



Individual difference predictors of well-being among displaced persons who live under stressful conditions

Thesis submitted for the degree of

Doctor of Philosophy

At the University of Leicester

By

Izaddin Ahmad Aziz

School of Neuroscience, Psychology, and Behavior

University of Leicester

2017

The Abstract

Individual difference predictors of well-being among displaced persons who live under stressful conditions

Izaddin A. Aziz

Background

The common concern surrounding the poor level of displaced life is that it might cause harmful psychological conditions. Another concern of displacement is the impact of conflict and the ability to survive in adverse situations. The reasons for conducting this thesis were developed through the literature review, and noticing a lack of studies that assess psychological issues such as well-being, resilience, prejudice and forgiveness among Syrian refugees and Iraqi displaced persons comprehensively.

Research aims

In particular, the studies address three issues that are fundamental to understanding how the thesis is structured. The first issue is essential in examining how war has affected individuals' well-being in short and long term of life engagement of the refugees. The second issue investigates the impact of the displacement situation on prejudices and the possibility of forgiveness after conflict and violence between groups of people. The final issue involves identifying the factors that might help individuals to survive and face any potentially harmful situation.

Methods

The overall research sample includes 1,256 individuals of both genders. For collecting the data, self-report questionnaires and objective measures were used.

Results

The results show that the research samples indicated poor levels of quality of life, well-being, forgiveness and resilience. Importantly, these findings reveal the significant role played by positive relation domains of psychological well-being in improving resilience and forgiveness. The research has also shown that the psychological health domain of quality of life recorded the highest significant associations with resilience and psychological well-being. To Sum up, this thesis illustrates the importance of positive social relations, lower prejudice and greater resilience in predicting mental health states.

Declaration

For the scientific credibility, I am declaring that this thesis has been composed and organized by myself, under standard terms of supervision has been carried out. I submitted as an original piece of work. Moreover, I am declaring that this thesis has not been submitted to any other institution or for any other degree.

2017

Izaddin A. Aziz

Study 1 is reported in:

Aziz IA, Hutchinson CV, Maltby J. (2014) Quality of life of Syrian refugees living in camps in the Kurdistan Region of Iraq. PeerJ 2:e670 <https://doi.org/10.7717/peerj.670>

Acknowledgement

First, thanks to God that make me able to finish my thesis. I owe lots of appreciation to my both extraordinary supervisors **Prof. John Maltby** and **Dr Claire Hutchinson** for the incredible support all the time with presenting invaluable help and constructive advice throughout this process. With their encouragement they made a daunting task appear attainable. I am proud and very grateful to have had them as supervisors. Moreover, I want to express my thankfulness and gratefulness to my Wife Sumaya for her support during my study.

I would like to thank the Ministry of Higher Education and Scientific Research of Kurdistan region of Iraq for supporting me and making this Ph.D. initially possible. Additionally, I would like to present my thankfulness and appreciation to the Neuroscience, Psychology, and behavioural school. I am also grateful to all the Ph.D. students, lecturers, and support staff within the School of Psychology who made my academic life so enjoyable.

Special thanks to Mr. Zaito Siyani from UNAMI, Mr. Hemin Hassan from Democratic, and Human Right Institutes (DHRI), Mr. Hoger Shekha, Miss. Ramzya Ameen, and Mr. Nzar Abdul-Aziz from Public Aid Organization (PAO), Miss. Skala Lotfi from REACH organization, Mr. Adnan Fadhil Khaleel from Lebanese French University Dr, Salah S. Sarteep from Salahaddin University, Mr. Zuber Sharif, Mr. Shwan Sherzad, Mr. Eadin Yosif and Mr. Ian Kilpatrick for supporting me and being helpful to make my work easier.

Last but not the least, I would like to express sincere thanks to all the research samples who participated in my studies and shared their profound experiences so willingly for their cooperation, without that this research would never have been a reality.

Contents

| | |
|---|----|
| The Abstract..... | 1 |
| Declaration..... | 2 |
| Acknowledgement | 3 |
| List of Tables | 9 |
| List of figures..... | 11 |
| Chapter One | 13 |
| The thesis structure | 13 |
| 1.1. Thesis Overview | 13 |
| 1.2. Part A: Global armed conflict and displacement life conditions..... | 13 |
| 1.3. Part B: The effect of conflict on prejudice and forgiveness..... | 15 |
| 1.4. Part C: Surviving from adverse situation and well-being | 19 |
| 1.5. Summary | 21 |
| Part A | 23 |
| Presenting an overview of the effect of armed conflict on well-being..... | 23 |
| Chapter Two | 24 |
| Overview of global armed conflict and the psychological well-being of refugees | 24 |
| 2.1. Introduction | 24 |
| 2.2. Definition of refugees..... | 25 |
| 2.3. Forced migration and the global refugee crisis | 25 |
| 2.4. Syrian refugees | 27 |
| 2.5. The needs and physical and psychological support of refugees..... | 29 |
| 2.6. Displacement and quality of life | 30 |
| 2.7. The research aims of Part A (Chapters Three and Four)..... | 32 |
| Chapter Three | 34 |
| Quality of life of Syrian refugees living in camps in the Kurdistan Region of Iraq..... | 34 |
| 3.1. Abstract. | 34 |
| 3.2. Introduction | 35 |
| 3.3. The Research Method | 37 |
| 3.3.1. The research sample..... | 37 |
| 3.3.2. The measures | 37 |
| 3.3.3. Data Analysis..... | 38 |

| | |
|--|----|
| 3.4. Ethics | 38 |
| 3.5. The results | 39 |
| 3.6. Discussion | 42 |
| Chapter Four | 44 |
| The association between psychological quality of life scores and psychological well-being among Syrian refugees..... | 44 |
| 4.1. Abstract | 44 |
| 4.2. Introduction | 45 |
| 4.3. Method | 52 |
| 4.3.1. The research sample | 52 |
| 4.3.2. Measures..... | 53 |
| 4.3.2.1. Psychological quality of life | 53 |
| 4.3.2.2. Psychological well-being..... | 53 |
| 4.3 Ethics..... | 54 |
| 4.4 Results | 54 |
| 4.4.1 Descriptive statistics..... | 54 |
| 4.4.2 Bivariate correlation | 55 |
| 4.4.3 Multiple regression..... | 56 |
| 4.5 Discussion | 58 |
| 4.6 Conclusion..... | 60 |
| Part B | 62 |
| An overview of the psychological perspectives of the conflict effect on prejudice and forgiveness. | 62 |
| Chapter Five..... | 63 |
| The psychological perspectives of the conflict effects on prejudice and forgiveness | 63 |
| 5.1. Introduction | 63 |
| 5.2. Overview of Internally Displaced Persons | 64 |
| 5.4.1. Realistic Conflict Theory..... | 67 |
| 5.4.2. Relative Deprivation Theory | 68 |
| 5.4.3. Social Identity Theory | 69 |
| 5.4.4. Integrated Threat Theory | 69 |
| Chapter Six | 78 |

| | |
|---|-----|
| Exploring the association between Explicit and Implicit Prejudice with Psychological Well-Being among two different nationalities..... | 78 |
| 6.1. Abstract | 78 |
| 6.2. Introduction | 79 |
| 6.3. Method | 81 |
| 6.3.1. The research sample | 81 |
| 6.3.2. Measures..... | 81 |
| 6.3.2.1. Prejudice measure | 81 |
| a. Explicit measure | 82 |
| b. Implicit measure | 82 |
| c. The Implicit-association Test design | 84 |
| a. The procedure | 86 |
| 6.3.2.2. Psychological Well-being | 88 |
| 6.4. Ethics..... | 88 |
| 6.5. Results | 89 |
| 6.5.1. Descriptive statistic | 89 |
| 6.5.2. One sample T.test | 90 |
| 6.5.3. Independent sample T.test | 91 |
| 6.5.4. Bivariate correlations..... | 94 |
| 6.5.5. Multiple regressions | 98 |
| 6.6. Discussion | 101 |
| 6.7. Conclusion..... | 105 |
| Chapter Seven | 107 |
| Exploring the association between intrapersonal forgiveness and psychological well-being among internally displaced people in the Kurdistan region of Iraq..... | 107 |
| 7.1. Abstract | 107 |
| 7.2. Introduction | 108 |
| 7.3. Method | 110 |
| 7.3.1. The research sample | 110 |
| 7.3.2. Measures..... | 111 |
| 7.3.2.1. Forgiveness | 111 |
| 7.3.2.2. Psychological well-being..... | 112 |
| 7.4. Ethics..... | 112 |

| | |
|--|-----|
| 7.5. Results | 113 |
| 7.5.1. Hurt experience | 113 |
| 7.5.2. Descriptive statistic | 114 |
| 7.5.3. One sample T.test | 114 |
| 7.5.4. Bivariate correlation | 115 |
| 7.5.4.1. Correlation of hurt experience with forgiveness and psychological well-being domains 115 | |
| 7.5.4.2. Correlation between forgiveness and psychological well-being domains.... | 116 |
| 7.5.5. Multiple regression analysis | 119 |
| 7.6. Discussion | 121 |
| 7.7. Conclusion..... | 123 |
| Part C | 124 |
| Investigating resilience and people’s ability to survive from harmful situations and how it is associated with well-being..... | 124 |
| Chapter Eight | 125 |
| A general review of resilience, surviving adverse situations and well-being..... | 125 |
| 8.1. Introduction | 125 |
| 8.2. Definitions of Resilience | 126 |
| 8.3. The Theoretical Background of Resilience | 127 |
| 8.4. Resilience as a trait the EEA Resilience Holling Model..... | 129 |
| 8.5. Resilience and life stress | 130 |
| 8.6. Displacements conditions and resilience..... | 132 |
| 8.7. Resilience and Well-Being | 133 |
| 8.8. The Aim of Part C | 136 |
| Chapter Nine | 138 |
| Exploring the association between quality of life and EEA resilience among Syrian refugees | 138 |
| 9.1. Abstract | 138 |
| 9.2. Introduction | 139 |
| 9.3. Method | 141 |
| 9.3.1. The Research Sample..... | 141 |
| 9.3.2. Measures | 142 |
| 9.4. Ethics..... | 142 |

