paths. So only direct pathways were tested in the hypothesized conceptual models.

In view of the etic approach to the current study, the findings highlight that the concepts of help seeking developed in the West were useful to observe how person-related factors relate to cognitive help seeking. However, when examining these in a different culture like the Syrian Arab one, not all the factors are related as expected. This further highlights the usefulness in adopting Western theories to observe general patterns, but an emic approach

to research in diverse cultures found in the Middle-east is needed and would be more informative.

The results show that the overall model fits were poor for all the presented hypotheses. Some pathways of the models were not only significantly related to the outcome but there were gender differences found in the findings, and further explorations are needed in the future.

9.6.1 Direct and Indirect Effects

Several pathways within the path analysis models were found to have a significant effect on the outcome variable 'Recognition'. Please see Appendix 22 for a list of significant pathways in the different models presented.

Moral obligation to Help Sufferers

The predictor variable 'Benevolence' was found to affect the scores on 'Recognition'. While it was predicted from previous research that high scores on 'Benevolence' would impact scores on 'Recognition' in a positive way, in that pity or concern for mental health sufferers would elicit greater recognition for psychological treatment, the findings in the current study are contrary to this prediction. 'Benevolence' was found to significantly affect the outcome in a negative way. This indicated that participants who felt that looking after sufferers of mental illness was a moral obligation to society were the ones who least recognised the need to seek psychological help in times of distress. This could be reflecting a belief that sufferers would be looked after by people in their community and thus would not need to seek the help of outside sources, as there would be enough sources of help to compensate for any need of formal treatment.

Alternatively, participants could have been drawing on personal experiences of helping others. In that if participants felt a moral obligation to help others and have done so in the past, they might not recognise the need to seek further help professionally. 'Benevolence' is an alternative concept to help seeking, coming from the point of view of the helper than the sufferer. It could be that attitudes are being affected by the notion of societal or community help versus professional help, in that the higher the role of community help was adjudged, the lower the desire to seek help from professionals. Further research is needed on this to understand attitudes.

The data could be a reflection of past research on Arab culture which argues that Arabs are socialised in a collectivist society that reinforces societal interdependence and familial and community assistance in times of hardship (Achoui, 2003; Al-Mahroos, 2001). Maintaining an attitude that reflects responsibility to help mental health sufferers places less responsibility or need on external sources of help outside of the family or community, such as psychological help.

It is important to explore the extent to which persons in Syria feel responsible to helping sufferers and the extent to which they believe the help they offer or the help of professionals is perceived useful. In finding out whether the sense of responsibility stems from the desire to avoid cultural taboo of appearing unwilling to help others or a belief that reflects actual desire to help mental illness recovery, would impact on mental health awareness initiatives and other community mental health programs in the future.

Community Mental Health Ideology

As predicted 'Community' was found to positively affect scores on the outcome 'Recognition'. This showed that participants who believe in the therapeutic value of the community on mental health recovery were the ones who recognised the need to seek psychological help. Participants who expressed more acceptance of community integration of mental health sufferers were the most open to and recognised the need to seek psychological help. These findings are similar to past research (e.g. Pinto-Foltz et al., 2011), in that a desire to segregate mental illness sufferers from the community is related to recognising less need to seek psychological help. It would be interesting to explore in the future factors that would encourage an inclusive attitude towards mental illness, one that relates to community ideology. It would be valuable to know how best to increase people's acceptance and inclusion of sufferers of mental illness in the community.

Fearing People with Mental Illness

The variable 'Social Restrict' was found to negatively affect scores on the outcome 'Recognition'. This meant that participants who believed that sufferers of mental illness are dangerous and should be feared, recognised less need for psychological help. Similar to previous research on attitudes towards mental illness (Pinto-Foltz et al., 2011), when mental illness is viewed as dangerous and there are responses of fear, there would be a greater desire

to segregate sufferers and indicate avoidance behaviours for mental health treatment. Interestingly, unlike past research which argues that females fear mental illness more than males, there were no gender differences found on fear in the current study. This could be because the research was conducted in the Syrian context, the first of its kind, and these gender differences may not extend to the Syrian culture.

It can be argued that it is inevitable to embrace less recognition for mental health treatment if mental illness is feared and not accepted. A desire to segregate mental health sufferers away from the community would also reflect little desire to seek or recommend help by professionals. One of the most influential factors of attitudes towards mental illness and openness to seeking psychological help has been found to be a lack of knowledge on mental illness (Angermeyer and Matschinger, 2005). Negative generalizations about mental illness, e.g. genetic heredity of mental illness, elicit prejudicial and discriminatory reactions like fear of mental illness. It is important to determine the underlying causes of 'Social Restrict' attitudes to deduce whether community awareness programs are needed to provide educational information on mental illness to refute negative generalisations. It would be interesting to confirm whether less fear of mental illness would lead to more recognition of seeking psychological help.

Coping using the Help of Others

It was found that 'Collaborative' coping style affected scores on 'Recognition' negatively. Participants that showed higher preference to cope with their problems with the help of other people, recognised less need for psychological help. These findings were similar to previous research which suggested that people prefer informal sources of help, from family or friends, than formal sources of help like mental health facilitators, especially for young people (Slone, Meir and Tarrasch, 2013).

Despite there not being any gender differences on the effect of 'Collaborative' coping style on scores on 'Recognition'; females were found to score significantly higher on the 'Collaborative' coping style than males. This showed that patterns of effect from the predictor to the outcome variable were too similar for both genders; however, the findings were in line with previous research that shows that males generally express less desire to seek help from others than females (Moller-Leimkuhler, 2002). This has often been likened to men's feelings

of loss of status, control, competence and reputation of strength in the Arab world (Al-Krenawi and Graham, 2003).

The findings highlighted an important issue in understanding help seeking for mental health. Coping with problems through the help of others has many positive effects on mental health too, and has been shown to lessen mental health problems (Khatib, Bhui and Stansfeld, 2013). However, while there are benefits of informal help seeking, the extent to which it is sufficient enough for Syrian mental health needs requires further examination. Moreover, it seems that including other people as sources of coping with problems leads to a decrease in recognising the need for professional help. An important question arises for Syrians: are the sources of help being offered for mental distress adequate to replace professional support, and could seeking help from both sources of help (informal and formal) be a viable option for Syrians?

Mental Health Wellbeing and Help Seeking

The predictor variable 'Wellbeing' was found to significantly affect scores on 'Recognition' negatively. As predicted, participants that exhibited high mental illness were less likely to recognise the need for psychological help. These findings were similar to previous research which suggests that mental health sufferers hardly ever seek psychological help (Moller-Leimkuhler, 2002). There were significant gender differences found in overall mental health wellbeing. Interestingly and contrary to research, the findings showed that male participants exhibited significantly higher scores on mental illness than females. Most research (e.g. Moller-Leimkuhler, 2002) finds poorer actual mental health for females than males.

Furthermore, 'Wellbeing' was found to significantly and partially mediate the negative relationship between 'Surrender' coping style and 'Recognition'. The findings showed that participants that exhibited higher preference to cope with the guidance of God, expressed low mental illness, and scored high on recognising the need to seek psychological help. In line with previous Western research, the relationship between the 'Surrender' coping style and the mediating variable 'Wellbeing' was predicted to be negative – religious coping aids in the positive adjustment of mental wellbeing (Carone and Barone, 2001).

Religious Coping

There were gender differences found in the preference to adopt the 'Surrender' coping style, in that females significantly adopted this coping style more than males. Also there were

significant gender differences between males and females on the effect 'Surrender' coping style was having on the outcome variable 'Recognition'. This effect was mostly pronounced in female than male participants. These findings were similar to major research that stipulates that religious coping is generally more frequent among females than males (Pargament, 1997). Here, participants that exhibited better wellbeing could have found a way to negate mental illness by adopting a coping style. This could have led to their openness to recognise when psychological help is needed and when it is not.

9.6.2 Gender Disparities and Similarities

Gender differences were also found on the effect the predictor variable 'Interpersonal' had on the outcome 'Recognition'. Participants that were more open regarding their own problems recognised, to a greater extent, the need to seek psychological help; with some gender differences, females scoring higher than males. These results were in line with past research which argues that some people have difficulty in verbalising and describing their emotional problems. Quite often social stigma associated with seeking emotional help can discourage one's openness to their problems as well as to seeking help (Chandra and Minkovitz, 2007).

It was interesting to find that the predictor variable 'Tolerance' had a significant effect on the outcome variable 'Recognition' for male participants only. Males who held sufferers less accountable for their illness and indicated more tolerance of mental health stigma recognised more the need to seek psychological help for problems. The predictor variable 'Self-directing' coping style was found to significantly affect scores on 'Recognition' for female participants only. Females who showed a preference for self-reliance when coping with problems displayed lower recognition for the need to seek psychological help. Similar to the current findings, the need for autonomy and the desire to be independent in times of distress have been found in past research to be strong barriers to cognitive help seeking (Wilson and Deane, 2012).

9.6.3 Unrelated Variables

Two predictor variables were found to have no significant effect on the outcome variable in any of the path analysis models: 'Confidence' in mental health professionals, and 'Social_Helpseek'. People who do not have confidence in mental health professionals, and

also those who have access to informal support have least recognition to seek psychological help (Slone, Meir and Tarrasch, 2013).

In finding no significant relationship between these variables and the outcome 'Recognition' does not necessarily deem the relationships irrelevant for the Syrian case, but does further raise the question of adequacy of the measures used to investigate these concepts. Further exploration is needed to explore whether similar patterns of effects can be found on the Syrian population using different scales.

9.6.4 Overall Model Fit

The overall model fits were poor for all the presented hypotheses and path analysis models tested. Several possible explanations for these outcomes can be put forward.

Testing Concepts Not Previous Models

The current study looked to test a series of concepts documented in past research about community attitudes towards mental illness (Taylor and Dear, 1981; Cohen and Struening, 1962); opinions about seeking professional help (Fischer and Turner, 1970; Al-Krenawi, 2004) and coping styles (e.g. Pargament et al., 1988; Wong-McDonald and Gorsuch, 2000; Cole and Pargament, 1999). These concepts have not been used in path analysis models before. Therefore, the current study aimed to test the concepts evidenced in past research to see whether they would fit in one or more path analysis models. Furthermore, while the concepts have been documented in research, predominantly in the West (e.g. Pargament, 1998) and some in the Middle-east (e.g. Al-Krenawi, 2004), they have never been examined on the Syrian population.

It is noteworthy that:

1. The concepts, while most were significant to explain openness to seeking psychological help, together they do not explain variance in attitudes well and further explorations are needed to evaluate this further. This is further highlighted in the findings of the final model in Section 9.4.19. When all the significant pathways were tested in one final model, the model was a poor fit to the data but the pathways remained to have a significant relationship with 'Recognition'. However, the pathway 'Surrender' was not significant in this model, indicating

that when concepts are tested together they might or might not explain psychological help seeking and further exploration is needed on the scales and modelling concepts together.

2. The uniqueness of cross-cultural research is further highlighted here: the Syrian population has never been investigated before and the sample is culturally (including language and religious orientations) different to samples used in past research like the USA (Hofstede, 2010).

Use of Scales

The three scales (CAMI; OSPH and coping styles) used in the current study were originally developed and validated using a Western sample in the USA. The scales were translated into Arabic and back translated into English and shortened versions of the original scales were used in the current study. The scales were explored in CFA and the optimal measurement models were used in path analysis models on the data. The use of the scales could explain the outcome findings of the poor model fit to the sample in the current study:

- 1. Scale constructs were not confirmed:** In past research the scales were originally explored and developed using EFA (e.g. Pargament et al., 1988; Taylor and Dear, 1981) and have not been used in SEM. The scales have not previously been investigated using CFA or in path analyses. Therefore, it cannot be determined whether the poor fit of the sample data to the models was due to the conditions of the current study or whether the actual constructs poorly fitted in structural models in the first place.
- 2. Original scale development:** The theory behind the original scales was developed with a Western sample in mind, and have never been used on a Syrian Arab population before. The outcome findings could have been due to the limited compatibility of the measures on the current population, given the cultural and language differences from previous samples.
- 3. Scale modifications:** The modification made to the scales, especially shortening of the original scales for data collection and through the CFA, could have had a significant impact on their use in path analysis modelling. In particular, the predictor variables were only measured by two or three observed items. While using a low number of items is acceptable, it has been found to weaken constructs and their use should be cautioned (e.g. Blunch, 2012; Kline, 2011). In particular, the outcome variable 'Recognition' in the path models was only measured by two items. The findings of the models could have

been due to a weak construct, and the results and generalisations should be cautioned and further explored for conclusive findings and recommendations for Syrian psychological help seeking.

Therefore, the findings are not conclusive to deduce that the concepts do not fit together in models. But perhaps the poor fitting models were due to the underlying measurement scales.

- 4. Significant concepts:** It is clear from past research and from some of the current findings in the study that the concepts to measure attitudes and openness about seeking psychological help are significantly important but in future the use of scales developed especially for the Syrian population would be recommended.

9.6.5 Future Research and Recommendations

Exploring Other Measures

The endogenous outcome variable 'Recognition' was part of the OSPH construct and measured recognizing the need for psychological help, again an attitude variable. There were no measures of actual psychological help seeking, which could have been more suitable as an endogenous outcome variable. Furthermore, religious coping was explored through the predictor variable 'Surrender' coping style. However due to the laws and regulations in Syria it was not permissible to measure and use actual religious sect or religiousness in the models; which would have been informative to determine the role of religion in the help seeking and coping process.

Exploration should be conducted on a national level to account for cultural, religious and socioeconomic differences in Syria which may impact attitudes and actual help seeking. Moreover, expansion of the target age group beyond young people should be explored to know the differences in attitudes, help seeking and coping across different age demographics of the population. Gender should be explored further and across different regions in Syria to know the extent to which attitudes are rooted in gendered socialisation.

Further Data Collection

It is important to note that the key aim of the thesis was to adopt the shortened Western scales and validate them on the Syrian sample. These validated scales were then to be used

in further longitudinal research. Structural models would have been developed using these validated Syrian scales. However, it was unfortunate that the research could not carry on the exploration of the scales and models due to the escalating war in the country that deemed any further data collection too dangerous and not permissible by government authorities. Further data collection and analysis should be conducted when the war in Syria ends. This would allow for theory and scales to measure seeking psychological help, attitudes on mental illness and styles of coping appropriate and relevant to the Syrian case.

9.7 Summary

The current chapter adopted the mean scores of the CAMI, OSPH and CS sub-scales derived in Chapters 6 to 8. These were used to develop and investigate eight hypothesised models using path analysis models in AMOS. The aim was to adopt an etic approach in the current research to develop recommendations to illustrate the relationships between person-related factors in the cognitive help seeking process for mental health. The findings showed that all the hypothesised models were a poor fit to the Syria data. However, some pathways in the models were found to be significantly related to scores on the outcome variable 'Recognition' of the need to seek help.

The findings indicated that there was a *moral obligation to help others in need*, and those who felt an even higher obligation recognised less need to seek psychological help for distress. Some *fear towards mental illness* was portrayed and was found to be related to recognising the need to seek help, particularly for females. There appeared to be a *Community Mental Health Ideology* that related to attitudes towards recognising the need to seek psychological help. Coping using the *help of others* and *seeking solace in religion* affected recognition of the need to seek psychological help negatively. Those with high mental illness recognised less need to seek professional help, especially males. Other gender differences were found. Males showed less *openness regarding emotional problems* and less *tolerance* towards mental illness.

Future research is recommended to understand the factors that influence psychological help seeking to determine approaches to providing help for Syrians. Overall, the current research helped highlight that it is useful to adopt an etic approach in research and make use of Western theories and constructs on help seeking, but in order to gain an in-depth and

informative understanding of help seeking in the Syrian context then an emic approach to research is needed.

Chapter 10: Syrian Mental Health Attitudes and Psychological Help Seeking: A Case Study Post-2011

In the previous chapters results from quantitative survey research have been presented. It has been argued that there are limitations in using translations of Western measures to investigate help seeking. Sadly, it is impossible, at this time, to conduct more data collection in Syria to investigate this further. However, as a result of the ongoing war, seeking help for mental health problems is a pressing issue and mental health facilitators are working with displaced Syrians in a number of Middle-eastern countries. This chapter examines the real-life issues experienced by these mental health professionals and links to the overall quantitative findings presented earlier. This provides another perspective on the etic/emic approach taken in this thesis.

10.1 Introduction

In this chapter a series of email interviews were conducted with Syrian mental health professionals to investigate the main issues surrounding mental health attitudes and help seeking in real-life contexts for Syrians. The current qualitative study investigated the extent to which the quantitative findings of the thesis extended to and were echoed in real situations of Syrian mental health, but accounted by Syrian mental health professionals. These professionals provide mental health treatment to Syrians who are displaced and refugee in neighbouring or border towns to Syria. While these accounts do not provide a direct insight into refugee experiences of mental health, Syrian mental health professional offer great insight into community experiences and opinions of mental illness. Further, due to the nature of their work they are well attuned to challenges and obstacles facing psychological help seeking amongst Syrians.

For nearly 6 years now Syrian children, with their families, have been experiencing an escalating violent war that has torn the country. As a result, many have been displaced from their homes within Syrian and others have taken refuge in neighbouring countries like Turkey, Jordan and Lebanon or have crossed dangerous oceans to seek refuge in safer Europe. According to UNOCHA (2016), Syria is the biggest humanitarian crisis in the world in the 21st century. The UNHCR supported this statement and said that Syria has become the world's leading country of forced displacement, with over 8 million of its people forced to flee their homes and are internally displaced in Syria (UNOCHA, 2015).

Approximately 5 million Syrians have sought refuge in neighbouring countries, with at least half of the refugee population are children (UNHCR, 2016). It is estimated that at least 13.5 million of Syrians are in need of immediate humanitarian assistance, including food, shelter, health and mental health services. Internally an estimated three million Syrians were living in 'hard-to-reach' areas that aid workers could not reach. Of these, 212,000 people were trapped in besieged areas and cannot be reached (UNHCR, 2015).

Recent reports on death tolls document that more than 250,000 civilians have been killed, over half of these were civilians, particularly young people (The Syrian Observatory for Human Rights, 2015); while many more have suffered injuries and disabilities. Most organizations and agencies have stopped counting the numbers of deaths due to the conflict in Syria because it could no longer verify the sources of information, and many corpses could not be identified. However, the death count was estimated to be four-folds greater, with an average of 100 people being killed on a daily basis. Injuries were estimated to be three to four times the number of deaths.

There have been reports of large numbers of unaccompanied minors both among internally displaced people and the refugee population, due to family separations or death of parents and guardians. Internally displaced people and refugees continue to face many challenges related to living conditions and circumstances that are insecure and hazardous to safety and health. Syrians have been survivors or witnesses of severe war associated trauma experiencing extreme violence like bombings and chemical attacks, as well as arrest, torture and multiple losses of family members and friends. Many have experienced arrests and beatings as well as humiliation and a great deal of loss. These experiences are an addition to and compounded by experiencing the difficult way of life as refugees or displaced in places that are relatively unsafe, uninhabitable and crowded.

One of the priorities in emergencies is to protect and improve people's mental health and psychosocial wellbeing (Inter-Agency Standing Committee [IASC], 2007). In 2013, the UNHCR recommended that mental health services for Syrian's have to be increased and strengthened, particularly for refugees (UNHCR, 2013). As refugees, Syrians are thought to constitute a risk group for mental health problems.

10.1.1 Syrian Refugees in Turkey

Over the last four years Syrians have been fleeing to neighbouring countries to seek safe shelter. The highest number of refugees can be found in Turkey. In 2016 the estimated number of Syrian refugees there was approximately 2.8 million people (UNHCR, 2016). However, the number of refugees is continuously changing as many refugees cross the border for short periods of time on a regular basis then the violence in Syria escalates.

The Turkish government has provided much support to Syrian's, especially via local organizations and international aid agencies such as the United Nations, to provide shelter, food and health aid as well as schooling and monetary grants. However, there has been a great deal of tension about the presence of Syrians in this host country. The tensions have arisen about concerns of increasing unemployment, pressures on public services, and increase in housing prices, crime and epidemic infectious diseases. Despite that, Turkey remains to be the most desirable refuge location for most Syrians for residence and to seek healthcare and mental health services.

Assessment and data collection efforts to document basic demographics and needs of Syrian refugees have rapidly taken pace. However, the mental health needs of Syrian refugees have not been as well documented and addressed. Responses to mental illness have taken less priority over medical and humanitarian first aid and limited resources have been allocated to provide mental health care to Syrian refugees. The distressing and traumatic experiences are thought to have detrimental effects on the mental health well-being of Syrian refugees, especially children (UNHCR, 2014). While mental illness is a secondary concern compared to meeting basic needs of refugees, failing to address the impact of the war on mental health well-being is costly not only for health at an individual level but for society as a whole. Mental illness carries a great deal of burden on families and communities as it can result in unemployment, increased domestic violence and further adverse health risks (Hisanaga, Nishio and Ito, 2007). The current study looked to investigate the experiences of Syrian mental health professionals and their teams in addressing the mental health needs of refugees in Turkey. The aim was to know Syrians' openness to seeking psychological help and determine the obstacles and needs of this displaced nation.

10.1.2 Emailing as an Interviewing Technique

With the modernization of technology and the advancement of the internet there has been growing interest to conduct internet-based research. There exists a broad category of internet research, some of which using surveys, focus-type groups, and analysis of online documents as well as email interviews (Hine, 2008). There has been a growth in literature on the use of the web as a primary tool for conducting research (e.g. Burns, 2010; Bryman, 2011; Denzin and Lincoln, 2005; Kennedy, 2000; Karchmer, 2001; Meho and Tibbo, 2003; Lehu, 2004; Murray, 2004).

Using emails as an interview technique can be distinguished from other internet-based research techniques. The convenience of emails for gathering data fits well with contemporary technology use surrounding the daily life of many people. It is estimated that over 100 billion emails are sent out every day (Levenstein, 2013). Emailing has become part of a regular practice for most and this continues to evolve. On a daily basis people engage in a process of contact, data exchange and collection, and social enquiry, so its use as a tool for research may not be too unfamiliar for most.

There are a few methodological considerations to address when evaluating email as an interview research technique (e.g. Meho, 2006; Hunt and McHale, 2007; Hamilton and Bowers, 2006). The inclusion of participants in email-based research depends on access to the internet and familiarity with the use of technology. Invitation emails to participate in the study may be deleted before being read by participants, but this can be minimised if the researcher uses informative and eye-catching email subject lines. While the researcher has email contact details of participants, email interviewing runs the risk of undeliverable emails and the uncertainty of email delivery to 'Inbox' rather than 'Spam' or 'Junk mail' folders. The complete interview can take several days or weeks before the interview is complete and participants can drop out before the interview is complete. Conducting an interview via emails limits the ability to make direct probing to particular aspects of the interview, and the process loses visual, nonverbal cues, body language and voice tone of both interviewer and participant to assist with the interview to avoid miscommunication or misinterpretation.