| | |
|---|-----|
| 9.5. Results | 143 |
| 9.5.1. Descriptive Statistics..... | 143 |
| 9.5.2. One sample T.test | 143 |
| 9.5.3. Bivariate Correlation..... | 144 |
| 9.5.4. Multiple Regressions | 147 |
| 9.6. Discussion | 150 |
| 9.7. Conclusion..... | 152 |
| Chapter Ten..... | 153 |
| An investigation of the association between the EEA Resilience model and Psychological well-being among Iraqi internationally displaced persons in the Kurdistan region of Iraq | |
| 10.1. Abstract | 153 |
| 10.2. Introduction | 154 |
| 10.3. Method..... | 156 |
| 10.3.1. The research sample..... | 156 |
| 10.3.2. Measures | 156 |
| 10.3.2.1. EEA Resilience | 156 |
| 10.3.2.2. Psychological Well-being | 157 |
| 10.4. Ethics | 157 |
| 10.5. Results | 157 |
| 10.5.1. Descriptive statistic..... | 157 |
| 10.5.2. One sample T.test | 158 |
| 10.5.3. Bivariate correlations | 158 |
| 10.5.4. Multiple regression | 162 |
| 10.6. Discussion | 164 |
| 10.7. Conclusion..... | 167 |
| Chapter Eleven..... | 168 |
| Overview, Research Summary and Discussion of Findings, Implications and Future Research, Research Limitations and Challenges, and Conclusion | |
| 11.1. Overview | 168 |
| 11.2. Summary and discussion of findings..... | 169 |
| 11.3. Implications and future research | 182 |
| 11.4. Research limitations and challenges..... | 184 |
| 11.5. Conclusions | 185 |

List of Tables

| | |
|---|----|
| Table 1 Mean (SD) score comparisons for WHOQOL-BREF domain scores (range 4–20) between Kurdistan refugees and adults across 23 countries (n = 11,830) from Skevington <i>et al.</i> (2004). | 39 |
| Table 2 Mean (SD) score comparisons for WHOQOL-BREF raw scores between Syrian refugees residing in Kurdistan and refugees residing in West Africa | 40 |
| Table 3 Mean (SD) score comparisons for WHOQOL-BREF transformed scores (0–100) between Syrian refugees residing in Kurdistan and refugees residing in the Gaza strip. | 41 |
| Table 4: Psychological well-being domains, considering high and low scores for feelings | 46 |
| Table 2: Cronbach's alpha score obtained in the domains of psychological quality of life and psychological well-being | 54 |
| Table 6: Pearson's correlation coefficient between psychological well-being and psychological quality of life | 55 |
| Table 7 Male and female correlation and Z-Score of significance of the difference between the Correlations of psychological quality of life and psychological well-being components according to gender. | 56 |
| Table 8 Regression analysis with psychological quality of life as a dependent variable, and gender, age, education, marital status, health, and illness status, and psychological well-being as predictor variables | 57 |
| Table 9 Cronbach's alpha, Score obtained in Self-report and Implicit tests of Prejudice and psychological well-being domains | 89 |
| Table 10 One sample T-Test of explicit prejudice and psychological well-being | 90 |
| Table 11 Independent sample t-test of explicit prejudice between Arab and Kurdish nationality | 91 |
| Table 12 Independent sample t-test of implicit prejudice between Arab and Kurdish nationality, the first task is related to concept recognition | 91 |
| Table 13 independent sample t-test of implicit prejudice between Arab and Kurdish nationality, the third task combined with pleasant and unpleasant attributes. | 92 |

| | |
|---|-----|
| Table 14 Independent sample t-test of Implicit prejudice between Arab and Kurdish nationality, the fourth task, reversing target (concept recognition)..... | 93 |
| Table 15 Independent sample <i>t-test</i> of implicit prejudice between Arab and Kurdish nationality, fifth task combined with pleasant and unpleasant attributes. | 93 |
| Table 16 Pearson’s product-moment correlation coefficient for Prejudice and psychological well-being domains..... | 95 |
| Table 17 Male and female correlation and Z-Score of significance of the difference between the Correlations of explicit and implicit prejudice attitude and psychological well-being components according to gender. | 97 |
| Table 18 Regression Analysis psychological well-being measure as the dependent variable, and nationality, gender, age, education, marital status, and prejudice attitude used as predictor variables | 99 |
| Table 19 this table shows the frequencies of the individual responses to the hurt experienced that includes Grade of Injury, Length of Time and Injury Category. | 113 |
| Table 20 Cronbach's alpha, Score obtained for intrapersonal forgiveness and psychological well-being domains scales. | 114 |
| Table 21 One sample T-Test of forgiveness and psychological well-being..... | 115 |
| Table 22 the correlation of hurt experience with forgiveness and psychological well-being domains..... | 115 |
| Table 23 Pearson’s product-moment correlation coefficient for intrapersonal forgiveness and psychological well-being domains..... | 116 |
| Table 24 Male and female correlation and Z-Score of significance of the difference between the Correlations of Forgiveness components and psychological well-being components according to gender. | 118 |
| Table 25 Regression Analysis with psychological well-being domains as the dependent variable, and nationality, gender, age, education, marital status, health status, illnesses status, and forgiveness domains used as predictor variables. | 119 |
| Table 26 Cronbach's alpha. The score was obtained in relation to the EEA resilience components and quality of life domains..... | 143 |
| Table 27 One sample T-Test of resilience and quality of life | 144 |

| | |
|--|-----|
| Table 28 Pearson's product-moment correlation coefficient for Quality of Life and EEA Resilience domains. | 145 |
| Table 29 Male and female correlation and Z-Score of significance of the difference between the Correlations of quality of life components and EEA resilience components according to Gender | 146 |
| Table 30 Regression analysis of the dependent variables (the physical health, psychological health, social relationships and environment components of quality of life) and the predictor variables (nationality, gender, age, education, marital status and the three dimensions of resilience). | 148 |
| Table 31 Cronbach's alpha, Score obtained of the domains of EEA resilience and psychological well-being domains | 157 |
| Table 32 One sample T-Test of resilience and psychological well-being | 158 |
| Table 33 Pearson's product-moment correlation coefficient for EEA Resilience and psychological well-being domains. | 159 |
| Table 34 Male and female correlation and z-Score of significance of the difference between the correlations of psychological well-being components and EEA resilience components according to Gender | 161 |
| Table 35 Shows Regression analysis with six dimensions of psychological well-being measure as the dependent variable, and nationality, gender, age, education, marital status, with three components of Resilience used as predictor variables. | 162 |

List of figures

| | |
|--|----|
| Figure 1 illustrates the outline and the links of the thesis studies, including six studies divided into three parts and how each section addressed a specific aim. | 22 |
| Figure 2 shows the UNHCR's annual Global Trends Report regarding worldwide displacement. | 26 |
| Figure 3 shows the Syrian refugee population database from 2013 to 2015, detailing both Syria's neighbouring countries as well as the EU and other countries. | 28 |
| Figure 4 The number of internally displaced persons in the worldwide, alongside the top 10 countries in terms of internally displaced persons. | 65 |

| | |
|---|-----|
| Figure 5 The dual effects of imputations to prejudicial attitudes on psychological well-being through the rejection-identification model perspective. | 71 |
| Figure 6 shows how colours were used to design of the program and the way of choosing the alternatives by the participants to determine their gender. | 84 |
| Figure 7 Show the Implicit Association Test through schematic description and present the aim of the tasks in each stage of the IAT experiment and display stimuli at each stage. | 86 |
| Figure 8 Show how the program works during the selection of the correct response to the stimulus by pressing the correct key..... | 87 |
| Figure 9 Shows how the program works in during the selection of the wrong response to the stimulus by pressing the wrong key and the participants need to re-select the correct answer to move to the next stimulus. | 87 |
| Figure 10 The figure further highlights the association of each component of quality of life with the psychological well-being, and resilience components. | 170 |
| Figure 11 presents the association between psychological well-being domains and resilience, prejudice and forgiveness. The relationship between the components can be seen by considering two criteria: practical significance and the effect size of the data. Moreover, the figure highlights that the positive relationship component of psychological well-being recorded a more significant correlation with the components of other variables. | 171 |

Chapter One

The thesis structure

This chapter presents the thesis structure that highlights three perspectives: conflict and displacement life conditions, the effect of conflict on prejudice and forgiveness, and surviving adversity to ensure well-being

1.1. Thesis Overview

The central aims of this thesis are to address a number of issues, such as the effect of armed conflict on people's health and well-being, how conflict can affect individuals' attitudes, and the ability to survive in adverse situations. There is no doubt that war has profound consequences on people's health and well-being in both short- and long-term life engagement (Panter- Brick, Grimon, & Eggerman, 2014; Schweitzer, Murray, & Davidson, 2008). The violence inflicted by armed conflict frequently leads to people being confronted by increased physical and mental health risks (Levy & Sidel, 2000; Levy & Sidel, 2009). In light of this evidence, this thesis examines four main themes: subjective and psychological well-being, prejudicial attitudes, forgiveness following conflict and resilience.