Despite that, emailing as a tool allows access to participants who are difficult to reach and allows their inclusion in the study regardless of geographic location (James and Busher, 2006). It allows the elimination of expenses incurred for calling or travelling to recruit geographically

dispersed samples. It also eliminates expenses and time required for transcribing the interview as the email itself forms the interview content for analyses. Given the nature of the interview, participants can respond to the interview questions in a familiar and comfortable environment and any hour of the day they find convenient (Meho, 2006).

Likewise, for researchers it eliminates the cost and time incurred to schedule and make arrangements for interview appointments, and both researcher and participant can take time to reflect on the research questions and responses before responding. Participants can express their opinions, feelings and experiences in open honesty as emailing provides a sense of anonymity and thus promotes self-disclosure (Hamilton and Bowers, 2006). Cues and emotions can be conveyed using certain symbols and emoticons; but as a tool it is focused primarily on text which is particularly useful if analyses are information-driven.

10.1.3 The Aim of the Current Study

The aim of the research in the current chapter is to build from the quantitative findings and supplement investigations into psychological help seeking, but using a qualitative approach. The research so far in the thesis looked to understand the dimensions behind psychological help seeking for Syrian Arab populations using an etic quantitative approach. The research began by employing widely used psychometric scales developed and validated in the West for global use. After testing these measures with a Syrian sample, amendments to the original scales were made and the relationship between different factors of psychological help seeking were investigated. It was found that the models do not entirely apply to the Syrian Arab context, but some significant pathways were found. The findings indicated that there was a relationship between some variables and recognising the need to seek psychological help. From these findings, a turn to an emic approach to the research was prompted and a qualitative investigation into psychological help seeking was undertaken in the current chapter.

This chapter builds on the previous quantitative chapters in order to examine the extent to which findings of the quantitative models extend and translate to real-life mental health issues for Syrians during the war. The aim is to supplement and further extend research to know real-life issues for Syrian refugees concerning psychological help seeking, attitudes towards mental illness and alternative sources of help. As before, there was a particular

interest in the cognitive process involved in help seeking, and to understand whether the person-related factors investigated in the previous chapters do in fact extend to and are pertinent to the Syrian culture and context in the present day.

In trying to get an overall picture of Syrian psychological help seeking, mental health professionals working in the field with Syrians were employed in the current research. While their experiences do not give direct accounts of experiences of Syrians about mental health, these accounts do provide a comprehensive insight into the obstacles and challenges facing psychological help seeking of Syrian refugee or displaced communities. Syrian mental health professionals work within Syrian communities and are responsible for mental health treatment and services. Due to the nature of their work and direct interactions with Syrians, the aim is for their accounts to provide a snapshot of practical experiences on mental health depicting real-life issues surrounding mental health for Syrians.

The current research made use of the convenience of email interviewing. This approach was particularly useful as there was an inability to conduct further quantitative survey data collection inside Syria due to the war. The approach allowed access to participants who were hard to reach due to their location in refugee camps.

The main aim of the current research was to find out: What are the real-life experiences of mental health professionals working with Syrian refugees residing in Turkey?

10.2 Methods

10.2.1 Design

An email interviewing technique was employed. This one-to-one interviewing technique was used to explore Syrian mental health professionals' opinions and experiences of community mental illness attitudes and psychological help seeking of Syrian refugees in Turkey and borderland Syria post-2011 and during the Syrian war.

10.2.2 Participants

A total of 6 participants were invited to participate in the email interviews. However, only 5 participants were included in the study; one participant declined because he was preoccupied with family commitments related to the recent death of a relative.

At the time of the study all five participants were residing in Turkey and providing mental health treatment and support to Syrian refugees in Turkey (border towns to Syria) and displaced Syrians across the border inside Syria. The areas in which their teams provided service was not disclosed in this study for confidentiality and security reasons. Three out of the five participants were psychiatrists and the other two were psychologists (See Table 10.1). All participants were responsible for managing mental health teams on the ground and they themselves treated patients on a daily basis. Participants were all Syrian males and aged between 40 and 56 years (mean age = 48 years).

Table 10.1 Participants' Demographics: Participant Number, Age and Profession

Participants No.	Age	Profession
Participant 1	40	Psychiatrist
Participant 2	52	Psychiatrist
Participant 3	56	Psychiatrist
Participant 4	44	Psychologist
Participant 5	45	Psychologist

Three participants had completed their specialization in Syria and had practiced there prior to the war, the other two participants had studied and worked in Syria and had been working in the United Kingdom until the beginning of the war and before moving their work to Turkey. The participant's first language was Arabic and they offer mental health treatment to patients in Arabic language.

The decision on participant's selection was purposeful and was based on the research questions and insight into the field of mental health in the region. Participants were selected because of the nature of their work and their expertise in the field. Selected participants have extensive work in the field of mental health care for Syrian refugees and their insight into community attitudes and help seeking behaviours of Syrians through their ongoing work and management of implementing teams on the ground with Syrian refugees. It was felt that these participants would be able to inform the research questions well and provide comprehensive accounts on Syrian mental health issues.

The choice of sample size not only depended on the number of professionals with extensive experience in the field of Syrian mental health but also ones who were located and managing teams on the ground in Turkey and borderland with Syria. The sample size was selected in

mind that additional interviews may be needed in other areas of refugee communities, ones further away from the Syrian border, if more information is needed to fully inform important elements of the research questions. Otherwise the sample selected would be sufficient to inform important concepts for a snapshot on real-life cases on psychological help seeking for Syrians.

10.2.3 Relationship between Interviewer and Participant

The interviewer was the author of the current thesis. A relationship between the interviewer and the participants had been established outside of the interview context from 2012. The interviewer was involved in several trainings of the participants' teams and had established ongoing charity projects to support their work. It must be noted that there are a limited number of Syrian mental health professionals working with Syrian refugees and displaced communities in Turkey and borderland with Syria, and the selected participants were the main experts located in that geographical area. Due to the scarcity of mental health professionals there, the selected participants were representative of Syrian mental health professionals in that area and were selected for the current research. Further, due to the past professional relationship with the interviewer, it was established that the participants had the expertise and knowledge to participate in the current research and inform well the research questions.

Past e-mail exchanges had taken place between the interviewers and the participants due to ongoing charity projects, therefore e-mail addresses were known. The interview request prior to the interview was therefore presented in an informal manner to encourage ongoing support of combined efforts to develop mental health care for Syrian refugees. Participants were keen to support the research project and were not reluctant to provide any information that would help the research.

10.2.4 The Process of the E-mail Interview

Between 15th January and 15th February, 2015 five email interviews were conducted with Syrian mental health professionals who were working with Syrian refugees in Turkey. A total of 5 email exchanges took place per participant over a period of 4 weeks: an introduction email, interview questions email, two follow-up questions emails and a concluding email. Email exchanges were conducted in the Arabic language and used a mixture of formal and

conversational style Arabic. To ensure understanding, participants received follow-up questions to their initial responses to the listed interview questions; further elaboration and explanation on some aspects of the interview were provided by the participants.

For the purpose of analyses, email interviews were translated and back translated from Arabic to English (see Chapter 4 for details of translation approach used in the thesis). Email interviews were treated in the same way for coding purposes as other interview transcripts; the email content was the interview transcript (see 'Analysis' section below).

10.2.5 Invitations to Participate

Participants were sent invitations to participate in the study individually rather than via a mailing list or message board. This ensured a more personal request to participate and helped encourage participation.

10.2.6 Subject line

The subject line used in the first contact was "Request for Research Interview", this was an informative title that helped reduce the likelihood that participants would delete the email before it was read. Once participation approval was sent back to the interviewer a second email was sent. The subject line for the second email consisting of the research question was "Research Interview Questions", again an informative subject line that proved as a reminder to the first email request. Email exchanges for research question responses were sent in 'REPLY' so the same subject line was being used for the remainder of email exchanges, this helped keep all exchanges per participant in one email transcript.

10.2.7 Self-disclosure and Interview Request

In the first email inviting participants to take part in the research, the following exert was used for each participant in separate emails:

Dear Dr...

I hope you are keeping well. I am conducting a qualitative study as part of my doctoral research that looks at the experiences of mental health professionals in treating Syrian refugees to know more about the real-life implications of mental health issues for Syrians. I am interested to know more about community attitudes towards mental illness and help seeking behaviours as well as the obstacles and barriers facing professionals to provide mental health care. I am also interested to know about cultural and gender issues that are important in addressing Syrian mental health and know your views about addressing help seeking for Syrians.

I realize you are extremely busy but I would greatly appreciate your input, your professional opinion and experience would make a difference for the outcome of the study and your insight would help advance understanding on the pivotal issues for Syrian mental health. If you are happy to give me some of your time I will send you 10 questions for you to answer via email. I may need to follow-up on some points you raised in one or two follow-up emails and I would be happy to share with you the outcome of the study upon completion if you are interested. Please let me know your feedback and we can proceed from there. Thank you for your continued support and collaboration.

All email exchanges were in the Arabic language and the incentive to participate in the study was continued support and collaboration as well as advancement in knowledge for Syrian mental health treatment. Responses to the self-disclosure invitation email were received within 48 hours with permissions to participate and request to send the interview questions.

10.2.8 Instructions for the Interview

Along with the interview questions (see section 'Interview Questions' below for full details) instructions to participants on completing the interview were included. It was made sure that instructions were informative enough to guide participants in responding to the interview questions and encouraged them to provide substantial detail. The instructions were purposely not too long so to encourage participants to fully read them and use less time reading and more on responding. The following instructions were sent in the second email that also contained the research questions:

- 1. If you are still willing to take part in this study, please reply to this email straight away or within 3 working days. I will also respond back to you within three working days.*
- 2. You will be asked 10 questions: these questions can be found in this email below and have been sent to you all at the same time.*
- 3. Please respond to the questions by email by pressing REPLY to this email and filling in your answers in the space below each question. All further email exchanges will be sent back and forth by pressing the REPLY button and responding in-line with the reply email.*
- 4. Each question may be followed up by supplementary questions if clarification and further explanation is required.*

5. *You have the right to only answer questions you feel comfortable to answer and you may indicate in any of the email exchanges your desire to withdraw from the study at any time.*
6. *Please do not delete any part of the email dialogue. This will be my record of the interview.*
7. *It is estimated that the email dialogue will be completed within 4 weeks of this exchange, including any follow-up questions.*
8. *Please provide as much detail as you can and try to use full sentences, there are no right or wrong answers, I am interested in your viewpoints and experiences. You can use emoticons or symbols if you wish to be more expressive.*
9. *Finally, the interviews will be conducted in strictest confidence and your anonymity will be assured throughout the research project and outcomes of the study can be sent to you later if you wish.*

10.2.9 Questions

The questions included in the email interviews were derived and based on the quantitative findings of the thesis. Questions were based on the variables measured in the path analysis models in Chapter 9 to know real-life opinions and experiences of Syrian mental health professionals on community attitudes and help seeking for Syrian refugees in Turkey. A total of 10 interview questions were generated and sent to participants for responses:

1. What mental health problems are Syrian refugees you are dealing with experiencing?
2. What symptoms are they exhibiting?
3. How does the community view mental illness?
4. Are there important differences within the community on how they view mental illness?
5. How have Syrian refugees you deal with respond to the mental health services you provide?
6. What are the barriers to mental health help seeking for Syrians?
7. Are there cultural-specific or community-based healing, coping or help seeking practices that Syrians engage in, in addition or instead of your mental health services?

8. If so, are these cultural specific or community based practices effective?
9. Do you engage with these practices for your work?
10. What role has gender played in mental health treatment and help seeking?

10.2.10 Reminders, Time Limits and Deadlines

The due date of responses were clearly outlined in the second email with the research questions; responses were requested within 3 working days. Weekly reminders for email responses were not necessary as all participants replied in a timely manner, and time limits were not necessary as all participation was kept within the 4-week period of data collection time. Participants were regularly screening their emails as this formed part of their day to day work and they have been used to working with specialists and funders abroad so email exchanges were a natural part of their daily routine.

10.2.11 Follow-up, Feedback, Closure and Quality of Data

The email cycle was rapid: follow-up questions were sent back within 3 working days to participants. There were two follow-up email exchanges per participant. In the follow-up emails probe questions were asked about parts of their responses to provide further detail, explanation and examples of their experiences.

While the interviews were not as in-depth and lengthy as they would have been through video-conferencing or face-to-face interviewing these-mail interviews did give an opportunity for respondents to reflect and provide depth in their answers to the research questions. Responses were written under each research question (see Section 10.2.9) in full sentences and only a few in bullet point form. Responses to questions were in one to several paragraphs in text (as shown from the sample excerpts in Section 10.3 Results) – approximately 30 to 300 words. In follow-up e-mails, responses to specific questions were shorter in-length, between 50 to 100 words.

When all necessary information was collated from email exchanges, participants were informed that the email interview was over and if they had any additional information they wanted to provide or they had any comments then these would be welcome at any time. Participants were thanked for their time to participate and were invited to contact the interviewer at any time in the future, they were also invited to indicate if they wanted to receive a brief on outcomes of the study in the future.

Participants were highly committed and motivated in their participation in the study and provided detailed and in-depth responses to interview questions. None of the participants used emoticons or symbols but used very expressive examples and metaphors to illustrate their responses to questions.

10.2.12 Concurrent Interviewing

Interviews with participants were concurrent, in that email exchanges between interviewer and each participant were being conducted concurrently with other email exchanges with other participants. So that a third email response to participant 1 for example, was made without having received an email response from participant 2. This approach allowed for quicker data collection and helped maintain swift and ongoing rapport with participants and deterred delays in responses. Email interview transcripts were read thoroughly before interviewer responded to avoid repetition of responses and ensured clarity in further explanations required.

10.2.13 Ethics: Informed Consent and Confidentiality

Informed consent was obtained from participants in the first email sent where the study aims and objectives were outlined. Participants had the right to withdraw or abstain from answering any of the questions if they wished to do so. Opportunities to give feedback, ask further questions and request outcomes of the study was given. Participants were assured that the information provided would be treated with confidence and information would be used anonymously: no identifiable information was used in the study.

10.2.14 Analysis

Thematic Analysis

Thematic analysis (TA) is a flexible qualitative method used to analyse data (Braun and Clarke, 2013). TA has been described by Fereday and Muir-Cochrane (2008) as “a search for themes that emerge as being important to the description of the phenomenon under investigation” (pg: 82). TA was adopted because it is a method commonly used for recognising and organising patterns in the content of the data to give meaning. While TA underpins other qualitative methods of analyses, for instance, phenomenological analysis, it is recognised as its own qualitative method (e.g. Ryan and Bernard, 2000; Braun and Clarke, 2013). TA

required the formulation of themes to capture the important patterns in the data to give meaning to the findings (Willig, 2013).

The aim of the analysis was to systematically identify common trends in meaning and group these together into categories, and then to cluster these into high-order themes (Holloway and Todres, 2003; Joffe, 2012). TA requires an inductive bottom-up approach (Frith and Gleeson, 2004) where the analyses of the email transcripts is data driven – the production of themes is strongly linked to the actual data. Explicit surface meaning was the main focus, as theorization was aimed at describing the current situation on mental health for Syrian refugees.

It is argued that (Braun and Clarke, 2006, 2013; Harper, 2011; Willig, 2013) the researcher should be transparent about their ontological and epistemological standpoint in conducting the research. Ontology refers to the nature of reality, and whether it is objective or constructed subjectively (Guba and Lincoln, 1994). Epistemology is concerned with the theory of knowledge in which answers are provided to the research, the nature of knowledge itself (Willig, 2013).

There are several standpoints to consider based on Guba and Lincoln's (1994) paradigms. On one end of the paradigm is a Positivist standpoint, a realist ontology, that reality exists and is governed by laws and mechanisms that are context-free and there exists a form of cause-effect laws that make up our reality (Braun & Clarke, 2013). Epistemologically this is an objectivist standpoint that in nature everything is assumed objective and research can be conducted without any influence from the researcher or the context (Harper, 2011). Values and biases do not influence knowledge because methodologies of investigation are rigorous, objective and replicable. On the other end of Positivism is a Constructivist standpoint, a relativist ontology, that realities are constructed socially and are influenced by the context in which reality exists (Braun & Clarke, 2013). Realities are shared by individuals sharing the same social and cultural context and their reality is subjective by nature. Epistemologically, knowledge is created through the interaction between the investigator of knowledge and the object of investigation and knowledge is constructed subjectively based on the context (Braun & Clarke, 2013; Harper, 2011).

TA is a flexible method that allows for consideration of meaning and experiences (reality) of the participants, a standpoint of realism. But at the same time allowing for consideration of the social and cultural context of the participants, a standpoint of relativism. Thus the current approach in the TA takes a critical realist standpoint. This is a position between realism and relativism, where participants have the ability to report their reality with certainty but at the same time the role of the researcher is important in interpreting and identifying important patterns in participant's accounts to give meaning to their reality (Guba and Lincoln, 1994; Braun & Clarke, 2013; Harper, 2011).

Analysis Using Thematic Analysis

There are a number of accounts of conducting high quality TA research (e.g. Willig, 2013; Joffe, 2012). Braun and Clarke (2006) provide a comprehensive guideline on TA to instruct researchers on the theoretical and methodological approaches to TA. In outlining the advantages and pitfalls of TA they have been able to demonstrate what makes a good approach to TA. The six-phase guide to doing TA proposed by Braun and Clarke was adopted in the current study and the approach to the analysis used is outlined below. The time-saving element of the email interviews was that the email exchanges themselves were the interview transcript; no transcribing was necessary. TA technique was used to analyse the interview transcripts (Braun and Clarke, 2006, 2013).

Phase 1: Becoming Familiar with the Data

The analysis of the data began with repeated reading of the email transcripts. In reading and re-reading the data, meanings, patterns and identification of potential themes were noted down as forms of ideas for subsequent thematic coding in later phases in the analysis process. The data transcripts were initially read three times so to become familiar with the text. This eased the subsequent processes of searching and identifying semantic themes.

At this stage in the analysis it became clear that potential themes would revolve around the topics of the research questions (see Section 10.2.9). However, within each topic there were underlying topics that could form potential themes. To start 10 broader themes were generated in order to organise the information and guide the analysis:

1. Mental health problems resulting from the war experience
2. Common mental health problems treated

3. Attitudes towards mental illness
4. Differences in attitudes within the community
5. Attitudes toward professional psychological help seeking
6. Barriers to professional psychological help seeking
7. Culture-specific help seeking and Syrian coping styles
8. Professional opinions on culture-specific practices
9. Integrating cultural practices with professional help seeking
10. Gender differences in help seeking

Phase 2: Generating Initial Codes

After generating initial ideas about the data, initial codes from the data were derived. Codes were meaningful labelling of segments of the raw text (Miles and Huberman, 1994), and coding was part of an important process of organising the codes into meaningful thematic groups (Tuckett, 2005) needed for later phases. Coding was data-driven and themes generated from data analysis was dependent on the data. Coding the content of the data was done manually and did not use a computer program. An identification of recurring patterns in the interviews was made to identify common codes. Notes were made on the margin of the transcripts and extracts from the text were highlighted. Individual extracts were copied and organised into codes for further analysis. All potential patterns / codes were identified at this stage.

At this stage of the analysis coding of raw parts of the text were made on the interview transcript. The interviews were read and each new theme, line-by-line, was noted in the margin. Please see Appendix 23 for an example of a coded interview transcript at phase 2 of the analysis.

Phase 3: Searching for Themes

In phases 1 and 2 initial codes were collated and a list of identified codes was made, together with corresponding extracts of text. In phase 3 an analysis of the codes was conducted so that the different codes were combined into overarching themes. Again, ideas were noted about potential themes, and post-it notes were used to help organise and re-organise codes into main themes. All extracts of the interviews were organised in relation to the themes. Please see Appendix 24 for an example of combining overarching themes into one theme. In this

example, the extracts were organised into one overarching theme, where two sub-themes were collapsed into one – namely, ‘Effects of the war’ and ‘Mental health symptoms’. The extracts selected for this theme were used to report the findings.

Phase 4: Reviewing Themes

This phase was focused on refining themes. These were reviewed at the level of the coded extracts. In re-reading the collated extracts for each theme it was made sure that there was a coherent pattern, and all the extracts were relevant to the selected theme. A review of the themes was then made in relation to the entire data set. Re-reading of the entire transcripts helped ascertain the relevance of the themes to the whole data set and how themes related to one another.

Phase 5: Defining and Naming Themes

The essence and meaning of each theme was determined and defined. The aspect of the data each theme captured and the story each theme depicted within the overall story of the qualitative interviews was detailed. An important exercise in the phase was to describe each theme in only two sentences, and relate it to the other themes. This helped clarify the meaning and essence of each theme in the overall broader story of the current study.

Phase 6: Writing the Report

The findings were written up in the Results section 10.3. A concise and coherent account of the data within themes was reported. Extracts were used to provide evidence of the themes and smaller extracts from the interview texts were used to illustrate the essence of the interview accounts. Extracts were embedded within a narrative presented in the findings.

10.2.15 Validity and Reliability

A great deal of debate has taken place over time about judging the reliability and validity of qualitative research, particularly whether qualitative research can be judged using the same standards as quantitative research. It is argued that qualitative research is a field of inquiry in its own right and cannot be judged on its merits in the same way as quantitative research (Lincoln and Denzin, 1994; Holloway, 2007; Yardley, 2008; Pandey and Patnaik, 2014). But as with quantitative research, guidelines have been established for qualitative research to ensure good reliability and validity in all its methods (Lincoln and Guba, 1985; Merriam, 1995;

Elliott, Fischer and Rennie, 1999; Morse et al., 2002; Larkin, Watts and Clifton, 2006; Yardley, 2008; Yin, 2009; Crewell, 2012).

Trustworthiness of a qualitative research study is important to evaluate its worth (Pandey and Patnaik, 2014). Trustworthiness can be maximised by doing and documenting high quality research (Golafshani, 2003). Lincoln and Guba (1985) posit four criteria to be considered by qualitative researchers in pursuit of trustworthy research, and these constructs particularly correspond with the positivist approach to research and have been accepted by many to this day (Shenton, 2004; Patton, 2005; Yin, 2009; Erlingsson and Brysiewicz, 2013; Pandey and Patnaik, 2014). The current section will focus on guidelines provided by Guba and Lincoln (1985), with consideration to other researchers on trustworthiness.

Credibility: Trustworthiness involves establishing credibility. Similar to internal validity in quantitative research, this construct looks to establish confidence in the findings. It ensures that the study measures what it actually intends to measure. Merriam (1995) suggests that credibility deals with the congruence of the findings with reality. Of particular relevance to the current study, Shenton's (2004) provisions for researchers to promote confidence in the findings were used.

The current study *adopted well established methods in qualitative research* such as Thematic Analysis, and the procedures employed and methods of data collection have been successfully used in similar social science research on experiences (James, 2007; Burns, 2010; Bryman, 2011; Denzin and Lincoln, 2005; Kennedy, 2000; Karchmer, 2001; Meho and Tibbo, 2003; Willig, 2013; Joffe, 2012; Braun and Clarke, 2006). Further, *an early familiarity with the culture* of Syrian mental health was established by the current researcher. This was achieved through: previous publications, consultation of past literature, and past experience and knowledge of Syrian mental health.

Other criteria were used in the current study to establish credibility. The approach to data collection encouraged *participants to be honest*, by giving them the opportunity to refuse participation and repeatedly encouraging participants to give honest opinions to the interview questions. All participants had the right to withdraw from the study at any point, and were not required to disclose information they were not comfortable with. *Iterative questioning* was used in follow-up interview questions to elicit detailed data and ensure no

contradictions or false information or discrepancies emerged in the data collected. A *reflexive commentary* provided further credibility to the research in terms of evaluating the study and the effectiveness of the techniques and approaches employed. The *background, qualifications and experience* of the current researcher also helped ensure credibility to the data. The skills possessed by the researcher to carry out online qualitative interviews are reflected in her previous training and experience in the research field.

Finally, *triangulation* further ensured credibility of the data collected. The current thesis first conducted investigations using quantitative data, which lead to the formulation of the qualitative research questions. This helped ensure that both researches complimented one another and helped fill in some information gaps. Participants were employed from a specific field, namely Syrian mental health. However, each participant has the professional background in leading multiple and diverse teams on the ground working with Syrian mental health inside Turkey and Syria. This helped give further credibility to the data by giving opportunity to diverse contributions from the field and a range of viewpoints and experiences.

Transferability: Lincoln and Guba (1985) argue that trustworthiness can be demonstrated by the researcher showing that the findings are applicable in other contexts. This is similar to external validity in quantitative research methods. Scrutiny of qualitative research argues that qualitative information is specific and the findings are not applicable to a wider environment or context (Merriam, 1998; Pandey and Patnaik, 2014). So while it might be difficult to demonstrate the application of the qualitative study, that utilised small number of participants in a particular context. However, Lincoln and Guba (1985) argue that it is important nevertheless to demonstrate the trustworthiness of the data and it is the responsibility of the researcher to ensure sufficient contextual information is provided to enable transferability of the research findings to other contexts.

Shenton's (2004) guideline on transferability through thick description of the phenomenon was adopted. In the current study, detailed description of the background, methodology and research findings were provided to promote transferability of the research. In this sense the detailed insight into the research enabled the reader to understand why the researcher chose

specific methods, how the data was collected and analysed, what findings were concluded, and the researcher's own reflexive philosophical stance on the study.

Dependability: To determine trustworthiness, Lincoln and Guba (1985) argue that issues of reliability should be addressed in qualitative research. Similar to addressing reliability in quantitative research, dependability shows that if the study were to be repeated in a similar context using the same methods and participants, then similar results can be obtained. They emphasise that *inquiry audit* is one approach to achieve dependable data and it is described by Shenton (2004) as a data-oriented approach to establishing trustworthiness. In the current study, a detailed description was provided on how the data was collected, and how data was analysed to derive categories and themes and how decisions were made throughout the research study (please see Section 10.20 Methods for further details). The detail allows the reader to evaluate the accuracy of information gathered and whether the findings and its interpretations are supported by the study. Feedback throughout the process from the supervisory team helped establish dependable findings, as their input and feedback served as confirmation to the process of the research. Again reflexivity is a key part of this process.

Conformability: Comparable to quantitative research, this concept is similar to the concern of objectivity. Lincoln and Guba (1985) argue that trustworthiness in qualitative research can be fulfilled if necessary steps are taken to ensure as much as possible that the findings of the research are the results of the opinions and experiences of the participants, rather than that of the researcher. This, they argue, eliminates bias from the findings. In the current study, guidelines by Shenton (2004) were used to ensure conformability. The methods used to analyse the data helped support conformability. A thematic analysis was used to analyse the data. This approach to analysis is data driven and was used to systematically identify common trends in meaning and group them together into themes. The findings of the study were confirmed and corroborated by the supervisory team, reducing the effect of the researcher's bias in interpretation. Finally, the reflective commentary was important to establishing trustworthiness in the data. The researcher shared her philosophical reflexion on the research, and reflected on the decisions made in the study by acknowledging any predispositions and experiences that may have influenced the study.

10.2.16 Personal Reflexivity

Personal Reflexivity

My background as a Syrian expat living in the United Kingdom initially influenced my decision to study psychology as a first degree. Every summer my family would visit Syria, and I would be so fascinated by the people and the culture and it was so exciting for me to feel that I could fit in with everyone there. And yet after the summer finished, I was able to go back to my life in Cambridge and fit in to my usual everyday British life. As I grew up though, and started to form my sense of identity I often found it confusing as to which culture I belonged to – the British or the Syrian one. And one day I realized I could not be one or the other, and it was not necessary to choose. Some aspects of my life made sense in the UK and other aspects made sense in Syria. I did not necessarily have to merge them into one, but I can live with them together. This dual cultural identity really helped me understand how cross cultural understandings of human beings can be shaped depending on the context you are in and how elements of culture can cross over to one another and yet remain separate.

Pursuing this further I became interested in mental health and how society accepts and interacts with psychological help seeking. As early as my undergraduate research I wanted to understand the difference in community attitudes towards mental illness and how cultural differences may influence attitudes. As I moved into my masters course I began to visit Syria more because I was interested to see how in Syrian culture people would cope with their problems. During my visits I would interact with Syrian mental health professionals to know more about the state of the Syrian mental health care system. I was not mentally prepared to hear about the psychiatric asylums, and the overt mental health stigma that existed within Syrian society. It was at the time a great shock to me that mental health sufferers were rejected and shunned out of society for simply being psychologically unwell. I felt I needed to make a difference and help educate people on mental illness to overcome this discrimination and help those suffering. From then on my research, professional experience and my interest focused on Syrian mental health.

During this research process I have considered how my background could influence the research. One thing that stood out was the depth in understanding Western and non-Western culture, and knowing that some things can seem so different depending on the cultural context you are in. Growing up both Syrian and British, I understood mental health

from a Western British point of view, yet I understood it from the cultured Syrian point of view too – and interestingly noticed the cross-over between cultures. In this sense the experience I developed has been useful in driving my ability to understand mental health from different point of views – whether from a Western point of view, or a Syrian one. Upon reflection I could see that this served me well when I was reviewing the literature and formulating my rationale for my research. It also served me well in transitioning from an etic to an emic approach to the research. Adopting an etic approach and subsequently an emic approach seemed to mirror my experience with a dual culture. There is to an extent an ability to use information and generalize to the whole, but still there is a need to understand phenomena in a cultural context.

Another issue potentially impacting the research, was my experience in working with Syrian mental health, especially during the time of the war. Prior to 2011, my experience in Syrian mental health was predominately through research, but after the war began I pursued a career in training and consulting Syrian mental health professionals to provide better care for Syrians affected by the war. In reflection, this insight helped me in the research as I have often come across the societal and community factors involved in mental health. Many of the issues investigated in the current research are apparent in the day-to-day work on the ground and it was very satisfying and worthwhile to be able to use my research skills to document these pressing issues in a systematic manner for others to make use of in their pursuit to help suffering Syrians.

Another issue potentially impacting on the research, particularly my research methods, was my experience as a quantitative researcher. As I had developed my career in psychology, the research that I had conducted has always been quantitative in nature, and involved statistical analyses. By nature, I feel I have always been a positivist, maybe because growing up I always wanted definitive answers to my identity struggle. But my social constructionist side always crept up, because experience taught me that you need to look at things closely to really understand their meaning and the context in which information has been formed. I have always been reluctant to pursue qualitative research, opting for statistical analyses. I was extremely aware from the first year in my PhD that I leaned towards a quantitative study, but as time passed, and I had the chance to reflect on the literature and the research findings, it

became precedence to make a turn to the qualitative research and really understand mental health from the Syrian cultural context.

Overall I have found the research process to be very enjoyable, professionally and personally. I hope I have done all my participants justice and hope that this research can contribute to improving the mental health of Syrians.

10.3 Results

For the findings eight overarching *themes* and five sub-themes were derived from the interview transcripts (Table 10.2).

Table 10.2 A List of Overarching Themes and Sub-Themes

Main Overarching Themes	Subthemes
Effects of the Conflict on Mental Health	
Culture Specific Mental Health Symptoms and Idioms of Distress	
Cultural Concepts and Explanatory Models of Mental Illness	<ul style="list-style-type: none"> o <i>Scientific or Biomedical Models</i> o <i>Religious or Spiritual Models</i>
Psychological Help Seeking for Syrians	<ul style="list-style-type: none"> o <i>Medical versus Psychological Help Seeking</i> o <i>International Mental Health Care Services</i> o <i>Syrian Mental Health Workers</i>
Community Attitudes towards Mental Health Services	
Mental Health Stigma	
Gender Roles and Help Seeking	
Culture-Specific Healing Practices and Help Seeking	

10.3.1 Effects of the Conflict on Mental Health

War has torn apart the social fabric of society, and many Syrian families who are refugees in Turkey find themselves isolated from the surrounding community and disorientated from the rest of Syria. Feelings of estrangement and loss of identity were reported to participants in relation to living in isolated camps or in environments that exploit refugees' desperate need for work. Participant 3 explained:

Difficulties in adjusting to the new reality they found themselves has taken its toll on many. Large families living in tents and confined to places, often having to compete with other's to attend to basic needs, added more to the frustration to this usually proud people. As their stay gets longer despair and hopelessness is starting to surface with some general feelings of gloom.

In addition to the direct impact of Syrian refugees losing their homes and having to adjust to a difficult way of life in a host country, many are living with “*loss and grief*” (Participant 3). Many have faced multiple emotional, relational, and material losses; whether deceased or captured many are facing the loss of loved ones on a continuous basis. Participants voiced Syrians’ inability to adequately mourn and grieve their losses as for most it is a continuous experience of loss which complicates grief. Participant 4 explained:

The worst affected cases I saw were sadly of young children who lost one or both parents and siblings and there are many of these. Some give descriptions of horrific scenes they witnessed of their family members after shelling or bombardment. Some of these descriptions still ring in my mind to date.

Participant 1 explained:

We have many patients that are facing complicated grief because they have lost so much and too many people. While helping them grieve their loss they receive news that their brother got arrested or their cousin was shot or their neighbour was killed in a bombing...it is hard to treat grief when loss is ongoing and until when no one knows.

Many Syrians have witnessed multiple, complex and detrimental traumatic events from experiencing or witnessing violent acts like torture, killings and rape, to seeing the results of violent acts (e.g. dead bodies or bombed buildings) as well as experiencing non-violent traumatic experiences (e.g. refugee camps, homelessness, starvation). Heightened levels of mental health distress have been reported such as (Participant 2):

Some of the most common mental health problems we noticed were symptoms of anxiety, sadness, hyper-vigilance, social withdrawal, relationship problems and flashbacks of recent trauma. Some would qualify for diagnoses of mental health disorders like PTSD, severe depression.

Participant 1 listed common symptoms:

Speech problems or mutism; symptoms of hyperactivity; constant crying and exhaustion caused by stress-induced trauma, grief and mourning; and somatic symptoms that impair functioning; symptoms of depression and PTSD...We see all sorts of symptoms, flashbacks; sleep disorders; sexual disorders; decrease in concentration; tiredness; Anhedonia; nervousness; chest pain; boredom; delusions; hallucinations.

Sexual and gender-based violence has been reported to be on the increase for Syrians. Domestic violence has been identified as a common problem which is described as “...a negative outcome of mental health problems” (Participant 4). Sexual harassment and exploitation, sexual acts in exchange for money or food or to save a life as well as forced marriages and intimate partner violence became “commonly reported in refugee camps” (Participant 4). Participant 3 explained:

Rape or sexual assault or torture is a common weapon of war and has been an important source of mental health distress for Syrian refugees...Survivors of war violence are children, adult men and women and even elderly...almost every Syrian has either been abused or knows someone who has.

Participants explained that they face great deals of difficulty in helping those who have experienced sexual gender-based violence or war torture (Participant 3):

Rape is a source of stigma and touches on issues of honour...shame and pride often form as barriers to disclose survival of such events...For instance a woman would think twice before openly seeking support for rape (survival) because she would be scared to be the cause of dishonouring the family name or even feel guilty that she caused the abuse herself.

Feelings of shame and social exclusion were often reported by Syrian refugees, Participant 5 explained:

We have encountered many people who prefer not to talk about their torture...they say because they feel guilty or ashamed of the things that happened to them and feel they should have not survived and some even believe that if they talk about it then they risk it happening to them again out of fear.

The complexity of suffering due to the war was reported to be catastrophic, Participant 2 bluntly concluded:

In short, the Syrian war is reaching a point of no return, with long-term consequences for Syria and the region as a whole, including the risk of a 'lost generation' of Syrian children...There is too much suffering and you can really see it in people's eyes...People need help, we need help.

10.3.2 Culture Specific Mental Health Symptoms and Idioms of Distress

For Syrians concepts of mental health wellbeing '*al hala al nafsiah*' and mental health '*al saha al nafsiah*' are commonly discussed amongst the community. However, often people typically express their state of well-being in terms of a state of ill-being, with particular expression of physical complaints and psychosomatic symptoms: *"we hear a lot of people saying "my soul is tired" or "my heart hurts"...which usually they mean they are tired or equivalent to a range of depression or anxiety symptoms...we often have to pay particular attention to expressions of mental illness to assess for symptoms"* (Participant 4).

Some participants explained that most Arabic and Syrian idioms of distress in the Arabic language do not differentiate somatic experiences and mental illness symptoms; where explanations of illness links the body with the mind and soul: *"expressing mental distress in Arabic would in one sentence express bodily symptoms and state of mind...the language is made up this way maybe because definitions of illness in our culture consider both body and mind so it is hard to escape this when talking about it"* (Participant 3). Further to that, Syrians choice for expressions of symptoms appear to be rooted in social and cultural factors related to that society. Participant 5 explained:

It is common and normal for people to say they have physical symptoms like heart ache, heavy chest or like feelings of numbness in limbs. Usually they do not come to seek help and say I am depressed. They don't want to seem weak while everyone else is also suffering from similar problems or went through worse experiences...they worry that the psychologist would go tell others in the community of their complaints...There is a lot of stigma related to mental health in our society and still people think that if they talk of physical problems it will be more acceptable, understandable and has more importance for help".

Some of the most common idioms of mental illness that participants have come across were related to general distress: *"...they (patients) say they have a heavy heart or pains in the stomach or tight chest when they are expressing general distress"* (Participant 4). Other

common idioms related to expressions of and reactions to fear: *“falling or crumbling heart”* (Participant 4). For depressive symptoms and adjustment to acute stressors, common expressions like: *“...they say that life is black or they have heavy shoulders which gives them pains in their chest...some complain they are unable to eat or sleep or need to breathe”* (Participant 4). Another participant explained: *“when we get referrals of depressed patients from other health professionals we are told this person has gone into a state of depression...the word depression in Arabic has many meanings like gloom or darkening and has many somatic symptoms usually related to the heart or chest”* (Participant 1).

So while the effects of the Syrian war have impacted the mental health wellbeing of Syrians and they are presenting with common mental illnesses, social and cultural factors of Syrian society are integral and rooted in the way in which distress is often expressed and explained amongst sufferers. An important issue raised by participants was that mental health providers need to be very vigilant when assessing symptoms and prescribing help. They also need to have cultural understanding and awareness when approaching the issue of mental illness for Syrians.

10.3.3 Cultural Concepts and Explanatory Models of Mental Illness

Ideas about causality, course, treatment and likely outcomes of mental illness are thought to be shaped by Syrians different conceptualizations of illness. Multiple explanatory models of mental illness co-exist for Syrians and are not mutually exclusive.

Scientific or Biomedical Models

The scientific/biomedical models of illness have been thought to partly invoke and shape concepts of mental illness for Syrians (Participant 3):

A lot of people express their suffering in bodily or somatic symptoms...they try to make sense of their problem in terms of how it is impacting their physical self...often people come forward when they have noticed or witnessed bodily symptoms...maybe because they think if the mental distress had physical symptoms then it is easier to explain and understand.

Adoption of the scientific/biomedical model for symptom and illness explanations appears to stem back to times prior to the war (Participant 1):

When we treat patients we try to use both medication and psychotherapy because if we gave them psychotherapy alone with no medication then they would not be

convinced with the treatment. Patients are more likely to be convinced of psychotherapy if it was prescribed with medication because we are addressing physical symptoms first.

It seems that the divide between psychiatric and psychological frameworks of treatment remains to be pronounced in the context of Syrian mental health treatment (Participant 4):

I can say that around 70% of patients I see respond well to mental health treatment because I don't just depend on pharmacology but also on therapeutic treatments like CBT and EMDR...when people are referred to me they are sceptical of how treatment can help them, they have it in their mind that mental health treatment is all about medication and other therapy jargon...people are not used to the idea of therapy even from before the war but I try to encourage an integrated approach for treatment to really help them and most of the time when treatment is presented this way people are responsive.

Another participant explained that when mental illness is talked about in the context of physical illness and symptoms then treatment is more accepted: “a focus only on the mind makes people get defensive and insist they are not crazy” (Participant 3). Therefore, approaching mental health in the context in which Syrians conceptualize it has proven useful for treatment.

Religious or Spiritual Models

The religious/spiritual models of mental illness symptoms and suffering commonly exist for Syrians and do co-exist with scientific/biomedical models of illness. Religious/spiritual explanations and ideas of the processes of mental illness and healing are thought to be rooted in cultural ontologies of illness. These theories are thought to give Syrians meaning to causes of mental distress and illness (Participant 5):

In the Syrian culture the understanding and manifestation of mental illness is rooted in religious, cultural and social contexts...the way in which people understand mental illness is related to these value systems and so people understand problems and the methods for treatment in these contexts.

Tragedy, illness, disease or any experience including the war and consequences of it have been likened to acts of God or spiritual agencies, using this context to make sense of and cope with distress (Participant 4):

People in the (refugee) camps will speak about the horrific things they have endured or seen and they will tell you about the hardship they are facing...everyone has a story to tell but in the end we all say the same thing "all that happens to us is Allah's will". It is what God wants and it is a test of His we have to endure.

Participant 5 explained:

People find patience in Allah. People often say "God wanted this" and "there is a reason why I went through this" it is because they are trying to find ways to cope...and to understand...it gives them patience to see the meaning behind all what they have been through.

It seems that religious explanations of mental illness have helped Syrians understand and make sense of their distress but also people are able to understand the mental consequences of distress (Participant 2):

Lots of people do understand that things happen for a reason and the situation they are in is due to God's way and a lot of people do understand that mental distress is a consequence of the war...people can use religious belief to understand their situation but this is separate to the effects on their mental wellbeing.

10.3.4 Psychological Help Seeking for Syrians

Suffering is widespread, even prior to the war in Syria, and thus understood as a normal and integral part of life that does not necessitate medical or psychological intervention; with the exception of severe forms of mental health suffering requiring hospitalization. However, participants explained that *"awareness of mental health care has increased over the years...partly due to campaigns promoting this kind of care and also there is slowly more availability of this treatment in a time of much need and suffering"* (Participant 1).

Medical versus Psychological Help Seeking

In refugee camps Syrians can seek direct medical and psychological help from care services available in the camps or from mobile medical units and lesser so from external services available outside of the camps. Participants voiced many barriers and problems in psychological help seeking for Syrians. One pivotal obstacle to mental health care explained by Participant 3:

Syrians find it easier to seek medical treatment for mental health problems and this is mainly because there is less stigma associated with seeking help from a doctor than a psychologist or psychiatrist...They do not hesitate to seek help for physical war injuries or physical problems caused by the living conditions but when it comes to mental health they would rather address these problems with the medical doctor.

Participant 2 explained:

There are lots of pressures on medical teams helping Syrians in refugee camps because they see people for all sorts of problems including mental illness...there is so much need for capacity building training and support for primary care providers to manage people who present with mental problems.

It seems that Syrians have a preference to present their distress to primary care physicians rather than mental health specialists, which gives rise to opportunities for mental health screening, diagnosis and treatment prescription if medical teams have the capacity, knowledge and training to address mental illness. Otherwise this presents opportunities for referrals to mental health specialists.

International Mental Health Care Services

Mental health care is described as “*neglected*” (Participant 2) and “*below standards at best of times let alone at a time of a huge crisis like this war*” (Participant 2). But from the beginning of the war International Non-Profit Organizations (INGO’s) and humanitarian agencies began addressing some of the mental health needs for refugees. Despite efforts, many problems arose “*the more agencies that arrived the less coordination happened between them*” (Participant 2) which has led to “*duplication of services*” (Participant 2) and “*the fact that these agencies have different priorities when it comes to dealing with mental health problems and having different terms of references meant lots of valuable efforts are being wasted*” (Participant 2). A major problem experienced is that when Syrians present to them for medical or psychological care, medical records are not kept well maintained and, if they are, rarely does “*patient information sharing*” (Participant 1) take place for continued care when agencies or medical persons leave the camps.

Language is a major barrier for mental health care provided by agencies in refugee camps to Syrians. Many Syrians only speak Arabic, unless they have resided for long periods of time

before the war near the border of Turkey and so they are bilingual Arabic and Turkish. However, more mental health providers with INGO's and agencies do not speak Arabic and this poses grave communication problems, especially in providing psychological treatment. When language barriers are present, participants explained that *"the use of well-trained, professional mental health interpreters are important for accurate assessment and treatment delivery"* (Participant 3), but these can be costly and hard to locate. Often though *"informal interpreters from the community or family are used in emergency situations but (to be honest) there are special challenges with this...confidentiality and quality of care...so it is not ideal to do it this way"* (Participant 3).

Syrian Mental Health Workers

While there are Syrian mental health professionals providing care to other Syrians in the camps, and participants noted that agencies sometimes hire Syrians to provide mental health care, however: *"local recruits and volunteers do not always have enough experience and skills to deal with the type of mental health problems at war times"* (Participant 4). Despite that there is more and more reliance on local recruits to provide mental health care to other Syrians: *"we are trying to make training and capacity building on mental health treatment more available and we are building more local teams on the ground"* (Participant 4).

One challenge facing Syrian mental health professionals is *"burnout"* (Participant 1). There are small numbers of trained specialists available on the ground to address the needs of so many. Further to that: *"Syrian specialists themselves are refugees and have endured so much trauma themselves...a lot of them were imprisoned before they arrived to the camps...they are dealing with such extreme cases of mental health problems...it can be hard for them...they work long hours"* (Participant 1).

Participants seem aware of the problems facing their mental health teams and note: *"we try to ensure that workers and volunteers are well supported and supervised as much as possible even via skype...we need more support and more teams to achieve our task at hand"* (Participant 3).

10.3.5 Community Attitudes towards Mental Health Services

Community attitudes towards mental health care is a challenge for help seeking amongst Syrians. Syrians have *"sceptical views of psychology and psychiatry"* (Participant 5). These

perceptions are thought to be influenced by *“fear or stigma or scandal for the family if they reveal personal problems to strangers”* (Participant 5). What’s more, most Syrian refugees have faced negative experiences with professionals during the conflict at one point or another so *“they are wary of most professionals”* (Participant 5) even mental health workers. Most people cannot differentiate between psychiatrists, psychologists, social workers, counsellors and any mental health care provider and this is mainly because *“Syrians do not understand the difference between the different mental health fields so they do not know who is the right person to seek help from if they wanted help”* (Participant 3).