The thesis is divided into three parts, each one covering a particular issue. The first part is designed to investigate the effects of armed conflicts on the well-being of Syrian refugees. In the second part, the goal is to examine the association between the psychological well-being, prejudice, and forgiveness of displaced Iraqis. Similarly, in the third part, the aim is related to understanding how people are able to survive adverse situations and adjust to difficult life conditions. Well-being is considered as the main variable, and the purpose of this work is to gain a wider perspective and better understanding of human growth in the context of positive psychology and conflict.

1.2. Part A: Global armed conflict and displacement life conditions

The main purpose of this section is to analyse the effect of war on mental health and well-being, and two studies on Syrian refugees have been considered in this regard. The first study is a comparative study which aimed to assess the quality of life among Syrian refugees and to compare these results with other refugee samples. For instance, it

investigated people displaced by the Palestinian/ Israelite conflict (Eljedi, Mikolajczyk, Kraemer, & Laaser, 2006), the Oru community and the refugees who have been resident in Oru-Ijebu in the west of Africa (Akinyemi, Owoaje, Ige, & Popoola, 2012), and adults from 23 countries worldwide that have attracted the attention of the World Health Organization (WHO) Regions. The countries that were covered by the study are Australia, Argentina, Bulgaria, Brazil, Germany, China, Croatia, Israel, Norway, Japan, Greece, Hungary, Italy, India, Malaysia, Netherlands, Nigeria, Romania, Russia, Spain, the United Kingdom, Turkey and the United States (Skevington, Lotfy, & O'Connell, 2004).

Fundamentally, well-being is derived from two general perspectives. First, the hedonic approach, “Subjective well-being” that defines well-being based on pleasure attainment, happiness and pain avoidance and which measures well-being from short-term life engagement. Secondly, the eudaimonic approach, “Psychological well-being”, that defines well-being based on self-realization, meaning in life, and individuals fully functioning, which measures well-being from long-term life engagement (Huta & Ryan, 2010; Ryan & Deci, 2001). Several studies have suggested that these two approaches are complementary, and as such, to understand well-being comprehensively it is necessary to look at both hedonic and eudaimonic well-being (Keyes, Shmotkin, & Ryff, 2002; Waterman, Schwartz, & Conti, 2008).

To measure subjective well-being the quality of life, a WHOQOL-BREF (1995) scale is used across four subscales: psychological health, environments, social relations and physical health. The result of the first study shows that Syrian refugees have a poor level of psychological health in terms of their quality of life (Aziz, Hutchinson, & Maltby, 2014). This result led to the development of a second study which aimed to investigate the association between the psychological health of Syrian refugees with regard to quality of life and their psychological well-being.

The key issue that guided the second study emerged from the supposition that achieving a better understanding of the psychological quality of life, in terms of long-term life engagements, is extremely important; perhaps psychological well-being should be considered alongside the quality of life. Previous studies supporting this view have highlighted the effectiveness of the association of quality of life with psychological well-being (Akinyemi et al., 2012; Tang & Fox, 2001). In a study by Ring, Höfer, McGee,

Hickey, and Boyle (2007), quality of life was correlated positively with psychological and subjective well-being. Chen, Jing, Hayes and Lee (2013) also considered the quality of life to be an important factor of subjective well-being to measure individuals' well-being over a short period.

To measure psychological well-being, Ryff's (1989a; 1989b) "eudaimonic model" of psychological well-being was employed. As a concept, eudaimonic psychological well-being is commonly referred to as a life approach of living well with having an ability to attain meaning of life that can be achieved when the individuals are able to realize their real potential; their activities are congruent with their personal values; and they are fully engaged with the life (Ryan & Deci, 2001; Ryan, Huta, & Deci, 2008). Ryff (2014) pointed out that Eudaimonia refers to two Greek imperatives: knowing yourself and achieving your true potential. Ryff's model was chosen because it is considered to be a comprehensive model designed on the basis of a number of psychological theories, such as those of Rogers, Maslow, Jung, Frankl, Erikson and Allport. This scale also measures psychological well-being for long-term life engagement (Ryff & Keyes, 1995; Ryff & Singer, 2008; Ryff, 2014). The measure is theoretically grounded, and it concentrates on measuring multiple aspects of psychological well-being, including the following six components: environmental mastery, autonomy, personal growth, purpose in life, positive relations with others and self-acceptance (Ryff, 1989b).

1.3. Part B: The effect of conflict on prejudice and forgiveness

As the study progressed, and after reviewing reports published by international organisations, such as the Internal Displacement Monitoring Centre report (May 2015), and previous literature (Esses, Jackson, & Armstrong, 1998; Martin, 2005), it was noticeable that a mass exodus of refugees may lead to the emergence of negative attitudes among the displaced people and that the host community could promote additional adverse consequences. However, from the previous literature, it could be assumed that well-being might play a positive role in reducing the negative attitudes and could lead to alleviating the possibility of conflict. For instance, Schaafsma (2011) suggested that well-being might have a significant effect on reducing prejudicial attitudes. However, drawing on an extensive range of sources, different results were found that explicate the association

between prejudice and well-being. For instance, some studies suggested that prejudice may positively affect well-being when individuals find support from their group. The benefits of group cohesion were seen to outweigh external criticisms (Arroyo & Zigler, 1995; Branscombe, Schmitt, & Harvey, 1999). Contrary to this finding, Dinh *et al.* (2014) indicated that prejudice has a negative correlation with well-being.

Surprisingly, while the previous studies claim to have investigated psychological well-being, on reviewing the methods and measures used, it is clear that these studies examined subjective well-being rather than psychological well-being. Therefore, finding relevant research was challenging. Moreover, this limitation of the previous studies indicates that psychological well-being in terms of long-term life engagement has been poorly investigated. As no study has addressed the association between psychological well-being and prejudicial attitudes among displaced people, it could be said that measuring the psychological well-being and prejudicial attitudes of internally displaced Iraqis might be considered to be a unique study opportunity. The current research is broadly designed to measure eudaimonic well-being and to examine how these opposing conclusions might be understood in the case of displaced persons regarding their well-being and any ongoing effects of prejudice.

The second aim of this part of the thesis is to examine post-conflict situations and the ability of displaced people to build tolerance and acceptance after encountering the painful life experience of dislocation caused by the conflict. Due to the negative effects of conflicts on displaced people and the hurt they have been subjected to, it would be difficult to forgive those who have caused such harm. This thesis argues that the greatest step following conflict is to promote a relationship between victims and offenders. It is essential to address this issue both before and after returning the displaced people to their homeland. The objective of studying forgiveness among displaced individuals is to present a clear view of the importance of a social network structure after conflict and to review the probability of how this may alleviate humanitarian suffering in the future.

The predicament that may face displaced individuals after the conflict is the ability to recover from the impact of violence and to promote welfare by rebuilding a positive connection with offenders to achieve a peaceful life. As a consequence, it could be said that examining the association between well-being and forgiveness among displaced individuals

would be useful to indicate the different factors that help them engage positively with life. According to McLernon, Cairns, Hewstone, and Smith, (2004), forgiveness is a major factor which ensures peaceful coexistence in society after conflict. Previous research investigated the factors associated with forgiveness and focused on well-being. The findings suggest that forgiveness has a favourable role to play in reducing stress and increasing mental well-being (Cox, Bennett, Tripp, & Aquino, 2012; Toussaint & Friedman, 2009; E. Worthington, Witvliet, Pietrini, & Miller, 2007).

However, the main challenges faced by both studies related to finding an appropriate research sample. The sample of the earlier studies in this thesis involved Syrian refugees, and choosing Syrian refugees as a sample to conduct a study relating to prejudicial attitudes and forgiveness is inappropriate for two main reasons. First, both the Syrian refugees and the host community have the same ethnic background; namely, they are both of Kurdish ethnic origin. Second, historically, the Syrian people have not had any negative experiences with the Kurds in Iraq. In other words, no historical conflict informed the study. Thus, the Syrian refugees might not be an appropriate sample from which to measure forgiveness or prejudice. It was therefore decided to seek an alternative sample. The internally displaced people who moved to the Kurdistan Region of Iraq were considered more appropriate. There are three essential reasons for choosing this sample:

- a) The enormous internally displaced people's movement led to the deterioration of the life conditions of the local community (The International Organization for Migration, May, 2015).
- b) The internally displaced people are of Arabic nationality, and they have a different ethnic background to Kurdish individuals. Augoustinos and Reynolds (2001) pointed out that the differences between nationality, ethnic groups, and political affiliation might negatively affect relationships and raise the possibility of prejudicial attitudes.
- c) Both Arabic and Kurdish nationalists have a long history of conflict and violence (Cordesman, Mausner, & Derby, 2010; Hanauer, Martini, & Al-Shahery, 2011).

After deciding that the displaced Iraqi people are the best choice for this research, two studies were applied to investigate the association between psychological well-being and prejudice and forgiveness. These studies are reported in Part B of the thesis. The first

study aimed to investigate the association between prejudice and psychological well-being among both Kurdish and Arabic nationalities. To measure prejudice, a subjective measure called the implicit association test (IAT) is used, and this scale is designed to measure an individual's reaction based on identifying the link between mental representations of objectives. This test includes an objective measure and a self-report questionnaire (Greenwald, McGhee, & Schwartz, 1998).

The hypothesis behind using the IAT measure is that some studies established that implicit preferences might affect individuals' behaviour, and it is possible to recognise real attitudes through implicit predilection because it occurs outside of conscious awareness and control (Dovidio, Kawakami, & Gaertner, 2002; Nosek, Greenwald, & Banaji, 2005). The goal of the study is to investigate the relationship between prejudicial attitudes and psychological well-being since individuals usually tend to avoid negative attitudes because of social desirability. The IAT measure is considered to be a valuable scale and the best option for this study to measure prejudicial attitudes to obtain an accurate result by eliciting the correct answers from the participants.

The aim of the second study in this section is to investigate psychological well-being with intrapersonal forgiveness across three domains – behavioural, emotional and cognition – using the short version of the Enright scale (McLernon *et al.*, 2004). Worthington *et al.* (2005) suggested that intrapersonal forgiveness is related to the changes that occur within an individual that promote positive emotions after experiencing adverse conditions, which primarily involves wide-reaching positive implications for the future health of the person. As well, Dolan, Loomes, Peasgood, and Tsuchiya (2005) pointed out that violence has a negative impact on the life quality and emotional suffering in all likelihood leads to serious psychological repercussions for the victim. Studying intrapersonal forgiveness in a way that examines forgiveness from the perspective of victims will perhaps establish a new space of forgiveness by providing an extra insight into the psychological experience of victims. The second study focuses mainly on the intrapersonal levels of forgiveness to assess how it is linked to an individual's well-being.

1.4. Part C: Surviving from adverse situation and well-being

In the second part of the thesis, the results show that some people recorded high levels of well-being while others had low levels. These findings lead to a further investigation which asks the following question: Why are some displaced individuals who experience the same life conditions able to adapt to harmful situations while others are less able? Accordingly, the aim of the study is to examine individuals' ability to adapt to stressful life conditions. Also, it will investigate psychological well-being to reflect a resilience context. In this section, a newly formed theory and measure is applied to psychological resilience based on Holling's theory and called the EEA resilience model. The measure includes three components: engineering resilience, ecological resilience, and adaptive resilience. This scale was developed by Maltby *et al.* (2015).

Through an additional review of the literature, it was observed that there are a large number of published studies relating to resilience in the context of psychological and physical conditions and it has been reported that resilience has a positive impact on individuals' lives. For instance, some people are overcome by painful experiences (Avery, Braunack Mayer, Duggan, Taylor, & Stocks, 2015; J. Min et al., 2013), experience mental health problems (Bonanno & Mancini, 2008; Jamison, Weidner, Romero, & Amundsen, 2007) and endure difficulties relating to well-being (Cofini, Carbonelli, Cecilia, & di Orio, 2014; Maltby et al., 2015; Rabkin, Remien, Williams, & Katoff, 1993; Xu & Ou, 2014). Similarly, Rutter (1990) concluded that resilience is a mechanism that protects individuals against psychological adversity. Moreover, Polk (1997) also, pointed out that resilience refers to moving forward and having the ability to transform negative events into a growth experience. From the previous evidence, it could be hypothesised that resilience might be seen as a significant factor which helps displaced individuals to deal successfully with difficult and challenging situations.

A key study by Ryff (2014) concluded that eudaimonic psychological well-being plays an essential role in physical and mental health, such as facing adversity, living longer and social communication. Therefore, Ryff (2014) examined psychological well-being in a resilience context and highlighted that resilience might consider to be an important factor in maintaining or regaining psychological well-being, especially when facing adverse situations. Additionally, the review of the previous literature shows that, the previous

research that investigated the interventions between resilience and well-being used different samples; for instance, patients (Fava & Tomba, 2009), students (Bajaj & Pande, 2016; Sagone & De Caroli, 2014), military groups (Griffith & West, 2013) and employees (Ablett & Jones, 2007; Grant, Curtayne, & Burton, 2009).

Similarly, Ryff (2014) noticed that studies which applied the eudaimonic psychological well-being model to people living in poor conditions, such as displaced individuals and war victims, have been ignored. Thus, Ryff (2014) suggested conducting additional studies to test the eudaimonic psychological well-being model on individuals living under stressful conditions. After reviewing the literature, it is surprising to notice that there are no studies investigating psychological well-being among displaced people or examining the influence of resilience on the life quality or well-being of displaced individuals who have experienced harmful and conflicted situations. As a consequence, this is what this research sets out to do.

In the third part of this thesis, the association between resilience and well-being is examined. Two studies were undertaken, and they are explained in this section. First, the research aimed to examine the relationship between resilience and quality of life among Syrian refugees. The WHOQOL-BREF scale is used to measure the quality of life (WHOQOL group, 1995) and, to measure resilience; the EEA resilience model is employed. The measure scaled across three components: engineering resilience, ecological resilience and adaptive resilience (Maltby *et al.*, 2015). The second study examined the relationship between EEA resilience and psychological well-being among the internally displaced Iraqi people. Ryff's (1989a; 1989b) scale is used to measure eudaimonic psychological well-being.

In the final chapter of this thesis, the overall results that constitute the main findings of the six studies are presented and discussed. The narrative focuses on three main areas: the effects of war on well-being, conflict, and forgiveness, and resilience. This chapter also summarises the findings and proposes new areas for further studies. The difficulties and limitations of this study are also highlighted, as well as the factors which demonstrate why this research is challenging to apply to any future research in this field.

1.5. Summary

To summarise, the central aims of the thesis are examining the effect of war on short and long term of well-being, with examines how the process of extended prejudicial attitudes and forgiveness influences psychological well-being in conflict, and how resilience helps people to survive in adverse situations. The thesis outlines six studies divided into three parts that consider well-being to be the main topic of discussion. Each section includes two studies and the arrows below. Figure 1 show how these studies have been linked together in the three parts. The first part illustrates the studies that were applied to the Syrian refugees and included two variables: quality of life and psychological well-being. In the second part, the study focuses on internally displaced Iraqi people, and it consists of three variables (psychological well-being, prejudice, and forgiveness). Finally, in the third part, three variables are examined (quality of life, psychological well-being, and resilience). In addition, at the end of the sections, a general discussion is presented for all the studies.

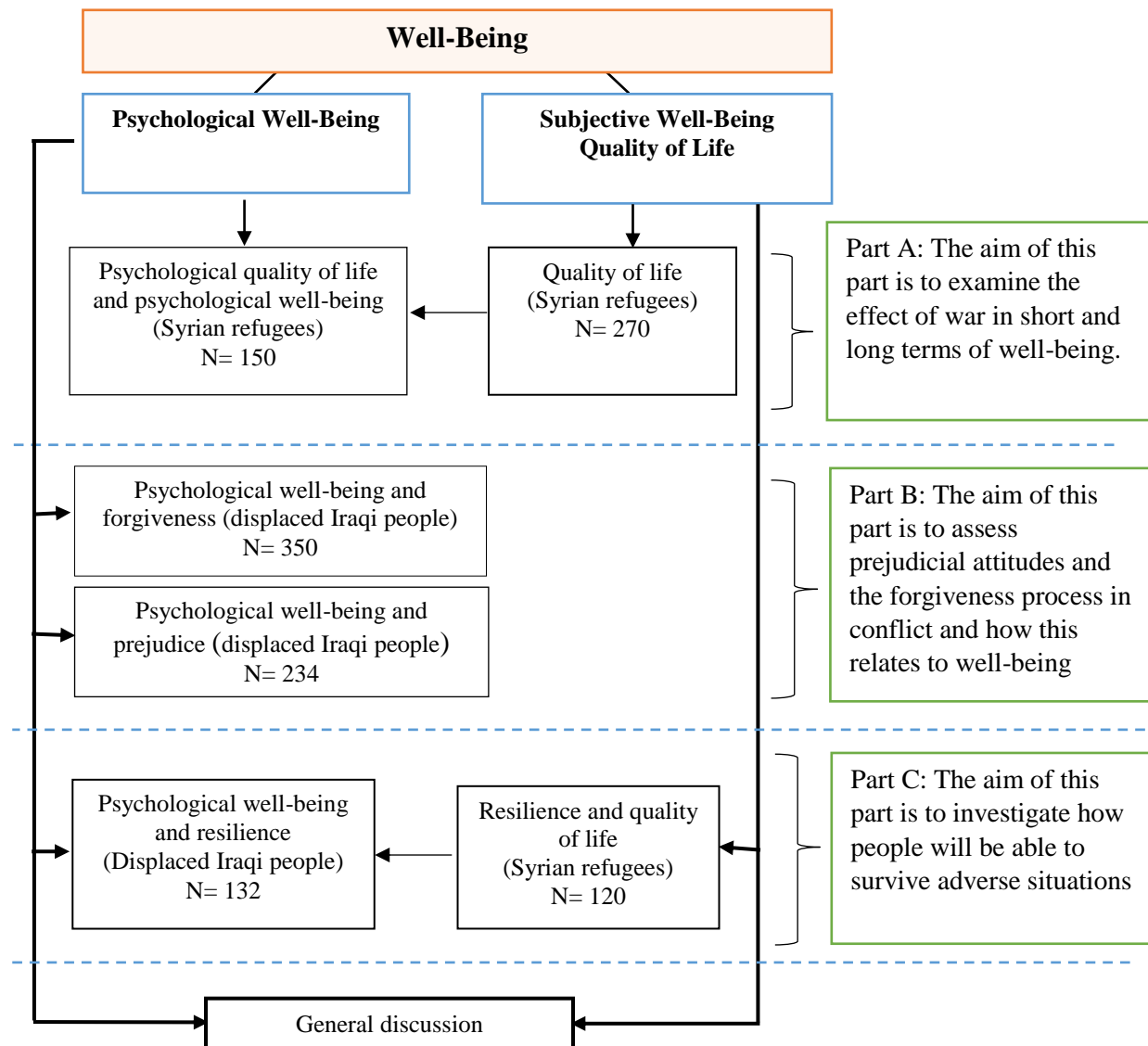


Figure 1 illustrates the outline and the links of the thesis studies, including six studies divided into three parts and how each section addressed a specific aim.