Another major problem impacting community attitudes about mental health care is *“establishing trust with mental health providers”* (Participant 5) and making sure that workers understand their values, mind-sets and cultural background. Participant 2 explained:

Syrians are coming across mental health care that is dominated by Western practices... and they feel this discredits their cultural or religious or social practices or values they hold...it becomes a choice of values for them than a source of help.

10.3.6 Mental Health Stigma

Syrian refugees are accepting to *“emotional suffering”* (Participant 5) or *“expressions of emotional problems”* (Participant 5) because *“everyone has shared experiences of war or displacement or being a refugee so they all are experiencing emotional problems in one form or another”* (Participant 5). So long as emotional or mental distress can be normalized and not associated with a *“psychiatric label”* (Participant 5) Syrians are accepting of mental illness. Participant 3 explained:

When someone’s emotional problem is labelled as some kind of mental illness which happens through assessment and mental health treatment then people reject this and hold negative views of mental illness...they feel embarrassed to be considered mentally ill and fear that people around them will think they are crazy.

The word in Arabic ‘*majnoon*’ can be used to describe someone with mental illness but this term carries with it other negative connotations like mad or possessed and this labelling *“casts shame on the patients and their family amongst the community and ultimately affects peoples decision to seek help or adhere to prescribed treatment”* (Participant 2). Psychiatric labelling discourages people from seeking help as *“stigma of mental illness in Syrian society is*

high and often hinders follow-up for those who found the courage to be seen in the first place” (Participant 4).

For help seeking for survivors of rape, abuse and torture, seeking help is a complex process. Survivors of abuse *“especially rape victims”* (Participant 2) can be highly stigmatized by the community as there are *“grave concerns about matters of family honour due to out of marital sexual intercourse”* (Participant 2). Participant 1 described:

We have many rape survivors who have not disclosed their abuse to anyone even their family as they are afraid they will cause shame to the family or that their family will disown them or their husbands will divorce them.

Survivors of abuse generally seek medical care for physical symptoms and in the process gain access to mental health care but *“often mental health treatment is done in secret if the victim is willing to even discuss this with anyone otherwise victims just suppress their experience or just make somatic complaints and we deal with the experience this way”* (Participant 5). Survivors of prison torture experience similar self and public stigma especially if sexual abuse took place for male victims by male abusers. Participant 4 highlighted:

Almost every person that enters Syrian prisons gets tortured that is a fact. We have many male victims who survived the most horrific acts of torture and some of these are of sexual nature from male prison guards or secret service...what they experienced is almost never spoken about and if it is then it is spoken in small whispers...we get these referrals from medical staff who are treating them for physical wounds.

To overcome the barrier of stigma for mental health care help seeking, participants explained that the work with medical staff in primary care units is important and they work with them on referrals. Otherwise they look to provide help to people in more accepting and non-stigmatized settings (Participant 1):

Many of the services we provide is through the community. Community-based psychosocial activities have been developed for Syrians to be able to access those in need of specialised care. We have been successful by providing access to help through community outreach programs and through schools which has encouraged people to come forward to seek help.

Ensuring that help is made available to Syrians in a culturally and socially acceptable manner was found to be a key part of help seeking.

10.3.7 Gender Roles and Help Seeking

During the Syrian war both men and women have been exposed to many negative experiences, but for most women these experiences have been catastrophic: *“sexual harassment and exploitation, blackmail, forced marriages, carers of immediate and extended family and often orphans and elderly neighbours”* (Participant 4). Many have experienced changing roles as they may have to *“care for and financially support themselves and their family if male family members have been captured, deceased, missing or injured”* (Participant 4). Despite changing roles and living in extreme war circumstances many segments of Syrian society have defined gender roles and expectations. Participant 2 explained:

There are a few important issues to consider when we discuss gender...disclosing personal information can be a problem especially if the information is being expressed to a male psychologist.

The use of mental health services can be detrimental to marital prospects or increasing marital problems if the treatment is seen as prying into family personal matters (Participant 5):

We have many women patients especially those who originally come from rural areas, who worry what their husband will say or think...they feel uncomfortable...we have cases where we have to sit with the male family member to give updates on the treatment sessions...this causes a great worry.

Syrian women are generally in charge of internal household matters and that includes care for the children and this has proved useful for providing mental health care for women: *“we developed community activities for children but made sure to include mothers in parts of the activity so we can access them to give them help they need and this has worked because it is not stigmatized and they are getting help in the context of their children which is acceptable”* (Participant 5).

On the whole, *“women seek more psychological help treatment than men”* (Participant 3). Socially males are raised to suppress their emotions and focus on their *“practical male roles”* (Participant 3) and often they are ridiculed by others in the community for complaining *“like women”*. This is problematic because *“it is often difficult to engage males in mental health support and even community programs”* (Participant 3) and most do not receive any kind of treatment. Participant 2 noted:

I have no doubt that so many severe cases of mental health problems in these communities suffer in silence for reasons of stigma or fear of their social image.

10.3.8 Culture-Specific Healing Practices and Help Seeking

For most Syrians the first source of help sought after is family or friends and when these are not available people “seek the help of community leaders like Imams” (Participant 4). Seeking social support is “an integral part of Syrian culture and often this determines pathways to care” (Participant 4). Cultural and social sources of help are important to consider for mental health care (Participant 2):

Children who found family support and got support at school are generally recovering well and manage to get on with things. It is not all doom and gloom I think generally people do support each other especially in large families and communities and this element needs highlighting and encouraging.

Religion is a prominent source of healing and coping for most Syrians. Traditional healers are often approached instead of or concurrently or in succession with mental health services. Participant 4 explained:

We see many people who have either been referred to by the Imam in the community or tell us that they are seeking help from religious healers...I think it can be effective but I don't necessarily encourage them to do it if they don't do it alone.

There is a general view that community or religious leaders would relate more and be understanding to the hardship Syrians are facing (Participant 1):

There is a common Arabic saying that people use “ask someone who experienced it, and not a doctor”. People think that receiving help from persons in the community means they will get more effective help because they too have experienced or still experiencing similar hardship and know better than a professional who is an outsider to their community.

Seeking help from religious or community leaders does not always purpose treatment but “people often go to religious leaders in search of social or moral or spiritual meanings to their situation or illness or suffering. People find comfort in speaking to them because it helps them make sense of their situation and it helps them find the strength and patience in times of despair” (Participant 5). Seeking the help of community or religious leaders encourages coping and resilience amongst Syrians and can be effective for mental distress.

Religious rituals particularly prayer were reported to be used by many to relieve some mental illness suffering: *“praying and other religious practices are used by many and believed to be effective...people pray when they are worried about a loved one or when they have lost someone or when they are facing emotional or financial difficulties...they find comfort in this”* (Participant 5). It seems that religious rituals provide a sense of communal support and used as a coping mechanism to overcome suffering and mental distress and these practices are an integral important aspect of their lives.

10.4 Discussion

The current study was a qualitative study using emails as an interview technique to investigate Syrian mental health professional’s experiences with Syrian refugees help seeking and attitudes towards mental health. The results showed that the Syrian war has had a detrimental effect on the mental health well-being of Syrians as a whole. This is similar to research reporting on the mental health effects of war on other Arab populations (Okasha, Karam and Okasha, 2012). While refugees appeared to be suffering from common mental health problems like post-traumatic stress, depression and anxiety, it was interesting to find that expression of illness was culture-specific. Syrians appeared to exhibit and come forward with mental illness symptoms that were expressed in physical or biological complaints. Congruent with past research which finds that it is important in Arab culture to fit in socially in the community (Coker, 2005; Al-krenawi et al., 2000; Okasha, 1999), the current research finds that Syrians feel more comfortable to express mental illness in ways that were deemed acceptable to social and cultural norms to evade social blunder and uphold a credible social reputation amongst the community.

It was found that concepts of illness were predominantly understood using scientific or biomedical explanatory models of illness. Many Syrians appeared to find solace in explaining their illness and their unfortunate circumstances as the will of God; religious or spiritual explanations of illness were commonly used to put mental illness in context to better understand it. These findings are in line with previous research that suggested Muslims in the Middle-east illness is understood as something that comes from God and seeking solace in religion is a common practice for Arab populations (Warpole et al., 2013; Okasha, 1999; Trembovler, 1994). It appeared that Syrians preferred to disclose their mental health

problems to medical or first aid workers rather than to mental health professionals. These help seeking preferences appeared to be linked to conceptualizations of illness and disease and greater cultural acceptance of physical rather mental illnesses.

Similar to past research on mental health stigma (Okasha, 1996; Al-Krenawi et al., 2004), the current research finds that mental health stigma appears to be one of the strongest predictors and influences on mental health help seeking. Participants expressed their concern that negative attitudes towards mental illness was continuously discouraging help seeking. These findings were similar to outcomes from the path analysis models in Chapter 9 where fear of mental illness was shown to be related to low recognition of the need to seek psychological help.

Furthermore, informal sources of help through the family and members of the community were popularly sought after by Syrians. The findings of Chapter 9 were similar to the current study: holding a moral obligation to help others decreased the ability to recognize the need for professionals to offer psychological help. The need for autonomy or seeking the help of others lowered the recognition of the need to seek psychological help.

Moreover, it seemed that Syrians were more apt to seek help from religious and community leaders, not just for mental health problems but also to seek guidance and patience in their ongoing struggle to deal with multiple losses and difficult refugee living circumstances. These findings were similar to Chapter 9 and that of past research (e.g. Al-krenawi and Graham, 2000; Al-Krenawi, Graham and Kandah, 2000), participants that had preferences to find solace in religion for coping recognized less need to seek psychological help from a professional. In the current study, there were some reports of coordination between religious leaders and mental health professionals, and even though religious healing and psychological treatment were often sought after simultaneously, there did not appear to be adequate coordination and integration between the two sources of help seeking practices.

While some efforts have been made to address the mental health needs of Syrians particularly by international organizations and agencies, there were many obstacles and barriers highlighted by participants to provide adequate mental health care. Expertise and language barriers were deemed the strongest obstacles in providing mental health services, and trust

in professionals and cultural and social understandings in dealing with Syrians were also proving problematic barriers for care.

Trained Syrian mental health workers have been relatively scarce to find, which appeared to be putting a lot of pressure on agencies and organizations to provide adequate care. However, training needs for Syrian workers seemed to be addressed slowly and international agencies are more so including these trained individuals in their organizations to help them provide care for the surrounding communities. As a result Syrian workers have been facing a great deal of stress and burnout: massive demand to address mental health problems with little human resources, coupled with long working hours and difficult caseloads had led many to burnout. Helping the helpers was highlighted as a prominent and urgent need to ensure ongoing mental health care.

Special attention should be paid to issues surrounding gender. There were concerns over gender-based violence, and the changing roles of women; this vulnerable group seemed to be at great risk of much mental distress. While females appeared to seek more help than males in the Syrian community, their help seeking has been in the past very much affected by gender social norms. Help seeking for women seemed to be more acceptable and approachable if it was offered within community programs where they could freely access support in a socially acceptable manner, particularly through programs aimed at children with access to adults. Similar to previous findings in Chapter 9, females appeared to have more interpersonal openness to their problems than males and thus recognized more need to seek psychological help.

Help seeking was also found to differ across genders, with some concerns over males receiving little to no psychological treatment. These findings are similar to past research that documents differences in attitudes between genders on psychological help seeking (Raviv, Sills, Raviv and Wilensky, 2000; Schonert-Reichl and Muller, 1996; Grinstein-Weiss, Fishman and Eisikovits, 2005). This concern was first highlighted in Chapter 9, male participants exhibited more mental health problems than females, but appeared to have less tolerance for mental illness and recognized less need to seek psychological help. It seems that help seeking should be addressed in accordance with gendered roles and viewpoints, and as

indicated in the current study this appeared to be a hugely overlooked issue by many addressing mental health needs for Syrian refugees.

10.4.1 Implications of the findings

The findings have great implications on real-life mental health issues for Syrians and on the overall outcome of the thesis.

Consideration to Culture

The findings in the current study helped highlight the complexity of addressing mental health issues for Syrians, particularly those who are refugees. There is grave need for mental health care because the war has had and continues to have a detrimental effect on Syrian's mental health well-being. Making this kind of care more available, especially from Syrian mental health workers, should be a key priority. However, in approaching this matter and in order to provide good quality care, social, cultural and religious factors need to be considered in program development and delivery.

It is important to take into account how this population views and understands mental illness as this has an impact on the way mental health problems are expressed and the type and source of help seeking sought after by most. Similar to quantitative findings in the current thesis that highlighted the need to place cultural context central to research for Syrian mental health, the current study further highlighted that it is not sufficient to provide mental health care that has not been tailor-made for Syrians. Many can go unnoticed and undiagnosed because cultural expressions and idioms of distress appear specific to the Syrian Arab context. As a result, many may fail to receive treatment, leading to prolonged illness and suffering when symptoms are not recognised and treated within the Syrian cultural context.

Attitudes towards Mental Illness and Help Seeking

Attitudes towards mental illness appears to be a central issue for Syrian help seeking. This was found in the quantitative findings of the thesis and further echoed in the current study. Syrians appear to have some misconceptions about mental illness and as a result are reluctant to openly address mental health needs without fears of shame and social blunder. As indicated in the findings of Chapter 9, individuals who hold negative views, particularly those who fear mental illness, recognize less need for psychological treatment. These findings were

further elaborated in the current study, negative attitudes were proving to be detrimental to the help seeking process and especially seeking the help from mental health professionals.

In recognizing the need to seek help, Syrians have a preference to seek help from sources that are least stigmatized by the surrounding community. Syrian's have a preference to seek help from medical workers who appear as neutral sources on mental health issues, help seeking for medical rather than mental health problems is less stigmatized. The findings of the thesis have implications for future mental health awareness and promotion initiatives as one important avenue to encourage help seeking for mental illness. These initiatives can be implemented within the community to ensure they are readily available and more accepted.

Syrians hold strong cultural and religious values and these shape and are intertwined in everyday matters and form the basis for lifelong decisions. As a result, Syrians rely on cultural practices and healing techniques for problem-solving, decision-making and for solace and support in times of hardship. These findings were mirrored in the findings of Chapter 9, Syrian individuals who seek the help of others in the community recognized less need for psychological help. It appears that sufferers are often having to choose between psychological help seeking through mental health care, and cultural practices for healing, commonly available in the community from religious / community leaders or other persons available in the community.

In future, it could be that with a little more coordination and integration these two help seeking practices can be offered in complement to one another as a mental health care package similar to some being offered in Saudi Arabia. Patients can benefit from specialized mental health care, yet at the same time feel comfortable and enjoy the benefits of cultural practices both for optimal healing and well-being.

Gender and Help Seeking

Gendered roles and differences are pronounced in the Syrian context. Males and females are socialized in different ways and have to maintain roles within their gender expectations. For help seeking, gender roles are pivotal and there are essential gender-specific factors to consider for mental health care program development and delivery. For females, issues surrounding interdependence and the need to self-cope due to restrictions to seeking help when help is not available within the community. For males, despite the grave need to seek

help, there is reluctance to seek help altogether for fears of jeopardizing male character and the need to uphold a credible social reputation in the community.

The findings of the current study were similar to the overall thesis, it was females who were apt to self-cope with their problems and male participants not only exhibited higher mental illness but had little tolerance and acceptance of mental illness. Similar to the current findings, individuals who were less open about their problems, particularly males, recognized less need to seek psychological help.

Gender is a central issue intertwined with mental health care. Ensuring that mechanisms for help seeking make considerations to gender is a key part to help seeking processes and success for Syrians. Further to that, self-coping skills can be strengthened amongst Syrians as an alternative source of help due to gender-specific barriers to help seeking.

The role of the community is important in addressing gender for help seeking. Community programs and initiatives are largely accepted by Syrians, the approach to delivering help makes use of familiar environments and these programs are inclusive as they engage most segments of the community. Moreover, community programs are often supervised and encouraged by community leaders, who are held in high esteem by many in the community. Programs for help seeking can be tailored for genders and offered in segregated settings to encourage engagement. Making considerations to male gendered roles will be challenging, but through addressing these barriers, may encourage male help seeking. For females, ensuring that help seeking is offered in a socially acceptable manner, in a trusting environment will not only encourage females to help seek but will reassure their families.

10.4.2 Methodology and Future Research

The qualitative method employed for investigations in the current study helped convey experiences of Syrian mental health professionals providing care for Syrian refugees. While generalizations should be made with caution, it is noteworthy to indicate that the participants manage large teams of mental health workers on the ground, and the experiences shared are those summarizing their own as well as those of their teams. Thus, indications of real-life mental health issues were made in reference to a large scope of work taking place on the ground, proving informative to understand attitudes of and help seeking for mental illness of Syrian refugees.

The experiences were conveyed through email interviews, and like other qualitative methods this technique has some draw-backs especially for probing and gaining in-depth understanding on pivotal issues in the interviews. However, participants were committed to the research and provided good accounts for analyses and in a timely manner. Emailing was a familiar process for participants as this formed part of their daily work routine. This technique is commonly used for updating and reporting on mental health care for Syrians; programs being implemented by mental health teams are funded by external funders located mainly in Europe and the USA and daily reporting is required for continued resources. Therefore, adopting this research technique did not hinder accounts as participants were familiar with this kind of interviewing process.

Email content formed the interview transcripts and this proved efficient for analyses as lengthy transcription of interviews was not needed. Interview responses were informative to draw out themes as most participants used a conversational style of expression and most used examples and metaphors to illustrate their answers. This research method was beneficial in accessing these hard to reach participants, and with the modernization of technology it allowed the inclusion of participants that have indispensable experiences on the case of Syrian mental health.

In future, further research is needed with mental health professionals working in international organizations and agencies to understand their experiences of working with Syrians for mental health care. Furthermore, the current study investigated Syrians who were refugees in Turkey and displaced in borderland regions to Syria only. For further elaboration on attitudes towards mental illness and help seeking, research into experiences of mental health should be conducted in other regions where mental health care is available to Syrians; mainly, inside Syria, Lebanon, Jordan and Iraq.

Chapter 11: Summary and Conclusions of the Thesis

The current chapter provides a summary of the key findings, overall conclusions of the findings, methodological strengths and weaknesses, implications of the findings for research and practice and future recommendations for research. An overall conclusions of the current research is made.

11.1 Summary of the Key Findings

- *Syrians hold a moral obligation to help sufferers of mental illness.*
- *There is a cultural ideology of the community, and mental illness is often seen to disrupt this.*
- *There is a general fear of people with mental illness.*
- *There exist gender disparities to approaches and attitudes to psychological help seeking and gender roles are pronounced when it comes to psychological help seeking.*
- *Syrians, especially females, have a preference to cope with distress using the help of other people.*
- *Mental health wellbeing is related to help seeking.*
- *Syrians have a preference for religious coping.*
- *The war in Syria has had a strong effect on Syrian mental health wellbeing.*
- *There is cultural-specific mental health symptoms and idioms of distress.*
- *There exists cultural concepts and explanatory models of mental illness.*
- *There are specific approaches to psychological help seeking for Syrians.*
- *Community attitudes towards mental illness are linked to mental health stigma and misconceptions of mental health.*
- *Syrians adopt culture-specific healing practices and psychological help seeking approaches.*

11.2 Overview of the Thesis

While little research could be found on Syrian mental health, particularly help seeking, past research including some in the Arab region were used to guide investigations in the current thesis. Through this thesis, knowledge on Syrian mental health psychological help seeking was made available.

The current thesis adopted an etic approach in the research to describe and explain Syrian cognitive psychological help seeking. The research conveyed how psychological help seeking was related to person-related factors of attitudes towards mental illness and coping styles that were rooted in Syrian Arab culture. The findings were developed to guide researchers, professionals and policy-makers on approaches to engage and work with Syrians for better mental health.

Using a cross-sectional survey design, a stratified cluster sample of participants aged 15-29 years was employed (N = 683) in Syria in 2011. In its etic approach, the research adopted widely used and validated US designed scales (made up of sub-scales) and assessed them on a Syrian sample to investigate three key areas on mental health: opinions on seeking psychological help, attitudes towards mental illness and coping styles. The relevance and appropriateness of the scales in the Syrian context were determined using CFA and the amended scales were made available to other researchers in the Arabic language.

A total of eight models were hypothesized and investigated using path analysis models to know the relationships between person-related barriers of mental health in the cognitive psychological help seeking process. The relationship between the person-related predictor variables of attitudes towards mental illness, coping styles, social support and mental health well-being with the outcome variable recognition of the need to seek psychological help was determined.

A qualitative investigation was conducted into the real-life situation on psychological help seeking, attitudes towards mental illness and alternative (cultural) sources of help for Syrians during the time of war. Using emails as an interviewing technique the qualitative research provided an overview of experiences of mental health professionals working in the field with Syrians who were refugees or displaced in Turkey and borderland areas in Syria. It was determined the extent to which the quantitative findings of the thesis extended to and were echoed in real situations of Syrian mental health, accounted by Syrian mental health professionals.

11.3 A Summary of the Overall Findings

The overall findings of the thesis were found through three distinct parts of the investigation:

- 1.** Assessment of scales using CFA.
- 2.** Path Analysis Models of Psychological Help Seeking.
- 3.** A qualitative research on Syrian mental health using email interviews.

11.3.1 Assessment of Scales Using CFA

Three scales were used in the current thesis, and were assessed using CFA. The overall findings for each are outlined below.

Community Attitudes towards Mental Illness

The CAMI was a self-report measure of attitudes towards mental illness. For data collection the 20-items scale was used, consisting of four sub-scales: Authoritarianism; Benevolence; Social Restrictiveness; and Community Mental Health Ideology. Using CFA investigations, it was found that the model fit was not good for the Syrian data and amendments to the scale were made. The new measurement model for CAMI produced a better fit. The results indicated that a three-factor 8-item model produced excellent fit to the data based on several goodness of fit indicators. Only three out of four sub-scales of the CAMI were useful for investigations involving Syrian young people; the sub-scale 'Authoritarianism' was eliminated.

An important finding was that the four-factor 20-item model did not fit the data well for all groups based on gender and age. However, the new (optimal) model for the CAMI had good fit to the Syrian sample data. Without further research it would not be possible to conclusively determine the poor fit of the model before amendments. But one possible explanation presented was that the concepts behind the CAMI sub-scale were not entirely relevant to the Syrian context and were mainly relevant to the West.

Opinions about Seeking Professional Help

The OSPH was a self-report measure to investigate opinions on seeking professional psychological help. For the purpose of data collection, the scale consisted of 16-items, and measured four sub-scales: Recognition; Tolerance; Interpersonal; and Confidence. Using CFA to assess the OSPH scale, it was found that the model fit was not good for the Syrian data set but after amendments the new model produced a better fit. Based on several goodness of

fit indicators the results showed that a four-factor 9-item model produced excellent fit to the data.