Part A

**Presenting an overview of the effect of armed conflict on
well-being**

This part comprises Chapters Two, Three, and Four

Chapter Two

Overview of global armed conflict and the psychological well-being of refugees

2.1. Introduction

In this chapter, the definition of the term 'refugees,' is presented with general background information is provided relating to their plight. Alongside the introduction, there is an in-depth focus on the key points of the research. For instance, this chapter presents an overview of the global refugee crisis, in particular, the Syrian refugee crisis and the refugees' displacement to neighbouring countries, especially the Kurdistan Region of Iraq. Subsequently, there is a discussion of the evidence about how the provision of physical and psychological support could raise the quality of life of the refugees. This chapter also highlights how the issue of measuring the quality of life is common within the literature that focuses on refugees, specifically with regard to utilising the World Health Organization's measurement index. The lack of such a study on Syrian refugees stimulated the need to investigate their quality of life by using the World Health Organization's scale. Moreover, having a better vision of the life conditions of refugees worldwide, and Syrian refugees in particular perhaps will help to signpost the path for the research in this thesis.

2.2. Definition of refugees

The term ‘refugee’ relates to the migration of an individual or a group of people. This conceptualisation, however, can be problematized. For example, in legal and academic literature, a distinction is made between the phenomenon of migration and refugees. It is, therefore, necessary to specify the differences between those people who migrate as a result of their own decisions and those who are refugees. There is a divergence between migration, which involves people moving voluntarily, and the movement of refugees, which is usually the result of people facing harmful situations. Migration is a natural process whereby individuals seek economic opportunities or better life conditions. This is in sharp contrast to refugees who are fleeing from danger.

The United Nations (UN) has presented the most comprehensive definition of refugees. According to the United Nations’ Convention Relating to the Status of Refugees, the term ‘refugee’ refers to a person who escapes from their homeland due to a “*well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality and is unable, or owing to such fear, is unwilling to avail himself of the protection of that country; or who, not having a nationality and being outside the country of his former habitual residence as a result of such events, is unable or, owing to such fear, is unwilling to return to it*” (Cutts, 2000, p 23).

2.3. Forced migration and the global refugee crisis

In general, the experience of refugees can be seen to pertain to frustration and the loss of control over one’s life upon escaping from a conflict area (Lindencrona, Ekblad, & Hauff, 2008). According to Fazel and Stein (2002) and Ager (1993), such experience usually moves through three challenging and stressful stages: pre-migration, migration, and post-migration. In the first stage, that of pre-migration, a person resides in their hometown but faces (or has previously faced) prolonged and repetitive war-related traumatic experiences – these ordeals can include experiencing or witnessing violent acts such as injury, rape, kidnap and torture. The individual may also face disruption to their basic social and economic needs.

The second stage, the migration phase, refers to the movement of a person from a

particular war zone to another area or a different country. In this phase, the refugee will in all likelihood face difficult living conditions; for instance, they may encounter limited resources, a lack of medical care or poor educational opportunities. Furthermore, these conditions may also include being harmed by their host community. The final stage, post-migration, involves the refugee reaching a safe haven. Such locations can include refugee camps where the refugee can receive aid and basic support. The support offered will be limited, based on the host country's ability to provide assistance and the extent of the support provided by international organisations. As a result, some refugees may remain in such camps for many years (UNHCR, 2011).

In consideration of the significant increase in the number of refugees and internally displaced people in the world today, it could be argued that this humanitarian crisis require more attention, especially if the tragic experience of those displaced is to be assimilated. Recently, displacement has become a serious topic of discussion, primarily as the world seeks to respond to the need to supply basic provisions to displaced people. According to the United Nations High Commissioner for Refugees (UNHCR) (2014), the number of refugees has risen dramatically in the last decade from approximately 37.5 million in 2005 to more than 59 million by the end of 2014. Such refugees have mostly fled from persecution, conflict or violence see Figure 2.

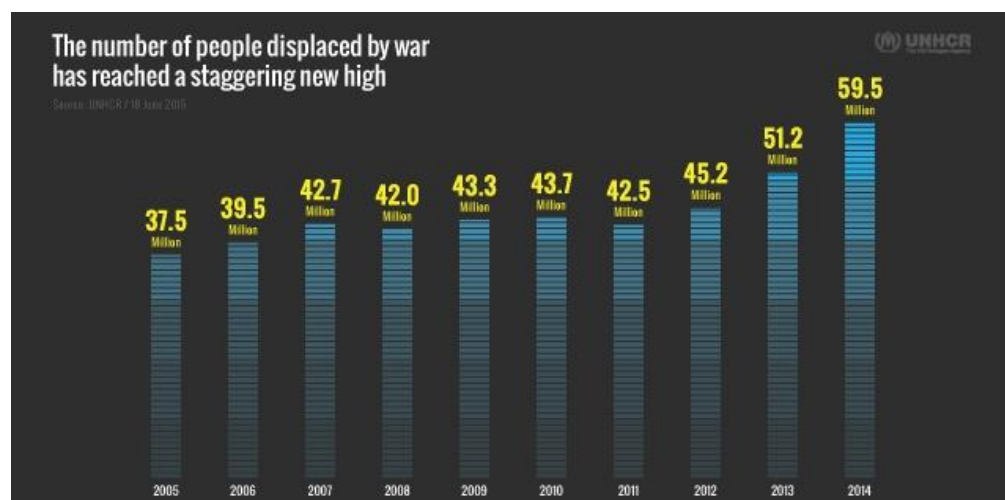


Figure 2 shows the UNHCR's annual Global Trends Report regarding worldwide displacement. The report confirms that, as of 2014, worldwide displacement was at the highest level ever recorded. The graph represents how the number of people forcibly displaced rose to a staggering 59 million by the end of 2014, this being compared with 2005 when the figure was 37.5 million (UNHCR Global Trends, 2014).

In order to describe the humanitarian crisis involving refugees, and thus identify the several causes which highlight the importance of addressing the causative issues, Zetter (1988, p 1) reported that: *“It is the word ‘refugee’ which has increasingly been deployed to describe the millions of uprooted people who have been forced into exile or displaced within their own countries because of intolerance, war or other human factors. ‘Refugee’ constitutes one of the most powerful labels currently in the repertoire of humanitarian concern, national and international public policy and social differentiation.”* From this perspective, it could be said that exposure to harmful war-related events causes a rapid escalation of the refugee crisis. Indeed, the quick and effective action is required if such a crisis is to be mitigated.

2.4. Syrian refugees

The result of the conflict in Syria is increasing and exacerbating the associated humanitarian crisis. Increased attention and action from both governments and international organisations is required when addressing this issue. Due to the war and the mass refugee movement of people attempting to flee the violence, the Syrian Arab Republic has been responsible for producing more refugees than any other country. Indeed, the UNHCR (2014a) reported that one in every five displaced individuals in the world is Syrian. According to the UNHCR report (17 Feb 2016), there are more than 4.7 million Syrian refugees worldwide.

Since 2011, the number of refugees who have sought protection beyond Syria’s neighbouring countries has increased (Ostrand, 2015). By following the movement of Syrian refugees, it has been observed that there has been a rise in the global number of refugees since 2013. Figure 3 demonstrates the clear and increasing trend of refugee numbers from 2013 to 2015. The data also highlights that Turkey not only received the most refugees but also witnessed a dramatic increase in refugees from 585,601 in 2013 to 2,503,549 in 2015. The movement of refugees to EU countries also rose sharply from 84,197 in 2013 to 897,645 in 2015. Nevertheless, in the other neighbouring countries, such as Iraq, Egypt and Jordan, the number of refugees only increased slightly; in 2013, the number of the refugees in these countries was 212,809, 131,659 and 576,354 respectively,

rising to 244,642, 138,212 and 633,466 in 2015. In Lebanon however, the number of refugees has fluctuated; there were 851,284 refugees in 2013, and this increased significantly to 1,146,405 in 2014 but then slightly reduced again to 1,069,111 by the end of 2015.

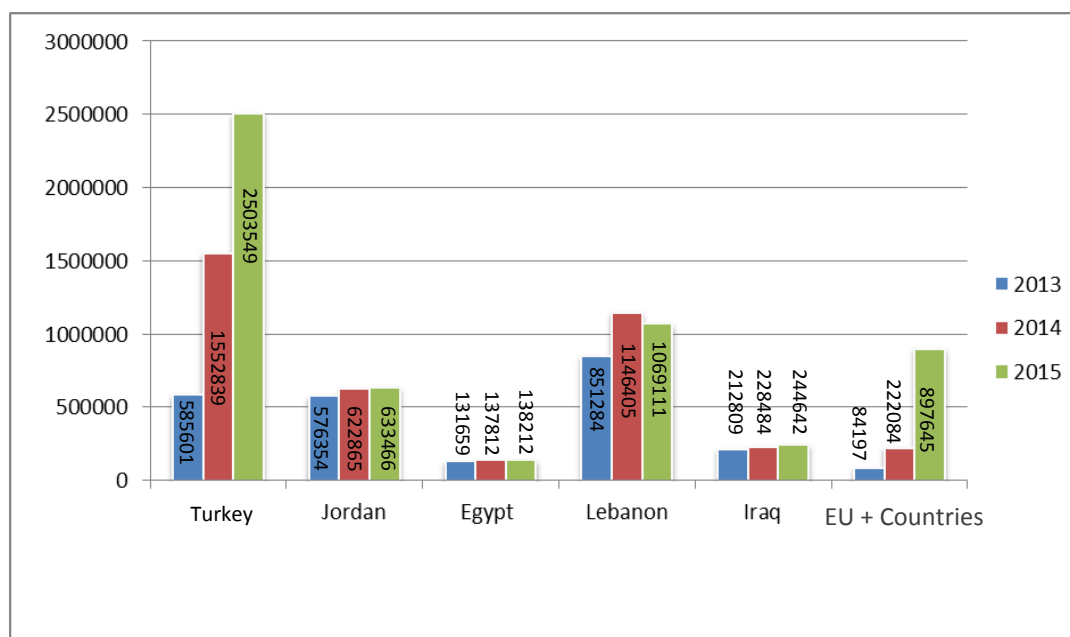


Figure 3 shows the Syrian refugee population database from 2013 to 2015, detailing both Syria's neighbouring countries as well as the EU and other countries. It is clear that the movement of refugees rose significantly in Turkey and the European countries. However, there were no significant changes in Iraq, Egypt or Jordan. In Lebanon however, the number of refugees received was relatively reduced. Source: <http://data.unhcr.org/syrianrefugees/country.php?id=103>

To date, however, Syria's neighbours have primarily shouldered the cost of the humanitarian crisis in Syria. For instance, Turkey, Lebanon, Iraq, Jordan, and Egypt have all hosted over 4.5 million refugees. Moreover, since 2013, Syria has been reported to be the main country of origin of refugee seekers in 44 European countries. Today, more than 897,000 refugees are seeking shelter in Europe, with the majority being settled in Serbia and Germany (UNHCR, United Nations High Commissioner for Refugees, 17 Feb 2016).

In Iraq, since 2012, approximately 250,000 individuals have been recorded as being Syrian refugees (United Nations Refugee Agency, 2015). 97% of these people were hosted in the Kurdistan Region of Iraq (KR-I) within UN camps (UNHCR, United Nations High Commissioner for Refugees, 17 Feb 2016). Most of these Syrian refugees were registered

in the Directorate of Duhok, this being located near the Peshkhabour border with Syria. As a consequence, the Domiz Camp opened on 1 April 2012 and, as of 28 February 2014, it remains the largest permanent camp with a population of 58,500. In 2013, as the number of refugees seeking asylum increased, a further four permanent camps were opened in the Directorate of Erbil: Kawergosk (15 August 2013), Qushtapa (19 August 2013), Basirma (26 August 2013) and Darashakran (29 Sept 2013). As of 28 February 2014, these camps had a combined population of 28,208 (UNHCR, 5 March 2014).

With the intention of drawing attention to the riskiness of the situation for Syrian refugees, as well as the undesirable impact of refugee movements in host countries, Secretary-General and UNDP Associate Administrator, Gina Casar, (2014) reported that *“countries hosting Syrian refugees are struggling with the massive impact on their economies, societies, and infrastructure, threatening not only their stability but the stability of the entire region”* (UNHCR, United Nations Refugee Agency, 18 December 2014). Similarly, the increasingly negative consequences of the refugee crisis are related to two issues: the continually increasing number of refugees due to the ongoing conflict in Syria, and the length of time that the Syrian refugees spend in the camps (Orhan, 2014; Ostrand, 2015).

2.5. The needs and physical and psychological support of refugees

Although refugees might survive the turmoil in their homeland, they may still be confronted by further suffering during and after their migration (Kirmayer *et al.*, 2011). There is a strong potential for this movement to lead to significant and inveterate mental illness (Palic & Elklit, 2011). Power *et al.* (2010) demonstrated that the conditions experienced by refugees, spanning the pre-migration phase to the post-migration stage, can also contribute to symptoms of psychological and physical illness. Additionally, the loss of loved ones may lead to a response of prolonged sorrow. (Prigerson *et al.*, 2009). Also, the existing evidence demonstrates that refugees experience poorer adjustment periods and greater psychiatric issues than the general population (Fazel, Wheeler, & Danesh, 2005; Papadopoulos, 2002) As such, the early detection of any psychological health issues of the refugees might be helpful to indicate the risk of physical or mental illness.

Throughout the last decade, international organisations, local charities, governments

and the wider general public have become increasingly aware of the problems faced by refugees. This awareness not only extends to appreciating the physical problems of being a refugee but also encompasses an acknowledgment of their suffering in relation to psychological issues. Therefore, refugee issues deserve more attention from all those concerned about their welfare. Moreover, despite the serious attempts by global organisations and local charities to help the displaced, the main support offered is limited mainly to meeting only their basic needs (Global Protection Cluster Working Group, 2010). However, the UNHCR (2014) reported that, given the sheer number of people who need attention with regard to both their physical health and clinical mental health needs, it is difficult to manage the situation that has arisen. As a consequence, there are numerous psychological issues facing those who live in refugee camps that need to be addressed.

2.6. Displacement and quality of life

De Vries and Van Heck (1994) suggested that ‘quality of life’ refers to the assessment of an individual’s living systems and the awareness of their position in life. A comprehensive definition was provided by the World Health Organization (1993): *“Quality of life is defined as an individual’s perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards, and concerns. It is a broad ranging concept incorporating in a complex way the person’s physical health, psychological state, the level of independence, social relationships, personal beliefs and their relationship to salient features of the environment”* (p. 24).

A vast and growing body of literature has investigated the factors that influence the quality of life of refugees. For instance, previous research relating to the quality of life has reported that lower levels of quality of life widely correlate with extended asylum procedures (Laban, Komproe, Gernaat, & de Jong, 2008), poor social relations, the lack of employment (Carlsson, Olsen, Mortensen, & Kastrup, 2006) and mental distress (Araya, Chotai, Komproe, & de Jong, 2007; Fazel et al., 2005; Gerritsen et al., 2006; Tribe, 2002). Indeed, poor life conditions, as experienced by refugees due to their significant losses (Eisenbruch, 1990; Papadopoulos, 2002), have the potential to have drastically negative consequences. However, because it is difficult to gather enough information regarding the

life conditions of refugees (Laban, Gernaat, Komproe, van, & De Jong, 2005; S. W. Turner, Bowie, Dunn, Shapo, & Yule, 2003), it is challenging to gain accurate knowledge of the overall quality of life issues that arise among such displaced individuals. Therefore, it could be said that the concept of quality of life requires further investigation within the refugee population.

Drawing upon an extensive range of sources, it has been identified that measuring quality of life via the World Health Organization's (WHO) index is common within the literature pertaining to refugees (Akinyemi et al., 2012; Carlsson, Mortensen, & Kastrup, 2006; Eljedi et al., 2006; Skevington et al., 2004). Nevertheless, the literature review revealed that even following the recent crisis, no study measuring the quality of life has used the World Health Organization's measure in relation to Syrian refugees. As a result, it could be said that focusing on this group would be helpful in evaluating their life conditions. Therefore, during the first stage of the research, a comparative study was undertaken of Syrian refugees and other refugees to conduct an assessment from the perspective of life quality. This study may contribute to a better understanding of the effect of war on the well-being of these individuals. Also, it is intended that such research will be able to determine the circumstances and psychological issues faced by displaced Syrians.

The main result of the study demonstrates that, in relation to quality of life, the Syrian refugees have a poor level of psychological health. This conclusion led to a further study being undertaken to address this issue from a wider perspective. By conducting further investigations, it was believed that a better understanding could be obtained with regard to the disparities in the quality of life within the refugee group, particularly in terms of the wider context of well-being. This understanding will perhaps help to explain the nature of the high and low scores on the psychological health measurements pertaining to the quality of life. It may also expose the reasons for the variance in quality of life scores recorded within the refugee camps. At this stage, it could be argued that by investigating the quality of life in the context of psychological well-being, a wider vision could be derived about the quality of life of refugees.

The previous research paper supports our view concerning the relationship between quality of life and psychological well-being. For instance, according to Novoa, Ballesteros de Valderrama, and Blanca Patricia (2006), from a psychological perspective, well-being

refers to mental health and good emotional health, these being considered pillars of the quality of life in different contexts. This view was supported by Diener, Oishi, and Lucas (2003) who highlighted how psychological well-being is an important way to evaluate the present and past life, and how this influences our emotional reactions to events, the way of living in the present moment and our moods. Furthermore, quality of life is considered to be an essential area of examination due to its implications for the well-being of those who live under stressful conditions. Several studies have also indicated a positive correlation between quality of life and well-being (Akinyemi et al., 2012; Tang & Fox, 2001).