There were gender and age differences on items in the OSPH scale. The new (optimal) OSPH model was a good fit to the Syrian sample. But the findings suggested that in measuring opinions about seeking psychological help not all elements of the original scale were relevant and applicable in the Syrian context.

Coping Styles

The 16-item Coping Styles scale was developed in light of existing theories on coping styles, social support and religious coping styles. The scale measured four coping styles: Self-directing coping style; Collaborative coping style; Deferring coping style; and Surrender coping style. Using a confirmatory analytic investigation, the findings showed that the model fit was not good for the Syrian data set but the amended model produced a good fit. Based on several goodness of fit indicators the results showed that a three-factor 11-item model produced excellent fit to the data.

Similar to the CAMI and OSPH measurement models there were gender and age differences found on the styles of coping. Overall, participants showed that when facing problems or stress in their life they had a preference to cope through self-help and with the help of other people. Participants also indicated that they sought the help of religion to cope with their problems, and least of all did they try to cope with their problems by sole reliance on other people.

11.3.2 Path Analysis Models of Psychological Help Seeking

The overall findings showed that none of the hypothesized models were a good fit to the Syrian data based on several goodness of fit indicators, even when the models were tested for genders separately. However, the results showed that while the overall model fits were poor for all the presented path models, some pathways of the models were not only significantly affecting the outcome but there were gender differences. The main findings are outlined below:

Moral obligation to Help Sufferers

The findings indicated a negative relationship between the sub-scales 'Benevolence' and 'Recognition'. It was found that participants who felt that looking after sufferers of mental illness was a moral obligation to society were the ones who least recognised the need to seek psychological help in times of distress. This could have been indicative of beliefs that when sources of help are available in the community they would compensate or negate the need to seek professional psychological help.

Community Mental Health Ideology

There exists an ideology for who should be included in the community, and if sufferers are accepted then positive attitudes towards psychological help seeking also exist. Participants who believe in the therapeutic value of the community on mental health recovery were the ones who recognised the need to seek psychological help. It would be valuable to know how best to increase people's acceptance and inclusion of sufferers of mental illness.

Fearing People with Mental Illness

The sub-scale 'Social Restrict' was found to have a negative relationship with the outcome 'Recognition'. Similar to past research on social distance and social restrictiveness, the findings showed that participants who believed that sufferers of mental illness were dangerous and should be feared, recognised less need for psychological help.

Coping using the Help of Others

The 'Collaborative' coping style sub-scale was found to have a negative relationship with the outcome variable 'Recognition'. Participants that showed higher preference to cope with their problems with the help of other people, recognised less need for psychological help. Similar to previous research, use of informal sources of help often reduces the need to seek formal help from professionals.

Mental Health Wellbeing and Help Seeking

The predictor variable 'Wellbeing' was found to have a negative relationship with the outcome variable 'Recognition'. Similar to previous research, participants that exhibited high mental illness were found to recognise less need for psychological help. Overall, male participants were found to have higher mental illness than females in the current study.

Further, participants that exhibited higher preference to self-cope with the guidance of God, were found to have better overall mental health wellbeing.

Religious Coping

The findings showed that female participants significantly adopted the 'Surrender' coping style more than males. There were gender differences on the relationship between the 'Surrender' coping style and the outcome variable 'Recognition', the effect was mostly pronounced in females than males. These findings indicated that participants that had preference to seek solace in religion to cope with distress recognised less need to seek professional psychological help; this was mostly pronounced for female participants.

Gender Differences

Gender differences were found on the relationship between the sub-scale 'Interpersonal' and the outcome 'Recognition'. Participants that were more open regarding their own problems recognised the need to seek psychological help; particularly females appeared more open about their problems than males and thus recognised more need to seek psychological help.

For males, it was found that the sub-scale 'Tolerance' had a significant relationship with the outcome variable 'Recognition'. Male participants who held sufferers accountable for their illness and were not tolerant of mental health recognised less need to seek psychological help.

For females, the coping style 'Self-directing' was found to have a negative relationship with the outcome variables 'Recognition'. Females who showed a preference for self-reliance when coping with problems displayed lower recognition for the need to seek psychological help. Similar to previous research, the results indicated that the need for autonomy and the desire to be independent in times of distress can work as barriers to cognitive help seeking.

11.3.3 Qualitative Research on Mental Health

The overall findings of the path analysis investigations were further echoed in the findings of the qualitative case study. In this study the findings showed that the Syrian war has had a detrimental effect on the mental health well-being of Syrians as a whole; expressions of illness were culture-specific. Syrians came forward with mental health symptoms that were expressed in physical or biological complaints.

Concepts of illness were predominantly understood using scientific or biomedical explanatory models of illness and religious explanations of illness were commonly used to put mental illness in context. A preference was found to disclose mental health problems to medical workers rather than mental health professionals. Help seeking was linked to conceptualizations of illness and mental health stigma was reported to be one of the strongest predictors and influencers on mental health help seeking.

Informal sources of help through the family and members of the community, like religious leaders, were popularly sought after by Syrians. Religious coping and healing was found to be widespread to provide general guidance in ongoing struggles to deal with multiple losses and difficult refugee living circumstances. Religious healing and psychological treatment were often sought after simultaneously and there was not adequate coordination and integration between the two sources of help seeking practices. Trained Syrian mental health workers have been relatively scarce to find and as a result this has been putting a lot of pressure on international agencies and organizations to provide treatment, despite the obstacles for them to provide adequate care.

There were concerns over gender-based violence, and the changing roles of women; with special attention paid to issues surrounding gender. Growing concerns for male mental health problems and their little tolerance for mental illness and reluctance to recognize the need to seek psychological help. Conclusions that help seeking should be addressed in accordance with gendered roles and viewpoints.

11.4 Methodological Strengths and Weaknesses

The current research shed new light on psychological help seeking in the Syrian context, however the findings must be considered in light of some limitations. The current section outlines some strengths and limitations of the research.

11.4.1 Emic and Etic Approaches: The current thesis began by adopting an etic approach to understanding psychological help seeking in Syria. A key strength of beginning the research with this approach is that the current research replicated the approaches adopted by past research (Al-Krenawi et al., 2004; Al-Krenawi et al., 2009; Leshem, Haj-Yahia and Guterman, 2015; Natan, Drori and Hochman, 2005) related to psychological help seeking and community attitudes. An etic approach was useful to know how a global viewpoint can or cannot be

applicable to a Syrian cultural context. However, the etic approach proved limited in helping convey Syrian attitudes towards mental illness, psychological help seeking and coping styles. This was due to the choice of the global scales selected which resulted in gaps of information to understand Syrian help seeking.

A turn to an emic approach was a key strength in the current research because it allowed a cultural point of view on issues relating to Syrian mental health. Rather than the two approaches contradicting one another, the adoption of etic and emic approaches in the current research were found to complement and supplement one another. The etic approach helped form the basis of understanding Syrian mental health and how it might relate to global viewpoints, and the emic approach, helped support the etic approach and fill in the gaps in understanding. Arguably, a limitation to the study could have been the choice to begin the research with an etic approach and then transition to an emic one. Information could have been obtained from an emic approach to fully understand psychological help seeking from a Syrian perspective, and then an etic approach could have been adopted to see how applicable these findings were on the global level (see Section 11.6)

11.4.2 The Quantitative Approach: The current research began by conducting a quantitative research using survey data collection. A key strength of the research was the objective nature of the findings and the ability to generalise these findings to the Syrian population in the selected age groups. Further, the concepts in the current thesis have not been used in path analysis models before, and they have not been explored together in structural equation modelling. A key strength to the research was the use of the analytical methods to test concepts evidenced in past research to determine how concepts fitted together in models; particularly for a never before explored Syrian sample. Another key strength was that the uniqueness of cross-cultural research was highlighted in the current research, particularly that the current sample is markedly different to samples used in past international research (including language and religious orientations).

The findings of the quantitative research were useful in finding significant relationships between factors that influence psychological help seeking; enabling a better understanding of what concepts of psychological help seeking are important to the Syrian one and needing further investigation. However, a key limitation to the research is that none of the

hypothesized models were able to describe or explain the relation between several factors of recognizing psychological help seeking. The findings were only able to show influential pathways, but not relationships between several factors when measured together. It could not however, be determined whether the poor goodness-of-fit models found in the current research were due to the concepts or variables not fitting together or whether the poor fitting models were due to the underlying measurement scales (see Section 11.4.4).

While the objective nature of quantitative research better allows for replication and statistical comparisons of data across different populations, a key limitation to the current research is that it was not able to take into consideration the Syrian social and cultural context. This was further echoed when the scale constructs were found to have a poor fit to the Syrian data in the CFA investigations. The specific social and cultural context in which psychological help seeking takes place, need to be addressed to avoid gaps in the research in future (see Section 11.6).

11.4.3 The Qualitative Approach: It was necessary in the current research to supplement the quantitative research with a qualitative research. The qualitative investigations helped supplement the quantitative findings and conveyed understandings on psychological help seeking from a Syrian cultural perspective. A key strength of the qualitative research was that it allowed for the valuable contribution of knowledge on how Arabs conceptualize and deal with mental illness within their cultural and social context.

The methods used to carry out the qualitative research through email interviewing eliminated expenses and time in conducting the research. Email interviews promoted self-disclosure and allowed participants the time to reflect on their responses in their own comfortable environment. Another key strength of the current research was utilising thematic analysis to analyse the email interview transcripts. This technique was relatively easy to use, especially for a less experienced qualitative researcher. It is a flexible method and was particularly suitable for the current research because TA is a data driven approach that allowed for the production of themes that are strongly linked to the actual data, without the need to analyse verbal tones or body language.

But like all methods of data collection there a few limitations to consider. The complete interview took several days to complete, rather than a few hours and direct probing as would

be done in face-to-face interviews was not possible. The interview process lost visual, nonverbal cues and body language introspections. The use of qualitative research, as opposed to quantitative research, can be argued to be subjective in nature and is influenced by researcher bias. The research has limitations in generalising the findings to wider populations and is context specific. However, these limitations were avoided as much as possible by outlining the researchers ontological and epistemological standpoints during the research process and the researcher was transparent about her influence on the research through personal reflexivity.

It must be noted that the qualitative findings were the opinions and experiences of mental health professionals, who reported on the experiences of the Syrian community. The strength here is that it enabled the insight into the experience of the professionals themselves and those who they serve and work with. But a cautious limitation is that the experiences must not be taken as direct experiences of the community, as the reporting of community experiences is not primary but secondary in nature.

11.4.4 The Use of Global Scales: The current research adopted previously validated scales to measure opinions on seeking psychological help, attitudes towards mental illness and coping styles. A key strength of the current research is that, in the same way as past research, the current research utilized global scales and made available findings on these in a context never researched before, namely the Syrian Arab one. These scales have been developed in light of well-known psychological theories on mental health and help seeking and their dimensions have already been adopted in past Arab research (e.g. Al-Krenawi, Graham, Dean and Eltaiba, 2004; Al-kurdi, 2011). The scales were also made available in the Arabic language. The current research was able to demonstrate through SEM techniques (in particular CFA modelling) how the selected global scales, which are widely used in research unquestionably, are not a good fit to the Syrian Arab context and their use in Arab populations should be limited.

The current research helped highlight the importance of adopting research tools that are theoretically appropriate and systematically validated in the context in which they will be used for research. There is a great need to design specific scales to measure psychological help seeking, attitudes on mental illness and coping specific to the Syrian Arab context.

Western theories on mental health need to be adopted and reviewed with caution if they are being used in non-Western contexts. While some elements of global theories may extend to cross-cultural contexts, in order to really conceptualise the dynamics of the context at hand, theories to conceptualise psychological help seeking for Arabs need to be made available (see Section 11.6).

Some limitations to the use of global measures were faced in the current research. The scales adopted in the current research were not entirely applicable in the Syrian context. Despite their wide use in research, a limitation in using the selected scales was that they have not been previously assessed for validity on an Arab population, like the Syrian one, and their theory and validation only extends to Western populations like the one found in the USA. On the whole, a key limitation to the research was that the selected surveys were not appropriate to use in the Arab context and in using them there remained gaps in research that could only be filled in through the supplement of qualitative research.

Arguably the way in which the original scales were shortened and amended could have been a limitation to the methodology adopted in the current research. It cannot be determined whether the findings of the current quantitative research were due to the shortened measures, or whether the measures on the whole were not appropriate for use in the Syrian Arab context.

11.4.5 Changing Circumstances that Affected the Research: Lastly, an important issue to note is that the quantitative data collection for the current research took place before the Syrian war, and the qualitative research took place during the Syrian war. While the current research was able to show differing viewpoints on Syrian mental health; some relevant to times leading up to the war and others very relevant to the current day situation during the war. The research approach and its methodology were largely affected by the changing circumstances in Syria.

During the time of the research the war in Syria quickly escalated and this affected the current research in several ways. First, the original plan for the quantitative research was to review the appropriateness of the selected scales and amend them accordingly and conduct further data collection. It was not possible to carry on with these plans because it became increasingly dangerous to do any more data collection inside Syria. Further to that, the

dynamics of psychological help seeking before and during the war are somehow different, with greater emphasis being placed on the need to address psychological war trauma. So any further amendments to the scale would have had to account for the war context, and at the time it was not possible due to the chaotic nature of the war situation and the political and security restrictions to research war issues inside Syria.

Second, there was a plan to conduct qualitative research simultaneously and to complement the quantitative research with interviews with religious leaders, general population and mental health sufferers. As the situation in Syria worsened there was a great fear amongst people to interact and speak with strangers about any kind of opinions, fearing ulterior motives of the interviewer that could prove dangerous to their wellbeing or risk imprisonment. Research inside Syria to the current day is extremely difficult, but with access to research on Syrian refugees in neighbouring countries to Syria has helped give much needed insight into the mental health needs of this population.

11.5 Implications of the Thesis and Recommendations

The following section outlines the implications of the findings for research and practice. Recommendations for research are put forward for future research.

Implications for research

11.5.1 Implications for Theories on Mental Health

While international research can be found on mental health and theories have been proposed to describe and explain seeking psychological help, these have not been fully explored in the Syrian context. An important implication of the findings was that theories and constructs on seeking help, attitudes towards mental illness and coping styles need to be developed specifically for the Syrian Arab population. As well as exploring further the extension of international theories to Arab populations as conducted in the current thesis. In doing so, it would enable accurate and introspective understandings of the dynamics of mental health operating in that social and cultural context, and from that many initiatives, programs and treatment approaches can be developed in light of that context (see Section 11.6).

11.5.2 Implications for Researching Syrian Mental Health

Research has made available prominent scales and models to investigate seeking psychological help, attitudes towards mental illness and coping styles. And while some of

these have been used in research for the Arab region, none of them have been fully tested and assessed on an Arab sample; and besides the current thesis none have been explored in the Syrian context. An important implication of the current thesis was the need to develop scales specifically for a Syrian population, so that these scales would be reliable and valid and encompass important cultural, social and religious factors; which appear to be central to the conceptualization of mental health in this population. Otherwise, existing scales need to be tested and assessed on Syrian samples to ensure appropriateness prior to data collection and drawing of conclusions from them (see Section 11.6).

Further, the area of mental health is largely understudied in the Arab region and extremely scarce for Syria. An important implication of the research presented here is the need to build understandings around Syrian mental health and in order to accumulate in-depth understanding, qualitative research needs to be conducted and findings be made available. Qualitative research allows for in-depth investigations, and permits for research to be conducted with little to no prior theory on the subject; which is the ideal research case for Syrian mental health. Qualitative research can be used to provide baseline and in-depth understanding on Syrian mental health to aid the development of constructs and theories that can later be explored quantitatively. The findings indicate that this is especially useful to explore issues surrounding gender (see Section 11.6).

Practical Implications

11.5.3 Vision for Arab Psychological Help Seeking

The current research has helped make clear the need for psychological treatment for Syrians, especially given the detrimental and dire effects of war facing most Syrians. Issues like gender-based violence, war torture, complicated grief and post-traumatic stress are just some of the few pressing issues needing resolution.

An important implication of the thesis was that Syrians generally appear to have access to support networks operating within their community, informal help is available and often sought after. It is apparent that actual help seeking behaviours for Syrians are geared towards informal helping seeking rather than formal help seeking. These appear to reflect the culture in which they live by and the type of help seeking is a result of their social, cultural and religious context. The implication is that if Syrians do not seek professional psychological

help, particularly at times of heightened stress conditions of war, it could be because they have adequate informal help to support them through their distress. This helps relieve some pressure away from the demand for psychological treatment, which has been proving costly and in short supply due to limited resources and trained professionals in the mental health field. Whether these kinds of help seeking are adequate enough to support mental health distress is another matter which requires further research (see Section 11.6).

Ideally though, both formal and informal sources of help should be used as a way to complement one another in helping Syrians overcome mental health problems. This would of course require the development of the mental health care system available to Syrians inside and outside of Syria, and there would appropriate referral systems put in place to mediate and coordinate between formal and informal help seeking (see Section 11.6).

Another important implication of the current thesis was that Syrians appear to be generally open to seeking help in times of distress. Whether it is a preference to seek help from family, or community leaders or health professionals, there is an awareness to seek help in times of distress; rather than overall resistance of help in favour of total self-autonomy. This is an important implication because in working to set up coordinated help seeking systems (formal and informal) Syrians can be encouraged to seek help in some way or another, particularly males. Further, in addressing the stigmatization of sexual, domestic and war violence within the community would further encourage people to address these issues when they do seek help from one of the several available help seeking sources.

A further implication of the current thesis pertained to Syrians' understanding and conceptualizations of mental health. The findings indicated the existence of some viewpoints that fear mental illness, deeming sufferers dangerous and wishing for their exclusion from society; and intolerance to mental illness especially when sufferers were blamed for their ill health. The important implication of these findings point to the need for mental health knowledge and awareness initiatives to counteract these misconceptions; exploring whether improved knowledge on mental health would encourage psychological help seeking and improve attitudes towards mental illness (see Section 11.6).

11.5.4 Mental Health Provisions for Syrian Refugees and the Displaced

The mental health needs of Syrians are great. There was a need to address mental health needs prior to the war, but now the needs are far greater due to the detrimental situations facing all Syrians. The current research has established that Syrians have an openness to seek help for psychological distress, and actual help seeking takes the form of formal and informal help for those in need. It appears though that, for Syrian refugees, informal sources of help in the community are more readily available and there is an apt to accept these sources more so than professionals.

Despite these preferences, formal help seeking is still being sought after by Syrian refugees. But understandably with the chaotic nature of war and refugee circumstances, there appears to be inadequate resources to meet the needs of those suffering. An important implication from the qualitative research is the vast obstacles facing Syrian mental health professionals, international organizations and agencies to provide adequate mental health support to Syrians. While steps have been made to include Syrian mental health professionals in the services provided by international aid agencies, there remains to be a limited number of trained Syrians in the field of mental health. Further training of Syrians in the field of mental health is much needed as they are in great demand due to language and cultural background, but with low numbers of these professionals they are at risk of burnout and case overload. Further funding is needed to build local capacities, and ensure mental health support is made available to Syrian communities.

The current research helped convey that Syrians often use religion as a way to cope with their distressing situations. The subject of religious coping has throughout history been treated with great caution, and especially nowadays with emerging extremist groups falsely using religion as a weapon of war. While there is a general sense in the international community to avoid issue of religion or practice. The current research though has helped show that religion can be a positive source for Syrians to make sense of their distress, particularly for issues pertaining to loss, grief and prolonged suffering. Religious coping is often used by many to overcome mental health problems and some seek the help of religious leaders and Imams in the community to help them overcome distress and make sense of their dire situations.

Religious healing or coping remain to be separate to and do not a substitute professional psychological help. While it requires a great deal of research and practice to really put in

place monitoring and regulatory methods to combine elements of these two forms of help seeking. For now, the current research has helped highlight the need for a referral system between professionals and religious leaders for better patient care. Religious leaders need to be aware of mental illness and should be informed when patients need to be referred to a mental health specialist. This form of referral would ensure that both sources of help can be sought after within the community but it promotes continued support and treatment for anyone suffering (see Section 11.6).

11.6 Considerations for Future Research

As outlined in Chapter's 3 and 6-9, there is growing body of evidence on Arab mental health, and some on psychological help seeking and coping with distress. However, there remains a great need to conduct more research on Arab mental health issues, especially after the numerous Arab springs in the region and escalating wars which have brought with them many negative consequences, particularly on mental health wellbeing. It remains to be unclear the intertwining roles informal and formal help seeking serve Syrian mental health, and in particular how religion is utilized in times of distress. Further research on all these subjects needs to be made available to better understand the situation, and in response develop programs and initiatives to help those suffering.

Further, a significant issue highlighted by the current research is the importance of developing theories to describe and explain Arab mental health, psychological help seeking, mental health stigma and different forms of coping. These theories need to take into account the social, cultural and religious elements at play in the Arab context. Theories would help give better insight into the gaps needing to be addressed by mental health professionals and the humanitarian aid community. Scales to measure opinions and attitudes can be developed with these theories in mind. Survey scales should be developed and validated on the Syrian Arab population and be made available to the research community. An interesting addition would be to investigate the overlap of help seeking processes found in the Arab world with non-Arab cultures and contexts. In finding overlaps, treatments, programs and initiatives can be borrowed and made appropriate to benefit Arab populations.

Another significant issue highlighted by the current research is the need to conduct research on the best way to set up help seeking coordinated referral systems between different

sources of help available to Syrians. This research can help determine the key processes and pathways to help and identify further needs for capacity building programs, awareness and education initiatives and mechanisms to refer sufferers between formal and informal help and vice versa. A key focus would be on gender issues, understanding the different pathways to help and referring help based on gender-specific mindsets and needs.

An interesting approach for research in the future would be to begin with an emic approach to conduct a wide range of qualitative research with various groups in the population – mental health professionals, mental health patients, families of mental health patients, religious leaders, community leaders, INGO's and so on. This would help gain a qualitative understanding into the processes and gaps in psychological help seeking and better recognize how the help seeking “ecosystem” available to Syrians operates together and identify the missing links in the process. From this emic approach, scales measuring different aspects of the help seeking process can be developed, including assessments of adequacy of help provided.

11.7 Final conclusions

Psychological help seeking is an issue of great concern for Syrians, it was so prior to the war and has become a matter of great urgency in consequence to a detrimental war affecting millions of Syrians. Past research has helped shed some light on various aspects of help seeking that are important for mental health wellbeing. Global scales exist to measure attitudes towards mental illness, psychological help seeking and coping styles. And some of these have been used in past Arab research. However, the scale constructs and the items to measure these various dimensions have never been explored in past research.

The current research has expanded past research by adopting renowned global scales previously used in research, in an etic approach to understand psychological help seeking for Syrians. Through various analytical techniques, the current research showed that global notions of psychological help seeking do not entirely apply to the Syrian context – further highlighting the uniqueness and need for cross-cultural research.

A turn to an emic approach helped supplement the quantitative findings by researching the opinions and experiences of mental health professionals on community mental health issues and psychological help seeking. Together the etic and emic approaches to the research

helped shed light on the approaches to psychological help seeking for Syrians. They helped show that Syrians are open to seeking help for distress, and there are various sources of help available to them. Formal and informal sources of help are both at play in the help seeking process. Both forms of help do not seem to negate one another and often are sought after concurrently, especially during times of war.

There still remain gaps in the research, particularly how formal and informal help processes intertwine together and the pathways to help seeking. Religious healing and coping seem to be an important source of help and understanding distress for Syrians, but it is still unclear how these can be used systematically and therapeutically alongside professional psychological help. Further research is needed in the Syrian context to develop theories to describe and explain psychological help seeking. Socially and culturally appropriate psychometric scales to measure various mental issues should be developed. Research can be used to better understand the help seeking process and know how a referral system of help can be put in place to serve the mental health needs of Syrians.

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Appendix 1: Factor Structure and Items used in the Scales

Community Attitudes towards Mental Illness

Sub-scale	Item No.	Item Statement	Min-Max Score
Authoritarianism	HE09_1	One of the main causes of psychological problems is a lack of self-discipline and will power	1-5
Authoritarianism	HE09_2	As soon as a person shows signs of psychological disturbance, he should be hospitalized	1-5
Authoritarianism	HE09_3	People with psychological problems need the same kind of control and discipline as a young child	1-5
Authoritarianism	HE09_4R	Mental illness is an illness like any other	1-5
Authoritarianism	HE09_5R	Virtually anyone can suffer from psychological problems	1-5
Benevolence	HE09_6R	More tax (government) money should be spent on the care and treatment for mental health	1-5
Benevolence	HE09_7R	Our mental hospitals seem more like prisons than like places where patients can be cared for	1-5
Benevolence	HE09_8R	We (society) have a responsibility to provide the best possible care for people with psychological problems	1-5
Benevolence	HE09_9	People with psychological problems don't deserve our sympathy	1-5
Benevolence	HE09_10	It is best to avoid anyone who has psychological problems	1-5
Social Restrictiveness	HE09_11	People with psychological problems should be isolated from the rest of the community	1-5
Social Restrictiveness	HE09_12	A person would be foolish (not wise) to marry a man who has suffered from psychological problems, even though he seems fully recovered	1-5
Social Restrictiveness	HE09_13	I would not want to live next door to someone who has been suffering from psychological problems	1-5
Social Restrictiveness	HE09_14R	No one has the right to exclude people with psychological problems from their neighbourhood	1-5
Social Restrictiveness	HE09_15R	People with psychological problems are far less of a danger than most people suppose	1-5
Community	HE09_16R	The best treatment for many people with psychological problems is to be part of a normal Community	1-5
Community	HE09_17	Mental health facilities should be kept out of residential neighbourhoods	1-5
Community	HE09_18	Having people with psychological problems living within residential neighborhoods might be good treatment but the risks to residents are too great	1-5
Community	HE09_19	It is frightening to think of people with psychological problems living in residential Neighbourhoods	1-5
Community	HE09_20	Locating mental health facilities in a residential area downgrades the neighbourhood	1-5

Opinions about Psychological Help Seeking

Sub-scale	Item No.	Item Statement	Min-Max Score
Confidence	HE10_1R	If a good friend asked my advice about a psychological problem, I might recommend that he see a psychiatrist	1-4
Tolerance	HE10_2	I would feel uneasy going to a psychiatrist because of what some people would think	1-4
Recognition	HE10_3	A person with a strong character can get over psychological conflicts (problems) by himself, and would have little need of a psychiatrist	1-4
Recognition	HE10_4R	There are times when I have felt completely lost and would have welcomed professional advice for a personal or emotional problem	1-4
Recognition	HE10_5	Considering the time and expense involved in psychotherapy, it would have doubtful value for a person like me	1-4
Interpersonal	HE10_6R	I would willingly confide intimate matters to an appropriate person if I thought it might help me or a member of my family	1-4
Confidence	HE10_7	I would rather live with certain psychological conflicts than go through the ordeal of getting psychiatric treatment	1-4
Recognition	HE10_8	Emotional difficulties, like many things, tend to work out by themselves	1-4
Interpersonal	HE10_9	There are certain problems which should not be discussed outside of one's immediate family	1-4
Confidence	HE10_10R	If I believe I was having a mental breakdown (psychological problems), my first inclination would be to get professional attention	1-4
Interpersonal	HE10_11	Keeping one's mind on a job is a good solution for avoiding personal worries and concerns	1-4
Tolerance	HE10_12	Having been a psychiatric patient is a problem for a person's life	1-4
Confidence	HE10_13	I would rather be advised by a close friend than by a psychologist, even for emotional Problems	1-4
Tolerance	HE10_14	Being mentally ill carries with it a burden of shame	1-4
Interpersonal	HE10_15	There are experiences in my life I would not discuss with anyone	1-4
Tolerance	HE10_16R	Had people received treatment in a mental hospital, they ought not to feel that they have to cover this up	1-4

Coping Styles

Sub-scale	Item No.	Item Statement	Min-Max Score
Collaborative	PE04_1R	When it comes to deciding how to solve a problem, I work together with others I am close to as partners	1-4
Collaborative	PE04_2R	Together, with others, I am close to, I put my plans into action	1-4
Surrender	PE04_3R	When a situation makes me anxious, I wait for others I am close to, to take those feelings away	1-4
Collaborative	PE04_4R	When considering a difficult situation, I work together with others; I am close to, to think of possible solutions	1-4
Self-directing	PE04_5R	When deciding on a solution, I make a choice independent of anyone or anything's input	1-4
Self-directing	PE04_6R	I act to solve my problems without anyone or anything's help	1-4
Self-directing	PE04_7R	When faced with trouble, I deal with my feelings without anyone or anything's help	1-4
Self-directing	PE04_8R	When thinking about a difficulty, I try to come up with possible solutions without anyone or anything's help	1-4
Surrender	PE04_9R	Rather than trying to come up with the right solution to a problem by myself, I let others I am close to, decide how to deal with it	1-4
Surrender	PE04_10R	In carrying out solutions to my problems, I wait for others, I am close to, to take control and I know somehow they'll work it out	1-4
Collaborative	PE04_11R	When I feel nervous or anxious about a problem, I work together with others, who I am close to, to find a way to relieve my worries	1-4
Surrender	PE04_12R	I do not think about different solutions to my problems because others I am close to provide them for me	1-4
Deferring	PE04_13R	When thinking about a difficulty, spirituality guides me to possible solutions (say a prayer)	1-4
Deferring	PE04_14R	In carrying out solutions to my problems, I wait for spiritual guidance (say a prayer) to take control to work out this problem	1-4
Deferring	PE04_15R	When I feel troubled or anxious, I seek spiritual guidance (say a prayer) to help me deal with my feelings	1-4
Deferring	PE04_16R	When deciding how to solve a problem, (say a prayer) I seek spiritual guidance	1-4

Self-Reporting Questionnaire-20 (SRQ-20)

Sub-scale	Item No.	Item Statement	Min-Max Score
SRQ-20	HE08_1	Do you suffer from recurring headaches?	1-2
	HE08_2	Do you suffer from loss of appetite?	1-2
	HE08_3	Do you not sleep well?	1-2
	HE08_4	Do you scare easily?	1-2
	HE08_5	Do you suffer from trimmers in the hands?	1-2
	HE08_6	Do you feel pressure, worry or anger?	1-2
	HE08_7	Do you suffer from indigestion?	1-2
	HE08_8	Do you find difficulty in thinking clearly?	1-2
	HE08_9	Do you feel unhappy?	1-2
	HE08_10	Do you cry more often than usual?	1-2
	HE08_11	Do you find it difficult enjoying daily activities?	1-2
	HE08_12	Do you find difficulty in taking decisions?	1-2
	HE08_13	Do you find it difficult to carry out day-to-day activities?	1-2
	HE08_14	Do you find it difficult to play an important role in your life?	1-2
	HE08_15	Have you lost interest in things around you?	1-2
	HE08_16	Do you feel that you are a person of less value/worth?	1-2
	HE08_17	Have you ever thought about committing suicide?	1-2
	HE08_18	Do you feel fatigue all the time?	1-2
	HE08_19	Do you feel uneasy in your stomach most of the time?	1-2
	HE08_20	Do you get tired easily?	1-2

Social Support

Sub-scale	Item No.	Item Statement	Min-Max Score
Social Help Seeking	YO01	Do you seek anyone if you have a problem that needs solving?	1-3
	YO03	Is there someone you rely financially on for most things in your life?	1-3
	YO05	Is there someone you rely emotionally on for most things in your life?	1-3

Appendix 2: Original CAMI Scale and Items Selected for the Current Study

No.	Sub-scale	Item	New CAMI Item
1	Authoritarianism	One of the main causes of psychological problems is a lack of self-discipline and will power	HE09_1
2	Authoritarianism	The best way to handle the mentally ill is to keep them behind locked doors	
3	Authoritarianism	There is something about the mentally ill that makes it easy to tell them from normal people	
4	Authoritarianism	As soon as a person shows signs of psychological disturbance, he should be hospitalized	HE09_2
5	Authoritarianism	People with psychological problems need the same kind of control and discipline as a young child	HE09_3
6	Authoritarianism	Mental illness is an illness like any other	HE09_4R
7	Authoritarianism	The mentally ill should not be treated as outcasts of society	
8	Authoritarianism	Less emphasis should be placed on protecting the public from the mentally ill	
9	Authoritarianism	Mental hospitals are an outdated means of treating the mentally ill	
10	Authoritarianism	Virtually anyone can suffer from psychological problems	HE09_5R
11	Benevolence	The mentally ill have for too long been the subject of ridicule	
12	Benevolence	More tax (government) money should be spent on the care and treatment for mental health	HE09_6R
13	Benevolence	We need to adopt a far more tolerant attitude toward the mentally ill in our society	
14	Benevolence	Our mental hospitals seem more like prisons than like places where patients can be cared for	HE09_7R
15	Benevolence	We (society) have a responsibility to provide the best possible care for people with psychological problems	HE09_8R
16	Benevolence	People with psychological problems don't deserve our sympathy	HE09_9
17	Benevolence	The mentally ill are a burden on society	
18	Benevolence	Increased spending on mental health services is a waste of tax dollars	

19	Benevolence	There are sufficient existing services for the mentally ill	
20	Benevolence	It is best to avoid anyone who has psychological problems	HE09_10
21	Social restrictiveness	The mentally ill should not be given any responsibility	
22	Social restrictiveness	People with psychological problems should be isolated from the rest of the community	HE09_11
23	Social restrictiveness	A person would be foolish (not wise) to marry a man who has suffered from psychological problems, even though he seems fully recovered	HE09_12
24	Social restrictiveness	I would not want to live next door to someone who has been suffering from psychological problems	HE09_13
25	Social restrictiveness	Anyone with a history of mental problems should be excluded from taking public office	
26	Social restrictiveness	The mentally ill should not be denied their individual rights	
27	Social restrictiveness	Mental patients should be encouraged to assume the responsibilities of normal life	
28	Social restrictiveness	No one has the right to exclude people with psychological problems from their neighbourhood	HE09_14R
29	Social restrictiveness	People with psychological problems are far less of a danger than most people suppose	HE09_15R
30	Social restrictiveness	Most women who were once patients in a mental hospital can be trusted as babysitters	
31	Community mental health ideology	Residents should accept the location of mental health facilities in their neighborhood to serve the needs of the local community	
32	Community mental health ideology	The best treatment for many people with psychological problems is to be part of a normal Community	HE09_16R
33	Community mental health ideology	As far as possible, mental health services should be provided through community based facilities	
34	Community mental health ideology	Locating mental health services in residential neighbourhoods does not endanger local residents	
35	Community mental health ideology	Residents have nothing to fear from people coming into their neighbourhood to obtain mental health services	

36	Community mental health ideology	Mental health facilities should be kept out of residential neighbourhoods	HE09_17
37	Community mental health ideology	Local residents have good reason to resist the location of mental health services in their neighbourhood	
38	Community mental health ideology	Having people with psychological problems living within residential neighbourhoods might be good treatment but the risks to residents are too great	HE09_18
39	Community mental health ideology	It is frightening to think of people with psychological problems living in residential Neighbourhoods	HE09_19
40	Community mental health ideology	Locating mental health facilities in a residential area downgrades the neighbourhood	HE09_20

Appendix 3 – Normal Distribution for the CAMI Scale

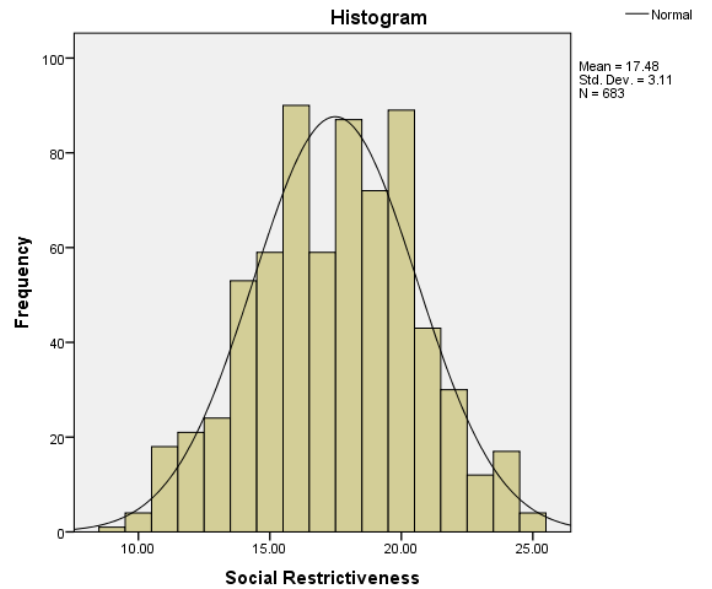
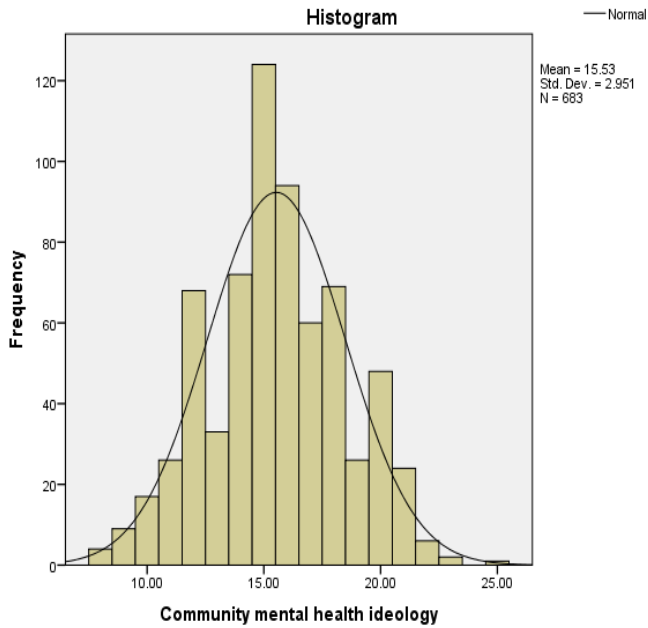
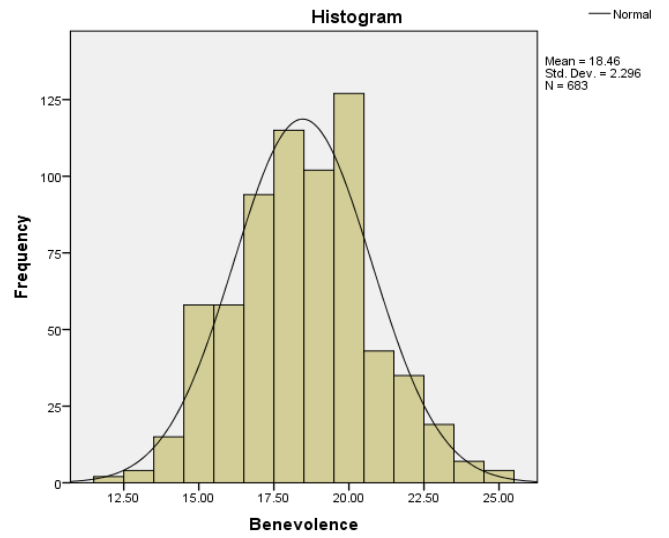
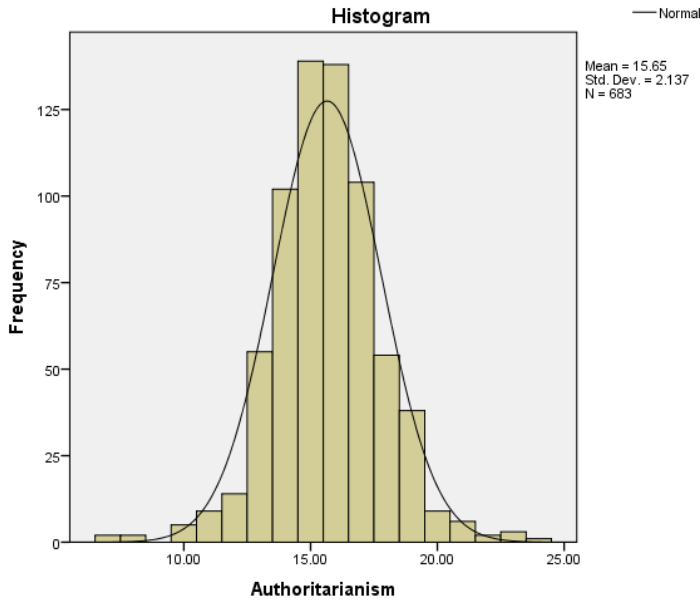
	Tests of Normality CAMI					
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Authoritarianism	.117	683	.000	.965	683	.000
Benevolence	.093	683	.000	.979	683	.000
Community mental health ideology	.093	683	.000	.983	683	.000
Social Restrictiveness	.084	683	.000	.986	683	.000

a. Lilliefors Significance Correction

Test of Skewness – Rule of Thumb (Field, 2013; Pallant, 2013; Rose et al., 2014; Howell, 2016)

Sub-scale	Skewness	Std. Error	Skew/Std. Error	Normally Distributed?
Authoritarianism	0.09	0.08	1.14	Yes
Benevolence	0.09	0.09	1.06	Yes
Community mental health	0.09	0.11	0.83	Yes
Social Restrictiveness	0.09	0.12	0.79	Yes

Appendix 4 – Normal Distribution for the CAMI Sub-Scales Illustrated by Histograms



Appendix 5 – Item Analysis for the CAMI Scale

		Community Attitudes towards Mental Illness (%)				
		1	2	3	4	5
Authoritarianism	<i>The need to hospitalize the mentally ill and discriminate between them and “normal” people</i>					
HE09_1	1.0	4.4	11.1	38.2	45.2	
HE09_2	7.3	44.7	20.6	19.6	7.8	
HE09_3	1.6	20.9	20.9	43.3	13.2	
HE09_4R	.6	13.9	9.1	52.9	23.6	
HE09_5R	.1	2.3	6.4	55.9	35.1	
Benevolence	<i>Signifying the moral responsibility of society to care for the mentally ill and the need for sympathetic and kindly attitudes towards sufferers</i>					
HE09_6R	0.0	3.1	14.2	50.1	32.7	
HE09_7R	3.4	12.0	44.4	26.9	13.3	
HE09_8R	1.2	18.2	14.9	47.6	18.2	
HE09_9	21.2	58.1	12.2	5.6	2.9	
HE09_10	11.3	51.5	13.6	19.3	4.2	
Social Restrictiveness	<i>Implying the dangerousness of the mentally ill and the desire to maintain social distance</i>					
HE09_11	13.2	53.9	15.5	15.4	2.0	
HE09_12	8.3	43.5	22.8	19.6	5.7	
HE09_13	6.9	47.4	15.7	22.8	7.2	
HE09_14R	2.9	15.8	16.5	41.3	23.4	
HE09_15R	12.0	55.2	22.8	8.8	1.2	
Community	<i>Expressing the therapeutic value of the community on mental health recovery and the acceptance of the principle of deinstitutionalized care</i>					
HE09_16R	.1	7.3	13.8	57.1	21.7	
HE09_17	1.8	21.8	23.9	38.2	14.3	
HE09_18	1.5	24.7	28.7	38.2	6.9	
HE09_19	1.9	37.2	27.1	27.5	6.3	
HE09_20	9.5	35.7	29.9	20.5	4.4	

Appendix 6 – Factor Analysis for the CAMI Scale

Pattern Matrix

Item Number	Item	Component					
		1	2	3	4	5	6
Benevolence HE09_10	It is best to avoid anyone who has psychological problems	.772	-.159	.000	.048	.052	.064
Community HE09_13	I would not want to live next door to someone who has been suffering from psychological problems	.757	-.034	-.128	-.009	.101	.043
Community HE09_11	People with psychological problems should be isolated from the rest of the community	.734	.083	-.036	.124	-.128	.070
Community HE09_12	A person would be foolish (not wise) to marry a man who has suffered from psychological problems, even though he seems fully recovered	.703	.177	-.062	-.086	-.169	-.033
Benevolence HE09_6R	More tax (government) money should be spent on the care and treatment for mental health	.010	.695	.062	.064	.023	.034
Authoritarianism HE09_5R	Virtually anyone can suffer from psychological problems	.025	.684	-.072	.068	-.116	-.064
Authoritarianism HE09_1	One of the main causes of psychological problems is a lack of self-discipline and will power	.062	-.592	.069	-.090	-.238	.075
Authoritarianism HE09_4R	Mental illness is an illness like any other	.238	.410	.106	.000	.028	-.355
Social restrict HE09_18	Having people with psychological problems living within residential neighbourhoods might be good treatment but the risks to residents are too great	.022	-.039	-.763	-.037	.093	.143
Social restrict HE09_19	It is frightening to think of people with psychological problems living in residential Neighbourhoods	.330	.000	-.657	.073	.247	.036
Social restrict HE09_20	Locating mental health facilities in a residential area downgrades the neighbourhood	-.091	.318	-.620	-.060	-.263	.002
Social restrict HE09_17	Mental health facilities should be kept out of residential neighbourhoods	.312	-.247	-.564	-.042	-.086	-.231
Community HE09_15R	People with psychological problems are far less of a danger than most people suppose	.078	-.166	.057	.853	.170	.052
Social restrict HE09_16R	The best treatment for many people with psychological problems is to be part of a normal Community	.158	.143	.170	.570	-.209	-.076
Community HE09_14R	No one has the right to exclude people with psychological problems from their neighbourhood	-.129	.235	-.064	.560	-.069	.172
Benevolence HE09_7R	Our mental hospitals seem more like prisons than like places where patients can be cared for	.003	.407	.006	-.135	.769	.087

Benevolence HE09_9	People with psychological problems don't deserve our sympathy	.291	.320	.027	-.115	-.530	.277
Authoritarianism HE09_2	As soon as a person shows signs of psychological disturbance, he should be hospitalized	.245	.082	.065	.097	.076	.673
Authoritarianism HE09_3	People with psychological problems need the same kind of control and discipline as a young child	-.033	-.162	-.234	.048	-.137	.600
Benevolence HE09_8R	We (society) have a responsibility to provide the best possible care for people with psychological problems	-.039	.103	-.208	.399	-.105	-.401

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

a. Rotation converged in 13 iterations.