However, as Tett, Steele, and Beauregard (2003) have indicated, it is possible that one domain may be responsible for the relationship that arises with one set of criteria of variables. It is even likely for two components to be correlated in adverse directions with standard variables. Based on the previous view, it is important to investigate the relationship that relate to each component of well-being with psychological health in terms of quality of life.

2.7. The research aims of Part A (Chapters Three and Four)

The studies detailed in this section are designed to investigate the quality of life and psychological well-being of Syrian refugees. Despite a growing body of literature relating to mental health, and the manifest differences between non-refugee individuals and refugees across the world, it has been noticed that the majority of studies have previously focused on measuring the quality of life with regard to short-term life engagement. Moreover, there were no studies relevant to measuring the quality of life using World Health Organization and eudaimonic psychological well-being scales relating to Syrian refugees. Therefore, the aim of the next two chapters is to examine three areas that have not previously been considered in the literature.

In brief, the subsequent chapters will involve:

- 1- Evaluating the quality of life among Syrian refugees who have entered the Kurdistan Region of Iraq and are currently settled in the refugee camps (Chapter Three).
- 2- Comparing the quality of life levels possessed by Syrian refugees with those held by refugees who have been reported elsewhere in the literature (Chapter Three).

- 3- Investigating the psychological quality of life component in terms of long-term life engagement as it is associated with psychological well-being (Chapter Four).

Chapter Three

Quality of life of Syrian refugees living in camps in the Kurdistan Region of Iraq

3.1. Abstract.

The current study explores the perceived quality of life of Syrian refugees who have entered the Kurdistan Region of Iraq. Two hundred and seventy participants residing in refugee camps in the Erbil region in Kurdistan completed the WHOQOL-BREF, which measures Quality of Life within four domains; physical, psychological, social relationships and environment. Syrian refugees in Kurdistan scored significantly lower for general population norms on physical health, psychological and environment quality of life, and score significantly lower for physical health and psychological quality of life for refugees in the Gaza strip. However, respondents in the current sample scored significantly higher on environment quality of life compared to refugees in the Gaza strip and significantly higher in all the quality of life domains than those reported for refugees in West Africa. Finally, Syrian refugees in Kurdistan scored significantly higher than general population norms for social relationships quality of life. The current findings provide the first report of quality of life domain scores among Syrian refugees in the Kurdistan camps and suggest that social relationships and environmental quality of life circumstances are relatively satisfactory and that further investigation might be focused on physical and psychological quality of life.

3.2. Introduction

The war in Syria has led to the worst humanitarian crisis of the 21st century. According to United Nations Refugee Agency figures, over 2.5 million people have fled the Syrian conflict, entering as refugees neighbouring countries of Turkey, Egypt, Lebanon, Jordan, and Iraq. The United Nations Refugee Agency (UNHCR) recorded that by the end of July 2012, 9,503 Syrians had registered as refugees in Iraq who have left Syria for a number of political, economic and social reasons. By the end of February 2013, this number had increased over 10-fold to 102,447 (UNHCR, 2013).

By February 2014, the figure stood at 225,548 (UNHCR, 2014b) and continued to increase. As of 5th March 2014, 226,934 people had registered as refugees in Iraq. The majority (around 97%) are registered in the Kurdistan Region in Northern Iraq, in and around the cities of Duhok (109,979 registered refugees), Erbil (84,881 registered refugees) and Sulaymaniyah (25,134) (UNHCR, 2014a). Around 60% of Syrian refugees are hosted in communities across Kurdistan, and the remaining 40% live in refugee camps (UNHCR, United Nations Refugee Agency, 2014a).

When Syrian refugees first began arriving in 2012, most registered in the Directorate of Duhok, near the Peshkhabour border with Syria. This led to the opening of the Domiz camp on 01 April 2012. It remains the largest permanent camp with a population of 58,500, as of 28 February 2014. In 2013, as the number of refugees seeking asylum increased, a further four permanent camps were opened in the Directorate of Erbil: Kawergosk (15 August 2013), Qushtapa (19 August 2013), Basirma (26 August 2013) and Darashakran (29 Sept 2013), with a combined population of 28,208, as of 28th February 2014 (UNHCR, 28 February 2014).

International Aid Agencies are working in collaboration with The Kurdistan Regional Government (KRG) to provide shelter, food, water, healthcare, education, and employment for Syrian refugees (UNHCR, United Nations Refugee Agency, 2014b). However, given the sheer numbers of people in need, it is an extremely, and increasingly, difficult situation to manage. Attending, for example, to the complex healthcare needs of such a large population represents a major challenge. The UN Refugee Agency records information from refugees about their physical health complaints and clinical mental health problems at the point of registration, but this is almost impossible to monitor on a follow-

up basis, given the many challenges and constraints posed by the current crisis. As a result, many psychological issues facing those who live in refugee camps are very unlikely to be addressed or detected.

Despite the profound effect of war and forced migration on people's living conditions, surprisingly little attention has been paid to the psychological impact of being a refugee. Studies that have investigated this issue have found that the prevalence of psychological illness is relatively high in refugee groups (Gerritsen *et al.*, 2006). Research suggests that poor perceived present Quality of Life may be the most significant factor in psychological illness and stress related disorders in refugee populations (Akinyemi *et al.*, 2012; Carlsson *et al.*, 2006; Fazel *et al.*, 2005; Matanov *et al.*, 2013; Tang & Fox, 2001). These findings support the World Health Organization's position concerning the importance of subjective quality of life as a measure of how an individual perceives "their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns" (World Health Organization, 1997, p.1).

At present, there is, at least, to my knowledge, no data concerning the known perceived quality of life of Syrian refugees who have entered the Kurdistan Region of Iraq. These are important issues that, given the sheer scale of the Syrian refugee crisis, have fundamental implications for the future health and well-being of a large number of people. The present study reported on the World Health Organization Quality of Life Assessment (WHOQOL-BREF) scores among Syrian refugees living in refugee camps in The Directorate of Erbil, Iraqi-Kurdistan. To provide context to the findings the WHOQOL-BREF scores among the current sample compared to other reports of WHOQOL-BREF scores among other refugee reports.

3.3. The Research Method

3.3.1. The research sample

Two hundred and seventy Kurdish nationalist refugees (135 males, 135 females), aged 18 to 60 ($M = 29.26$ years, $SD = 9.7$) from Syria, residing in refugee camps located in Kurdistan took part in the study. The sample used in this study was residing in the Erbil Governorate camps located on four sites: Qushtpa ($n = 67$), Kawrgosk ($n = 67$), Basirma ($n = 68$) and Darashakran ($n = 68$) in January 2014. At each site, the researchers split the map of the site into four zones, with the aim of obtaining around 20 respondents from each zone. In terms of selection and inclusion criteria, the researcher selected the second residence from each alley (moving on to the next residence in that alley if an interview was declined). One member of each family was chosen, who had to be 18 years old or over, and did not have special needs considerations. Equal numbers of respondents were sought from each gender, and to avoid selection bias on the part of the researcher, where there were multiple candidates in any residence for the interview, the individual with the closest birthday to the interview date was chosen.

Of these respondents, the most dominant demographic statistics were that 42.6% of respondents reported highest qualification was having completed secondary education (31.5% of respondents had completed tertiary education, and 17.4% of respondents had completed a primary education) and 58.1% of respondents reported being married (with the next highest frequency being that 40.5% of respondents were single, and 1.9% of respondents were separated).

3.3.2. The measures

The WHOQOL-BREF is the short 26-item form of the larger WHOQOL-100 assessment (WHOQOL group, 1995) that yields four quality of life domains: physical health (7 items; e.g., “How much do you need medical treatment to function in your daily life?”). Psychological quality of life (6 items; e.g., “To what extent do you feel life to be meaningful?”). Social quality of life (3 items; e.g., “How satisfied are you with your personal relationships?”), and environmental quality of life (8 items; e.g., “How safe do you feel in your daily life?”). Responses are scored via five-point response scales with various anchor statements (e.g., from 1 [*Very dissatisfied*] or [*Very poor*] to 5 [*Very satisfied*] or [*Very good*]).

3.3.3. Data Analysis

The WHOQOL-BREF can be scored in three ways; through raw scores and two transformation methods; the first that creates domain scores within the range of 4–20, and the second that creates domain scores within the range of 0–100. The WHOQOL-BREF's psychometric properties have been analyzed using cross-sectional data from 11,830 adults from 23 countries (Skevington *et al.*, 2004) and are a valid assessment across cultures and socioeconomic status (Hawthorne, Herrman, & Murphy, 2006; Skevington *et al.*, 2004).

Most Syrian refugees in these camps tend to speak the Kurdish language but have different dialects from the Iraqi Kurdish. However, they are also able to speak the Arabic language. Therefore, they were given the Arabic version of the World Health Organization Quality of Life Scale—Brief (WHOQOL-BREF). The reliability and validity of Arabic versions of the WHOQOL-BREF have been demonstrated among large Arabic-speaking samples (Ohaeri & Awadalla, 2009). On this occasion, one of the social relationships quality of life items (“How satisfied are you with your sex life?”) was removed due to concerns over the respondents’ potential sensitivity to the question. According to the WHOQOL-BREF manual, the transformational methods for scoring of the scale allows for missing items.