Appendix 7 - List of items selected and unselected for the CAMI the current study

(Please see Chapter 5 on selection criteria and Chapter 6 for CFA analysis of the scale)

Factor	Deleted Items	Selected Items
Authoritarianism	HE09_1 One of the main causes of psychological problems is a lack of self-discipline and will power	
	HE09_2 As soon as a person shows signs of psychological disturbance, he should be hospitalized	None
	HE09_3 People with psychological problems need the same kind of control and discipline as a young child	None
	HE09_4R Mental illness is an illness like any other	
	HE09_5R Virtually anyone can suffer from psychological problems	
	HE09_6R More tax (government) money should be spent on the care and treatment for mental health	HE09_9 People with psychological problems don't deserve our sympathy
Benevolence	HE09_7R Our mental hospitals seem more like prisons than like places where patients can be cared for	HE09_10 It is best to avoid anyone who has psychological problems
	HE09_8R We (society) have a responsibility to provide the best possible care for people with psychological problems	
	HE09_14R No one has the right to exclude people with psychological problems from their neighbourhood	HE09_11 People with psychological problems should be isolated from the rest of the community
	HE09_15R People with psychological problems are far less of a danger than most people suppose	HE09_12 A person would be foolish (not wise) to marry a man who has suffered from psychological problems, even though he seems fully recovered
Community	HE09_16R The best treatment for many people with psychological problems is to be part of a normal Community	HE09_13 I would not want to live next door to someone who has been suffering from psychological problems
	HE09_20 Locating mental health facilities in a residential area downgrades the neighbourhood	HE09_17 Mental health facilities should be kept out of residential neighbourhoods
		HE09_18 Having people with psychological problems living within residential neighborhoods might be good treatment but the risks to residents are too great
Social Restrict		HE09_19 It is frightening to think of people with psychological problems living in residential Neighbourhoods

Appendix 8 – Original OSPH Scale and Items Selected for the Current Study

No.	Sub-scale	Item	Current Study Item #
1	Confidence	Although there are clinics for people with mental troubles, I would not have much faith in them.	
2	Confidence	If a good friend asked my advice about a psychological problem, I might recommend that he see a psychiatrist	HE10_1R
3	Tolerance	I would feel uneasy going to a psychiatrist because of what some people would think	HE10_2
4	Recognition	A person with a strong character can get over psychological conflicts (problems) by himself, and would have little need of a psychiatrist	HE10_3
5	Recognition	There are times when I have felt completely lost and would have welcomed professional advice for a personal or emotional problem	HE10_4R
6	Recognition	Considering the time and expense involved in psychotherapy, it would have doubtful value for a person like me	HE10_5
7	Interpersonal	I would willingly confide intimate matters to an appropriate person if I thought it might help me or a member of my family	HE10_6R
8	Confidence	I would rather live with certain psychological conflicts than go through the ordeal of getting psychiatric treatment	HE10_7
9	Recognition	Emotional difficulties, like many things, tend to work out by themselves.	HE10_8
10	Interpersonal	There are certain problems which should not be discussed outside of one's immediate family	HE10_9
11	Confidence	A person with a serious emotional disturbance would probably feel most secure in a good mental hospital.	
12	Confidence	If I believe I was having a mental breakdown (psychological problems), my first inclination would be to get professional attention	HE10_10R
13	Interpersonal	Keeping one's mind on a job is a good solution for avoiding personal worries and concerns	HE10_11
14	Tolerance	Having been a psychiatric patient is a problem for a person's life	HE10_12
15	Confidence	I would rather be advised by a close friend than by a psychologist, even for emotional Problems	HE10_13
16	Confidence	A person with an emotional problem is not likely to solve it alone; he <i>is</i> likely to solve it with professional help.	
17	Interpersonal	I resent a person- professionally trained or not- who wants to know about my personal difficulties.	
18	Recognition	I would want to get psychiatric attention if I was worried or upset for a long period of time.	
19	Confidence	The idea of talking about problems with a psychologist strikes me as a poor way to get rid of emotional conflicts.	
20	Tolerance	Being mentally ill carries with it a burden of shame	HE10_14
21	Interpersonal	There are experiences in my life I would not discuss with anyone	HE10_15
22	Interpersonal	It is probably best not to know <i>everything</i> about oneself.	
23	Confidence	If I were experiencing a serious emotional crisis at this point in my life, I would be confident that I could find relief in psychotherapy.	
24	Recognition	There is something admirable in the attitude of a person who is willing to cope with his conflicts and fears <i>without</i> resorting to	
25	Recognition	At some future time I might want to have psychological counselling.	
26	Recognition	A person should work out his own problems; getting psychological counselling would be a last resort.	
27	Tolerance	Had people received treatment in a mental hospital, they ought not to feel that they have to cover this up	HE10_16R
28	Tolerance	If I thought I needed psychiatric help, I would get it no matter who knew about it.	
29	Interpersonal	It is difficult to talk about personal affairs with highly educated people such as doctors, teachers, and clergymen.	

Appendix 9 – Normal Distribution for the OSPH Scale

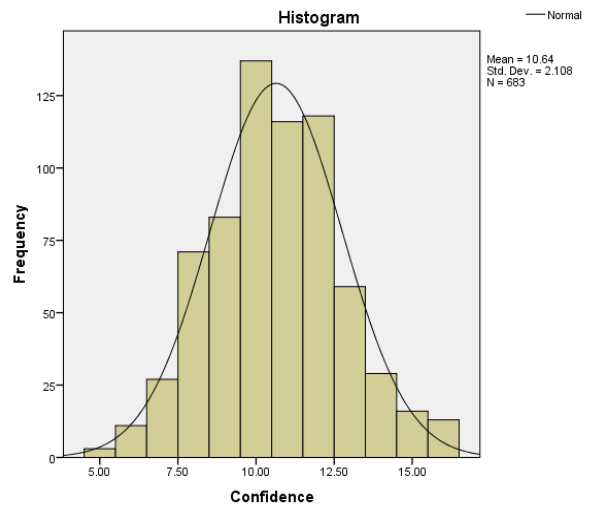
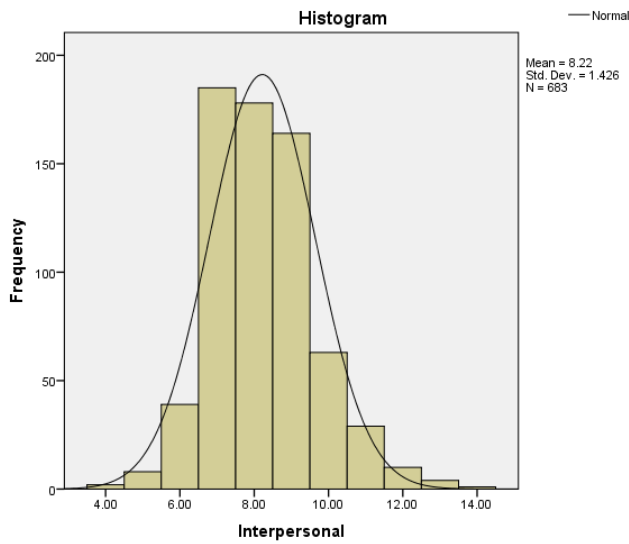
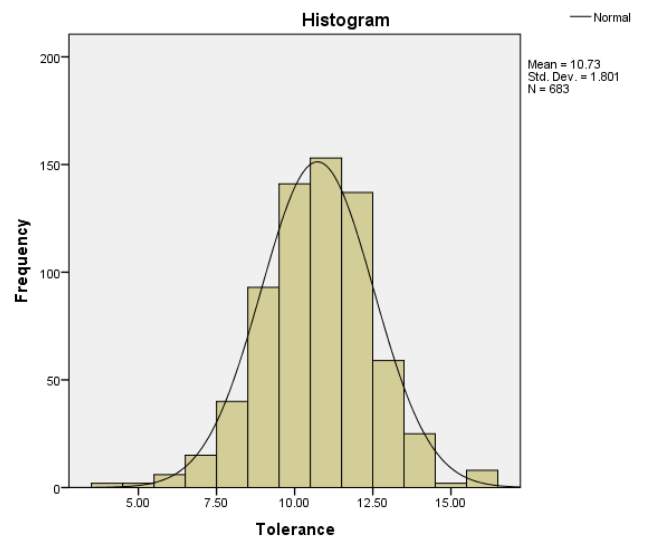
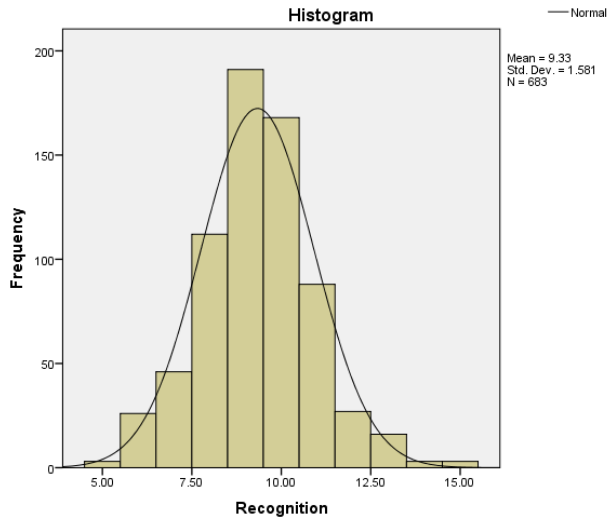
Tests of Normality OSPH						
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Recognition	.143	683	.000	.958	683	.000
Tolerance	.122	683	.000	.966	683	.000
Interpersonal	.164	683	.000	.938	683	.000
Confidence	.106	683	.000	.977	683	.000

a. Lilliefors Significance Correction

Test of Skewness – Rule of Thumb (Field, 2013; Pallant, 2013; Rose et al., 2014; Howell, 2016)

Sub-scale	Skewness	Std. Error	Skew/Std. Error	Normally Distributed?
Recognition	0.09	0.06	1.55	Yes
Tolerance	0.09	0.07	1.36	Yes
Interpersonal	0.09	0.05	1.71	Yes
Confidence	0.09	0.08	1.16	Yes

Appendix 10 – Normal Distribution for the OSPH Sub-Scales Illustrated by Histograms



Appendix 11 – Item Analysis for the OSPH Scale

Opinions about Seeking Psychological Help (%)				
	1	2	3	4
Confidence	<i>in the mental health professional</i>			
HE10_1R	2.6	21.5	51.8	24.0
HE10_7	11.0	40.0	36.5	12.6
HE10_10R	2.3	20.8	54.3	22.5
HE10_13	4.7	27.5	51.4	16.4
Tolerance	<i>of the stigma associated with psychological help</i>			
HE10_2	8.8	43.5	35.7	12.0
HE10_12	8.9	39.5	33.2	18.3
HE10_14	25.5	53.7	15.7	5.1
HE10_16R	5.7	21.1	55.5	17.7
Recognition	<i>of the need to seek professional psychological help</i>			
HE10_3	2.8	15.7	51.4	30.2
HE10_4R	4.0	28.3	51.7	16.1
HE10_5	10.4	56.1	27.7	5.9
HE10_8	2.0	14.6	55.9	27.4
Interpersonal	<i>openness regarding one's problems</i>			
HE10_6R	1.6	17.6	56.5	24.3
HE10_9	.7	6.0	37.3	55.9
HE10_11	1.8	9.4	60.6	28.3
HE10_15	3.4	13.3	45.2	38.1

Appendix 12 – Factor Analysis for the OSPH Scale

		Pattern Matrix			
Item Number	Item	Component			
		1	2	3	4
Interpersonal HE10_9	There are certain problems which should not be discussed outside of one's immediate family	.669	-.060	-.149	.011
Recognition HE10_8	Emotional difficulties, like many things, tend to work out by themselves	.639	.058	-.042	.101
Interpersonal HE10_6R	I would willingly confide intimate matters to an appropriate person if I thought it might help me or a member of my family	-.597	.078	-.003	-.026
Recognition HE10_3	A person with a strong character can get over psychological conflicts (problems) by himself, and would have little need of a psychiatrist	.589	.006	.106	-.066
Interpersonal HE10_15	There are experiences in my life I would not discuss with anyone	.585	.139	-.148	-.258
Interpersonal HE10_11	Keeping one's mind on a job is a good solution for avoiding personal worries and concerns	.522	-.301	.047	.066
Confidence HE10_13	I would rather be advised by a close friend than by a psychologist, even for emotional Problems	.459	.243	.317	-.177
Confidence HE10_1R	If a good friend asked my advice about a psychological problem, I might recommend that he see a psychiatrist	-.012	.753	-.096	-.005
Confidence HE10_10R	If I believe I was having a mental breakdown (psychological problems), my first inclination would be to get professional attention	-.033	.751	-.046	.183
Recognition HE10_4R	There are times when I have felt completely lost and would have welcomed professional advice for a personal or emotional problem	-.166	.633	-.019	-.238
Confidence HE10_7	I would rather live with certain psychological conflicts than go through the ordeal of getting psychiatric treatment	.234	.487	.362	.166
Recognition HE10_5	Considering the time and expense involved in psychotherapy, it would have doubtful value for a person like me	.089	.367	.238	.117
Tolerance HE10_12	Having been a psychiatric patient is a problem for a person's life	.009	-.387	.726	-.177
Tolerance HE10_14	Being mentally ill carries with it a burden of shame	-.268	.123	.670	-.030
Tolerance HE10_2	I would feel uneasy going to a psychiatrist because of what some people would think	.167	.216	.479	.314
Tolerance HE10_16R	Had people received treatment in a mental hospital, they ought not to feel that they have to cover this up	-.124	.012	-.123	.859

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization. a. Rotation converged in 12 iterations.

Appendix 13 - List of items selected and unselected for the OSPH the current study

(Please see Chapter 5 on selection criteria and Chapter 7 for CFA analysis of the scale)

Factor	Deleted Items	Selected Items
Recognition	HE10_4R There are times when I have felt completely lost and would have welcomed professional advice for a personal or emotional problem	HE10_3 A person with a strong character can get over psychological conflicts (problems) by himself, and would have little need of a psychiatrist
	HE10_5 Considering the time and expense involved in psychotherapy, it would have doubtful value for a person like me	HE10_8 Emotional difficulties, like many things, tend to work out by themselves
Tolerance	HE10_12 Having been a psychiatric patient is a problem for a person's life	HE10_2 I would feel uneasy going to a psychiatrist because of what some people would think
	HE10_16R Had people received treatment in a mental hospital, they ought not to feel that they have to cover this up	HE10_14 Being mentally ill carries with it a burden of shame
	HE10_6R I would willingly confide intimate matters to an appropriate person if I thought it might help me or a member of my family	HE10_9 There are certain problems which should not be discussed outside of one's immediate family
Interpersonal	HE10_11 Keeping one's mind on a job is a good solution for avoiding personal worries and concerns	HE10_15 There are experiences in my life I would not discuss with anyone
	HE10_1R If a good friend asked my advice about a psychological problem, I might recommend that he see a psychiatrist	HE10_7 I would rather live with certain psychological conflicts than go through the ordeal of getting psychiatric treatment
Confidence	HE10_13 I would rather be advised by a close friend than by a psychologist, even for emotional Problems	HE10_10R If I believe I was having a mental breakdown (psychological problems), my first inclination would be to get professional attention

Appendix 14 – Original CS Scale and Items Selected for the Current Study

No.	Sub-scale	Item	Current Study Item #	Current Study Statement
C1	Collaborative	When it comes to deciding how to solve a problem God and I work together as partners.	PE04_1R	When it comes to deciding how to solve a problem, I work together with others I am close to as partners
C2	Collaborative	When considering a difficult situation, God and I work together to think of possible solutions.	PE04_4R	When considering a difficult situation, I work together with others; I am close to, to think of possible solutions
C3	Collaborative	Together, God and I put my plans into action.	PE04_2R	Together, with others, I am close to, I put my plans into action
C4	Collaborative	When I feel nervous or anxious about a problem, work together with God to find a way to relieve my worries.	PE04_11R	When I feel nervous or anxious about a problem, I work together with others, who I am close to, to find a way to relieve my worries
C5	Collaborative	The Lord works with me to help me see a number of different ways that a problem can be solved.		
C6	Collaborative	After solving a problem, I work with God to make sense of it.		
C7	Collaborative	When I have a problem, I talk to God about it and together we decide what it means.		
C8	Collaborative	In carrying out solutions, I work hard at them knowing God is working right along with me.		
C9	Collaborative	When faced with a question, I work together with God to figure it out.		
C10	Collaborative	God and I talk together and decide upon the best answer to my question.		
C11	Collaborative	When a hard time has passed, God works with me to help me learn from it.		

C12	Collaborative	When I'm upset, I try to soothe myself, and also share the unpleasantness with God so He can comfort me.		
SD1	Self-Directing	After I've gone through a rough time, I try to make sense of it without relying on God.		
SD2	Self-Directing	When I have difficulty, I decide what it means by myself without help from God.		
SD3	Self-Directing	When a difficult period is over, I make sense of what happened on my own without involvement from God		
SD 4	Self-Directing	When faced with trouble, I deal with my feelings without God's help.	PE04_7R	When faced with trouble, I deal with my feelings without anyone or anything's help
SD 5	Self-Directing	When deciding on a solution, I make a choice independent of God's input.	PE04_5R	When deciding on a solution, I make a choice independent of anyone or anything's input
SD 6	Self-Directing	When I feel nervous or anxious, I calm myself without relying on God.		
SD 7	Self-Directing	When thinking about a difficulty, I try to come up with possible solutions without God's help.	PE04_8R	When thinking about a difficulty, I try to come up with possible solutions without anyone or anything's help
SD 8	Self-Directing	When faced with a decision, I make the best choice I can without God's involvement.		
SD 9	Self-Directing	When I am trying to come up with different solutions to troubles I am facing, I do not get them from God but think of them myself.		
SD 10	Self-Directing	I act to solve my problems without God's help.	PE04_6R	I act to solve my problems without anyone or anything's help
SD 11	Self-Directing	God doesn't put solutions to my problems into action, I carry them out myself.		
SD 12	Self-Directing	When I run into a difficult situation, I make sense out of it on my own without divine assistance.		

D1	Deferring	Rather than trying to come up with the right solution to a problem myself, I let God decide how to deal with it.	PE04_9R	Rather than trying to come up with the right solution to a problem by myself, I let others I am close to, decide how to deal with it
D2	Deferring	In carrying out solutions to my problems, I wait for God to take control and know somehow He'll work it out.	PE04_10R	In carrying out solutions to my problems, I wait for others, I am close to, to take control and I know somehow they'll work it out
D3	Deferring	I do not think about different solutions to my problems because God provides them for me.	PE04_12R	I do not think about different solutions to my problems because others I am close to provide them for me
D4	Deferring	When a troublesome issue arises, I leave it up to God to decide what it means for me.		
D5	Deferring	When a situation makes me anxious, I wait for God to take those feelings away.	PE04_3R	When a situation makes me anxious, I wait for others I am close to, to take those feelings away
D6	Deferring	When faced with a decision, I wait for God to make the best choice for me.		
D7	Deferring	I don't spend much time thinking about troubles I've had; God makes sense of them for me.		
D8	Deferring	When I have a problem I try not to think about it and wait for God to tell me what it means.		
D9	Deferring	I do not become upset or nervous because God solves my problems for me.		
D10	Deferring	When I run into trouble, I simply trust in God knowing that he will show me the possible solutions.		
D11	Deferring	I don't worry too much about learning from difficult situations, since God will make me grow in the right direction.		
D12	Deferring	God solves problems for me without my doing anything		
S1	Surrender	When I first try to make sense of a problem, I put God's understanding above my own.		

S2	Surrender	When my understanding of a problem conflicts with God's revelation, I will submit to God's definitions.		
S3	Surrender	When my solutions to problems are in conflict with God's alternatives, I will submit to God's way	PE04_16R	When deciding how to solve a problem, (say a prayer) I seek spiritual guidance
S4	Surrender	Although certain options to problems may seem more desirable, I will give them up if God directs me to do so.		
S5	Surrender	I will follow God's solution to a problem regardless of what that action may bring.	PE04_14R	In carrying out solutions to my problems, I wait for spiritual guidance (say a prayer) to take control to work out this problem
S6	Surrender	I will select God's solution to a problem even if it requires self-sacrifice from me.		
S7	Surrender	Although I may not see results from my labour, I will continue to implement God's plans as long as God directs me to do so.		
S8	Surrender	Even though I may not fully understand God's solution to a problem, I will carry out God's solution as God directs me to.		
S9	Surrender	When I think about the troubles I've had, I can give thanks for God's using them for God's purposes.		
S10	Surrender	I seek meaning in my difficulties by surrendering to God's guidance.	PE04_13R	When thinking about a difficulty, spirituality guides me to possible solutions (say a prayer)
S11	Surrender	I choose to be strong in the Lord, even when it means giving up being strong in myself.		
S12	Surrender	When I am in distress, my hope is renewed when I act in accordance to God's directions.	PE04_15R	When I feel troubled or anxious, I seek spiritual guidance (say a prayer) to help me deal with my feelings

Appendix 15 – Normal Distribution for the CS Scale

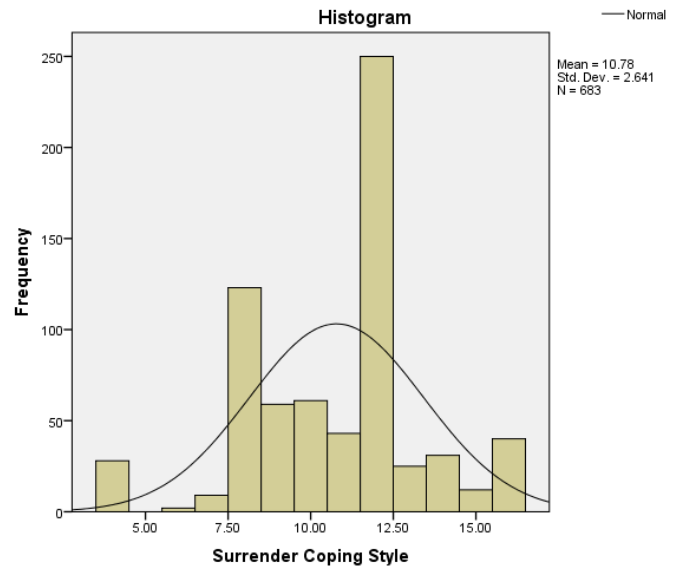
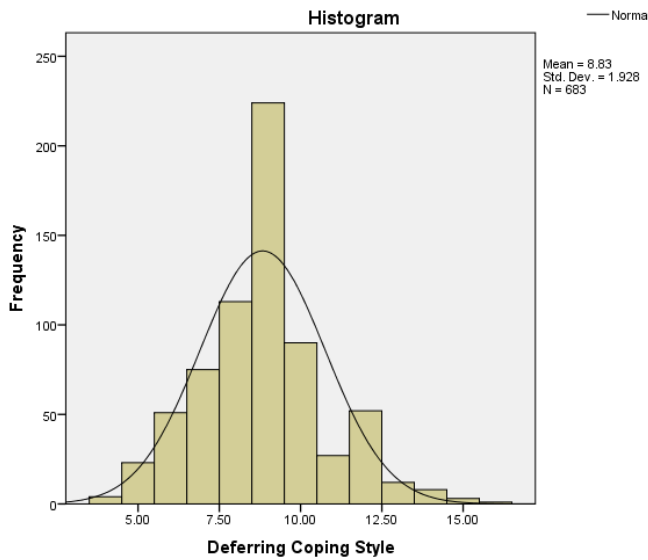
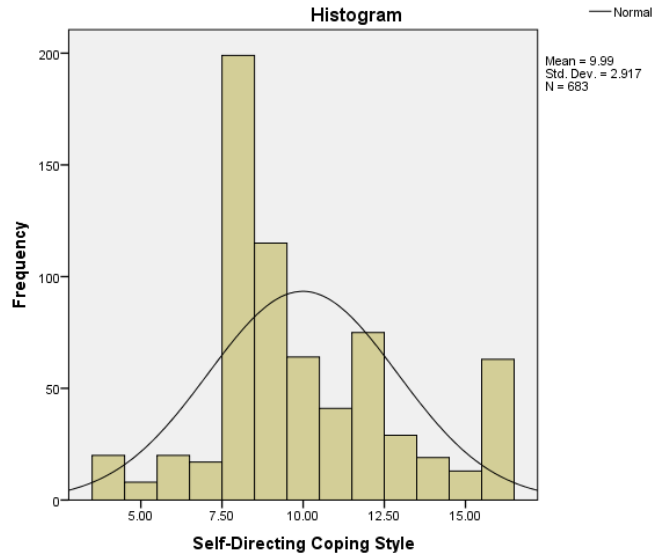
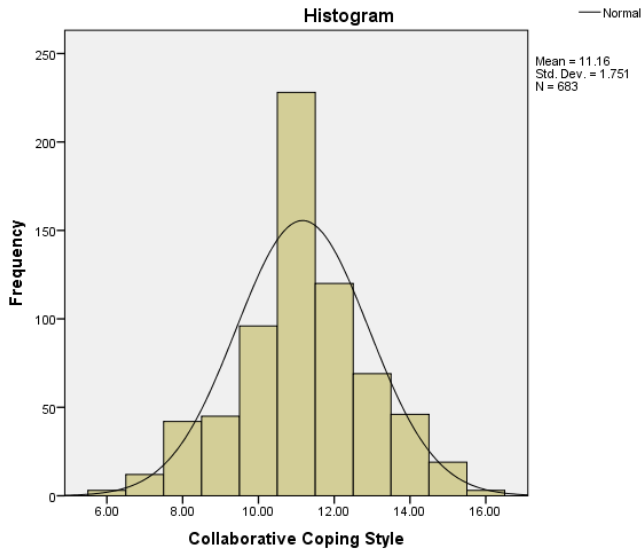
	Tests of Normality CS					
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Collaborative Coping Style	.173	683	.000	.959	683	.000
Self-Directing Coping Style	.188	683	.000	.916	683	.000
Deferring Coping Style	.183	683	.000	.954	683	.000
Surrender Coping Style	.202	683	.000	.928	683	.000

a. Lilliefors Significance Correction

Test of Skewness – Rule of Thumb (Field, 2013; Pallant, 2013; Rose et al., 2014; Howell, 2016)

Sub-scale	Skewness	Std. Error	Skew/Std. Error	Normally Distributed?
Collaborative Coping Style	0.09	0.07	1.40	Yes
Self-Directing Coping Style	0.09	0.11	0.84	Yes
Deferring Coping Style	0.09	0.07	1.27	Yes
Surrender Coping Style	0.09	0.10	0.93	Yes

Appendix 16 – Normal Distribution for the CS Sub-Scales Illustrated by Histograms



Appendix 17 – Item Analysis for the CS Scale

	Coping Styles (%)			
	1	2	3	4
Collaborative	<i>Coping using self-help and the help of other people</i>			
PE04_1R	.3	13.0	60.0	26.6
PE04_2R	.7	21.8	56.8	20.6
PE04_4R	.7	12.9	65.3	21.1
PE04_11R	2.0	17.3	58.6	22.1
Deferring	<i>Coping with the sole reliance on other people</i>			
PE04_3R	1.3	17.6	60.8	20.4
PE04_9R	22.7	62.7	13.0	1.6
PE04_10R	24.3	59.3	14.1	2.3
PE04_12R	24.3	58.6	14.9	2.2
Self-directing	<i>Coping using the help of self without other people</i>			
PE04_5R	5.1	39.8	31.3	23.7
PE04_6R	7.3	59.6	19.3	13.8
PE04_7R	7.6	54.2	24.3	13.9
PE04_8R	7.8	55.9	23.6	12.7
Surrender	<i>Collaboration between the individual and God to actively cope and solve the problem</i>			
PE04_13R	5.0	25.8	53.0	16.3
PE04_14R	6.9	39.5	44.1	9.5
PE04_15R	4.7	28.3	53.0	14.1
PE04_16R	6.0	33.7	49.6	10.7

Appendix 18 – Factor Analysis for the CS Scale

Pattern Matrix

Item Number	Item	Component			
		1	2	3	4
Self-Directing PE04_8R	When thinking about a difficulty, I try to come up with possible solutions without anyone or anything's help	.900	.047	-.006	.018
Self-Directing PE04_7R	When faced with trouble, I deal with my feelings without anyone or anything's help	.893	.024	-.022	-.020
Self-Directing PE04_6R	I act to solve my problems without anyone or anything's help	.877	.043	.049	-.053
Self-Directing PE04_5R	When deciding on a solution, I make a choice independent of anyone or anything's input	.819	-.074	-.021	.014
Deferring PE04_10R	In carrying out solutions to my problems, I wait for others, I am close to, to take control and I know somehow they'll work it out	.024	.914	.026	.039
Collaborative PE04_11R	When I feel nervous or anxious about a problem, I work together with others, who I am close to, to find a way to relieve my worries	.021	.879	.001	.012
Deferring PE04_9R	Rather than trying to come up with the right solution to a problem by myself, I let others I am close to, decide how to deal with it	.045	.867	.003	.023
Deferring PE04_12R	I do not think about different solutions to my problems because others I am close to provide them for me	-.060	.835	-.043	-.056
Surrender PE04_15R	When I feel troubled or anxious, I seek spiritual guidance (say a prayer) to help me deal with my feelings	.056	-.117	-.909	.037
Surrender PE04_16R	When deciding how to solve a problem, (say a prayer) I seek spiritual guidance	.051	.022	-.877	.019
Surrender PE04_13R	When thinking about a difficulty, spirituality guides me to possible solutions (say a prayer)	-.044	.005	-.860	.005
Surrender PE04_14R	In carrying out solutions to my problems, I wait for spiritual guidance (say a prayer) to take control to work out this problem	-.055	.109	-.854	-.062
Collaborative PE04_4R	When considering a difficult situation, I work together with others; I am close to, to think of possible solutions	.038	-.053	-.025	.898
Collaborative PE04_1R	When it comes to deciding how to solve a problem, I work together with others I am close to as partners	-.016	-.019	.001	.824

Deferring PE04_3R	When a situation makes me anxious, I wait for others I am close to, to take those feelings away	-.023	.042	.008	.823
Collaborative PE04_2R	Together, with others, I am close to, I put my plans into action	-.025	.045	.014	.774

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

a. Rotation converged in 8 iterations.

Appendix 19 - List of items selected and unselected for the CS the current study

(Please see Chapter 5 on selection criteria and Chapter 8 for CFA analysis of the scale)

Factor	Deleted Items	Selected Items
Self-directing	PE04_11R When I feel nervous or anxious about a problem, I work together with others, who I am close to, to find a way to relieve my worries	PE04_5R When deciding on a solution, I make a choice independent of anyone or anything's input
	PE04_3R When a situation makes me anxious, I wait for others I am close to, to take those feelings away	PE04_6R I act to solve my problems without anyone or anything's help
	PE04_9R Rather than trying to come up with the right solution to a problem by myself, I let others I am close to, decide how to deal with it	PE04_7R When faced with trouble, I deal with my feelings without anyone or anything's help
	PE04_10R In carrying out solutions to my problems, I wait for others, I am close to, to take control and I know somehow they'll work it out	PE04_8R When thinking about a difficulty, I try to come up with possible solutions without anyone or anything's help
Collaborative	PE04_12R I do not think about different solutions to my problems because others I am close to provide them for me	PE04_1R When it comes to deciding how to solve a problem, I work together with others I am close to as partners
		PE04_2R Together, with others, I am close to, I put my plans into action
Surrender		PE04_4R When considering a difficult situation, I work together with others; I am close to, to think of possible solutions
		PE04_13R When thinking about a difficulty, spirituality guides me to possible solutions (say a prayer)
		PE04_14R In carrying out solutions to my problems, I wait for spiritual guidance (say a prayer) to take control to work out this problem
		PE04_15R When I feel troubled or anxious, I seek spiritual guidance (say a prayer) to help me deal with my feelings
		PE04_16R When deciding how to solve a problem, (say a prayer) I seek spiritual guidance
	Deferring	

Appendix 20 - Correlations between Scores of Sub-Scales Explored in the Path Analysis Models

Scale Name	Community				Self-				Wellbeing	Scale		
	Sub-Factors	Benevolence	Mental Health Ideology	Social Restrictiveness	Recognition	Tolerance	Confidence	Interpersonal			Directing Coping Style	Collaborative Coping Style
Benevolence	-	-	-	-	-	-	-	-	-	-	-	2-10
Community Attitudes towards Mental Illness												
Community Mental Health Ideology		.573**	-	-	-	-	-	-	-	-	-	3-15
Social Restrictiveness		.289**	.417**	-	-	-	-	-	-	-	-	3-15
Recognition		.018	-.038	.031	-	-	-	-	-	-	-	2-8
Tolerance		.190**	.239**	.176**	.088*	-	-	-	-	-	-	2-8
Confidence		.039	.132**	.156**	.110**	.392**	-	-	-	-	-	2-8
Interpersonal		.585**	.325**	.111**	-.102**	.208**	.082*	-	-	-	-	2-8
Self-Directing Coping Style												
Self-Directing Coping Style		-.027	-.057	-.014	-.041	.071	.039	.018	-	-	-	4-16
Collaborative Coping Style												
Collaborative Coping Style		-.047	-.013	-.098*	-.211**	-.019	.088*	.049	-.445**	-	-	3-12
Surrender Coping Style												
Surrender Coping Style		-.118**	-.106**	-.104**	-.037	-.021	-.009	.024	.009	.056	-	4-16
Self-Reporting Questionnaire - 20												
Self-Reporting Questionnaire - 20		-.019	.027	-.048	-.110**	-.169**	-.196**	-.011	-.039	.079*	-.103**	0-20
Social Help Seek												
Social Help Seek		-.108**	-.068	-.029	-.045	-.002	-.021	-.025	-.117**	.249**	.050	3-9

Appendix 21 - Correlations for Male and Female Participants

(Note: Grey Shading for Male participants)

Scale Name	Sub-Factors	Benevolence	Community Mental Health Ideology	Social Restrictiveness	Recognition	Tolerance	Confidence	Interpersonal	Self-Directing Coping Style	Collaborative Coping Style	Surrender Coping Style	Wellbeing	Social Support	Scale
	Benevolence	–	.562**	.329**	.004	.180**	.004	.560**	-.081	-.025	-.176**	-.052	-.194**	2-10
Community Attitudes towards Mental Illness	Community Mental Health Ideology	.584**	–	.439**	-.049	.241**	.099	.246**	-.100	.030	-.063	-.027	-.163**	3-15
	Social Restrictiveness	.253**	.396**	–	-.001	.210**	.146**	.117*	-.007	-.086	-.107	-.089	-.093	3-15
	Recognition	.029	-.028	.062	–	.018	.096	-.114*	.018	-.212**	-.055	-.042	-.057	2-8
Opinions on Seeking Professional Help	Tolerance	.195**	.237**	.143**	.150**	–	.340**	.212**	.117*	-.040	-.060	-.196**	-.045	2-8
	Confidence	.071	.166**	.165**	.121*	.440**	–	.098	.068	.159**	.011	-.278**	-.004	2-8
	Interpersonal	.608**	.397**	.106*	-.083	.201**	.064	–	-.037	.037	-.019	.029	-.068	2-8
	Self-Directing Coping Style	.026	-.018	-.031	-.086	.027	.029	.079	–	-.489**	-.042	-.034	.001	4-16
	Collaborative Coping Style	-.073	-.053	-.117*	-.212**	-.006	.013	.047	-.384**	–	.072	.080	.121*	3-12
	Surrender Coping Style	-.070	-.150**	-.099	-.018	.012	-.039	.059	.082	.017	–	-.028	-.015	4-16
Self-Reporting Questionnaire - 20	Wellbeing	.018	.072	.002	-.161**	-.134*	-.114*	-.037	-.082	.119*	-.144**	–	.201**	0-20
Social Help Seek	Social Support	-.074	.002	.033	-.068	.025	-.060	-.027	-.161**	.312**	.026	.130*	–	3-9

Appendix 22 - List of Significant Pathways

Model	Sample	Benevolence	Community	Tolerance	Confidence	Social	Restrict	Interpersonal	Social_HelpSeek	Wellbeing	Surrender	Self-Directing	Surrender	Wellbeing
Model 1	All	X	X		X									
	Male	X	X		X			X						
	Female	X	X		X			X						
	Gender Differences													
Model 2	All	X	X		X									
	Male	X	X		X			X						
	Female	X	X		X			X						
	Gender Differences													
Model 3	All	X	X		X				X					
	Male	X	X	X	X				X					
	Female	X	X		X			X						
	Gender Differences													
Model 4	All	X	X		X				X					
	Male	X	X	X	X				X					
	Female	X	X	X	X			X						
	Gender Differences													
Model 5	All	X	X		X					X				
	Male	X	X	X	X					X				
	Female	X	X		X			X		X				
	Gender Differences													
Model 6	All	X	X		X					X				
	Male	X	X	X	X					X				
	Female	X	X		X			X		X				
	Gender Differences													
Model 7	All	X	X		X				X					X
	Male	X	X	X	X				X					X
	Female	X	X		X			X		X				X
	Gender Differences													
Model 8	All	X	X		X				X					X
	Male	X	X	X	X				X					X
	Female	X	X		X			X		X				X
	Gender Differences													

Key: X = Significant ($p \leq .05$); Shaded box = Variable included in the model

	<p>descriptions of horrific scenes they witnessed of their family members after shelling or bombardment. Some of these descriptions still ring in my mind to date.</p> <p>In short, the Syrian war is reaching a point of no return, with long-term consequences for Syria and the region as a whole, including the risk of a 'lost generation' of Syrian children. It is really a catastrophe. There is too much suffering and you can really see it in people's eyes. They suffer. People need help, we need help.</p>	<p>Effects of the war</p>
<p>Common mental health problems treated</p>	<p>Some of the most common mental health problems I noticed were symptoms of anxiety, sadness, hyper-vigilance, social withdrawal, relationship problems and flashbacks of recent trauma on others. Some would qualify for diagnoses of mental health disorders i.e. PTSD, severe depression but most cases I came across were of varying degree of adjustment disorders.</p>	<p>Effects of the war – mental illness symptoms</p>
<p>Attitudes towards mental illness</p>	<p>Stigma of mental illness in the Syrian society is very high which means delays in assessments and often hinder follow up for those who found the courage to be seen in the first instance.</p>	<p>Attitudes on mental illness – stigma – barrier to help seeking</p>
<p>Differences in attitudes within the community</p>	<p>Lots of people do understand that things happen for a reason and the situation they are in is due to God's way and a lot of people do understand that mental distress is a consequence of the war. People understand mental illness in different ways. But really Syrian people can use religious</p>	<p>Understanding illness</p> <p>Conceptualising mental illness</p> <p>Cultural understandings</p>

	belief to understand their situation but this is separate to the effects on their mental wellbeing.	Role of religion – religious belief models
Attitudes toward professional psychological help seeking	There are lots of pressures on medical teams helping Syrians in refugee camps because they see people for all sorts of problems including mental illness. Here we see that there is so much need for capacity building training and support for primary care providers to manage people who present with mental problems.	Capacity to treat mental illness Capacity building Barrier?
Barriers to professional psychological help seeking	Attending to mental health needs in this part of the world is neglected and is below standards at the best of times let alone at times of huge crisis like this. Many humanitarian agencies start arriving with varying degrees of enthusiasm to try to address some of the mental health needs of refugees. The more agencies arrived the less coordination happened between them. The fact that these agencies have different priorities when it comes to dealing with mental health problems and having different terms of references meant lots of valuable efforts being wasted. This is partly due to lack of coordination and often non-existence patients' information sharing. Some agencies would rely mainly on local recruits and volunteers who did not have enough experience and skills to deal with the type of mental health problems at war time. Little outreach work is done as there is reliance in people coming forward to seek help which means large number of needy people can be missed.	Barrier to seeking help INGOs – barriers for services provided Quality of services

	<p>There is a need for better co-ordination among aid agencies to better orchestrate their efforts in meeting the mental health needs of these refugees. Many agencies work in same towns and camps which is not always necessary and could mean duplications. Moving branches to different sites and areas and developing community teams will help uncover the real mental health needs of people. This can encourage other sufferers to come forward when they realise help is available.</p> <p>Training teams and volunteers on encouraging and highlighting the importance of self-help, problem solving and the role of affected individuals in dealing with their conditions. Patients/affected persons' role is vital in all cases and it becomes more important where there is lack of resources.</p> <p>Ensuring workers and volunteers are well supported and supervised is important to reduce occurrence of burn out. More psychiatrists, psychologists and trained mental health nurses are needed to achieve this task.</p> <p>Another problem which I mentioned is stigma. When someone goes for psychological help it casts shame on the patients and their family amongst the community and ultimately affects people's decision to seek help or adhere to prescribed treatment. This is really a problem we</p>	<p>Co-ordination</p> <p>Access to services</p> <p>Capacity building</p> <p>Helping the helpers</p> <p>Capacity building</p> <p>Attitudes towards mental illness</p> <p>Stigma</p> <p>Cultural beliefs</p> <p>Stigma</p>
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	are having to deal with in our practice when it comes especially to rape victims. In our culture there are grave concerns about matters of family honour due to out of marital sexual intercourse.	Family – social influences – alternative help
Culture-specific help seeking and Syrian coping styles	<p>Syrians are coming across mental health care that is dominated by Western practices. This can be problematic sometimes for people and they feel this discredits their cultural or religious or social practices or values they hold. For some it is a reality and it becomes a choice of values for them than a source of help.</p> <p>Children who found family support and got support at school are generally recovering well and manage to get on with things. It is not all doom and gloom I think generally people do support each other especially in large families and communities and this element needs highlighting and encouraging.</p>	<p>Attitudes towards mental illness</p> <p>Alternative viewpoints – culture</p> <p>Social support related to Syrian culture</p>
Gender differences in help seeking	<p>There are a few important issues to consider when we discuss gender. This is a long topic but mainly disclosing personal information can be a problem especially if the information is being expressed to a male psychologist.</p> <p>I have no doubt that so many severe cases of mental health problems in these communities suffer in silence for reasons of stigma or fear of their social image.</p> <p>The needs of people here vary widely from the most basic but necessary and sometime hard to get i.e. food, shelter and safety to most severe</p>	<p>Gender issues</p> <p>Barrier to seeking help</p> <p>Male-female differences</p> <p>Stigma</p> <p>Cultural barriers</p> <p>Needs of refugees</p>

	end of spectrum of complicated grief reactions, sever PTSD and Depression in some. Most agencies were focusing more, understandably at least in the beginning, on meeting the basic needs.	Symptoms Effects of the war
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Appendix 24 - An Example of Coding Sub-themes into an Overarching Theme

Participant No.	Exert	Theme
Participant 1	<p>We have many patients that are facing complicated grief because they have lost so much and too many people. While helping them grieve their loss they receive news that their brother got arrested or their cousin was shot or their neighbour was killed in a bombing...it is hard to treat grief when loss is ongoing and until when no one knows.</p> <p>Speech problems or mutism; symptoms of hyperactivity; constant crying and exhaustion caused by stress-induced trauma, grief and mourning; and somatic symptoms that impair functioning; symptoms of depression and PTSD...We see all sorts of symptoms, flashbacks; sleep disorders; sexual disorders; decrease in concentration; tiredness; Anhedonia; nervousness; chest pain; boredom; delusions; hallucinations.</p>	Effects of the Conflict on Mental Health
Participant 2	<p>The worst affected cases I saw were sadly of young children who lost one or both parents and siblings and there are many of these. Some give descriptions of horrific scenes they witnessed of their family members after shelling or bombardment. Some of these descriptions still ring in my mind to date.</p> <p>In short, the Syrian war is reaching a point of no return, with long-term consequences for Syria and the region as a whole, including the risk of a 'lost generation' of Syrian children. It is really a catastrophe. There is too much suffering and you can really see it in people's eyes. They suffer. People need help, we need help.</p>	Effects of the Conflict on Mental Health

<p>Participant 3</p>	<p>Difficulties in adjusting to the new reality they found themselves has taken its toll on many. Large families living in tents and confined to places, often having to compete with other's to attend to basic needs, added more to the frustration to this usually proud people. As their stay gets longer despair and hopelessness is starting to surface with some general feelings of gloom. Many of them are facing and trying to recover from loss and grief.</p> <p>I deal with many sexual or physical abuse patients due to the type of clinics I run. Rape or sexual assault or torture is a common weapon of war and has been an important source of mental health distress for Syrian refugees and Syrians in general during this war. Survivors of war violence are children, adult men and women and even elderly and anybody in fact almost every Syrian has either been abused or knows someone who has.</p> <p>The problem is that rape is a source of stigma and touches on issues of honour in these communities like shame and pride often form as barriers to disclose survival of such events and this is a problem I face in my everyday work. For instance a woman would think twice before openly seeking support for rape (survival) because she would be scared to be the cause of dishonouring the family name or even feel guilty that she caused the abuse herself.</p>	<p>Effects of the Conflict on Mental Health</p>
<p>Participant 4</p>	<p>The worst affected cases I saw were sadly of young children who lost one or both parents and siblings and there are many of these. Some give descriptions of horrific scenes they witnessed of their family members after shelling or bombardment. Some of these descriptions still ring in my mind to date. These are particularly the abused</p>	<p>Effects of the Conflict on Mental Health</p>

	victims (women) and these problems are commonly reported in refugee camps. These experiences are a negative outcome of mental health problems.	
Participant 5	I mainly work in camps for ex-military or people who fought in the war and many of these have seen so much death and often they have been tortured. We have encountered many people who prefer not to talk about their torture for many different reasons but often they say because they feel guilty or ashamed of the things that happened to them and feel they should have not survived and some even believe that if they talk about it then they risk it happening to them again out of fear.	Effects of the Conflict on Mental Health