3.4. Ethics

The study received ethical approval from the University of Leicester’s School of Psychology Ethics Board whose ethical procedures conform to those of the British Psychological Society ([http://www.bps.org.uk/sites/default/files/documents/code of human research ethics.pdf](http://www.bps.org.uk/sites/default/files/documents/code%20of%20human%20research%20ethics.pdf)). The Ethics Reference for the Ethics Board was jm148-851fa. All participants were 18 years of age or over and provided free and informed consent to take part in the study. Formal procedures and permission to visit the camps were given by the General Director of Academic Missions and Cultural Relations and the Democracy and Human Rights Research Institute.

3.5. The results

We found two reports of mean statistics for scores on the WHOQOL-BREF from refugee samples that were not from a clinical population. These reports were from samples from refugee populations residing in West Africa (Akinyemi *et al.*, 2012) and the Gaza Strip (Eljedi *et al.*, 2006). Together, with the overall norm data for the WHOQOL-BREF from 11,830 adults from 23 countries (Skevington *et al.*, 2004), these three reports provided information to facilitate statistical mean score comparisons between the current sample and three other samples see Table 1.

Table 1 Mean (SD) score comparisons for WHOQOL-BREF domain scores (range 4-20) between Kurdistan refugees and adults across 23 countries (n = 11,830) from Skevington *et al.* (2004).

| | Syrian Refugees in Kurdistan (n = 270) | | Adults across 23 countries (n = 11,830) | | | |
|----------------------|--|------|---|------------|-----------|------|
| | Transformed Scores (4-20) | | | | | |
| | Mean | SD | Mean | SD | t | d |
| Physical Health | 13.26 | 2.45 | 16.2 | 2.9 | -19.41*** | 1.20 |
| Psychological | 12.62 | 2.45 | 15.0 | 2.8 | -15.73*** | 0.97 |
| Social Relationships | 15.23 | 2.82 | 14.7 (14.3) ^a | 3.7 (3.2) | 2.99** | 0.18 |
| Environment | 11.66 | 2.39 | 13.5 | 2.6 | -12.48*** | 0.77 |

* p < .05; ** p < .01; *** p < .001

^a Original mean (SD) scores provided by Skevington *et al.* (2004) in brackets.

Table 1. Shows a set of mean comparisons between Syrian refugees in Kurdistan and overall norm data for the WHOQOL-BREF. This comparison uses transformed domain scores within a range of 4-20. As our sample data has a missing item, we recomputed the mean/SD score for social relationships quality of life for the general population norm data using the frequency responses that have been provided for these two social relationship

items (Skevington *et al.*, 2004). In this table, we also provide effect sizes for the comparisons computed for unequal sample sizes, for which $d \geq .8$ represents a large effect size, $.5 \leq d < .8$ represents a moderate effect size, and $.2 \leq d < .5$ represents a small effect size (J. Cohen, 1988).

In terms of the comparison with the norm data, the refugees residing in Kurdistan scored significantly lower on physical health, psychology and environment quality of life, but significantly higher on social relationships quality of life. In terms of effect size, the differences for physical health and psychological quality of life are of a large effect size, the differences for the environment quality of life are of a moderate effect size, but the difference reported for social relationships quality of life does not even meet the criteria of a small effect size. Table 2.

Table 2 Mean (SD) score comparisons for WHOQOL-BREF raw scores between Syrian refugees residing in Kurdistan and refugees residing in West Africa

| | Refugees in Kurdistan (n =270) | | Refugees in West Africa Akinyemi <i>et al.</i> (2012) (n= 444) | | | |
|----------------------|--------------------------------------|------|--|------|----------|----------|
| | Raw Scores | | | | | |
| | Mean | SD | Mean | SD | <i>T</i> | <i>d</i> |
| Physical Health | 23.21 | 4.29 | 19.45 | 4.18 | 11.47* | 0.89 |
| Psychological | 20.30 | 3.62 | 16.86 | 4.04 | 11.78* | 0.91 |
| Social Relationships | 10.10 ^a | 2.25 | 8.66 | 2.59 | 7.83* | 0.60 |
| Environment | 22.85 | 4.62 | 18.88 | 5.03 | 10.76* | 0.83 |

Note / * $p < .001$

^a Raw score for 2 items is weighted for comparison against a 3 item score.

Table 2 shows the comparison with the first of the two refugee samples, refugees resident in West Africa (Akinyemi *et al.*, 2012). For this sample, mean scores were presented as raw scores. Therefore, we have presented mean scores for the Syrian refugees in accordance with this. Across all domains of the quality of life scale, the refugees residing

in Kurdistan scored significantly higher than those reported in West Africa, with these differences ranging from a moderate effect size (social relationships quality of life) to a large effect size (physical health, psychological and environment quality of life).

Table 3 Mean (SD) score comparisons for WHOQOL-BREF transformed scores (0–100) between Syrian refugees residing in Kurdistan and refugees residing in the Gaza strip.

| | Refugees in Kurdistan (n =270) | | Refugees in the Gaza strip Eljedi <i>et al.</i> (2006) (n=197) | | | |
|----------------------|--------------------------------------|-------|--|-------|----------|----------|
| | Transformed Scores (0-100) | | | | | |
| | Mean | SD | Mean | SD | <i>t</i> | <i>d</i> |
| Physical Health | 58.12 | 15.45 | 75.9 | 20.92 | - 9.31* | 0.87 |
| Psychological | 53.82 | 15.35 | 70.0 | 21.65 | - 9.02* | 0.85 |
| Social Relationships | 70.41 | 17.61 | 71.4 | 19.48 | - 0.57 | 0.05 |
| Environment | 46.58 | 15.15 | 36.2 | 20.20 | 6.11* | 0.57 |

Note / * $p < .001$

Table 3 shows a comparison with a second refugee sample, residents in the Gaza Strip (Eljedi *et al.*, 2006). For this study, mean scores were presented as transformed domain scores with a range of 0-100. Therefore, we have presented the mean scores for the Syrian refugees in accordance with this. For the physical and psychological domains, the refugees residing in Kurdistan scored significantly lower than for those refugees in the Gaza Strip, with these differences being of a large effect size. For the environment, quality of life domain refugees residing in Kurdistan scored higher than for those refugees in the Gaza Strip with this difference being of a moderate effect size. No significant difference was found between Syrian refugees in Kurdistan and refugees residing in the Gaza strip for the social relationships quality of life.

3.6. Discussion

The current findings suggest the quality of life among Syrian refugees in Kurdistan falls largely within a range of quality of life scores that have been reported from other samples. In summary, the scores among the current sample are: (a) statistically significantly lower than general population norms (Skevington *et al.*, 2004) for three quality of life domains (physical, psychological and environment) and Gaza Strip refugees (Eljedi *et al.*, 2006) on two quality of life domains (physical and psychological); and (b) statistically significantly higher than West Africa refugees (Akinyemi *et al.*, 2012) on all the quality of life domains, Gaza Strip refugees on one quality of life domain (environment), and general population norms on one domain (social relationships).

A key finding from these comparisons is that Syrian refugees score higher than general population norms on social relationships of the quality of life. At face value, this suggests that Syrian refugees report being satisfied with their personal relationships and friendships more than those in the general population. The explanation for this difference may be that the current sample comprises many individuals who have moved away from the conflict in Syria with their family and friends. Therefore, the higher scores reflect a shared experience and purposeful support within a current social network that has been heightened in the context of the current conflict, whereas this level of social support, which would not necessarily be present for many members of a general population as it, would not be required. It is worth noting that the statistical effect size of this higher score is negligible (a magnitude that is less than small [$d = .2$]) and, therefore, any statistically significant difference could be attributed to sample size.

Moreover, there may be a concern about making the comparison while omitting of one of the items from the scale, although the scoring of the WHOQOL-BREF allows for the omission of items, and we have made a comparable alteration to the population mean scores. Notwithstanding those caveats, the current findings suggest that, even if the statistically significant higher difference is not robust, the social relationships scores compare favourably (by not being statistically significantly lower as with the other quality of life domains) to the population mean.

Another key finding is that Syrian refugees scores higher on environment domain of quality of life than the other two refugee samples. This suggests that those respondents in

the Kurdistan camps are relatively more satisfied with the living conditions and access to health and transport services to respondents from the other two refugee camps at the time of those surveys. Therefore, it seems that the environmental provisions made by the United Nations Refugee Agency in the camp could be viewed as favourable.

The findings seem to invite special attention for further research among Syrian refugees in terms of the physical and psychological quality of life domains, largely because these scores are lower to a large effect size than those means reported among Gaza Strip refugees. It is likely that the recency of the conflict in Syria and movement to the refugee camps has led to heightened levels of health and psychological problems, however, as lower physical and psychological quality of life can be indicative of stress-related disorders (Carlsson *et al.*, 2006; Fazel *et al.*, 2005) this requires further investigation. Therefore, this finding indicates that if there is a current concern for policy makers or researchers, there may be a need to prioritize aspects of physical and psychological quality of life among Syrian refugees.

Despite these speculations, it is important that seeking any exacting social or policy analysis in these comparisons is mostly redundant to the immeasurable variance in the nations, context and time periods considered. However, the current findings do provide some key indicators to the quality of life among Syrian refugees in Kurdistan, in terms of comparisons to the general population and other refugee camps. Namely, social relationships and environmental domain of quality of life circumstances are relatively satisfactory, but if further investigation is needed, then a key focus might be the consideration of physical and psychological quality of life.

Chapter Four

The association between psychological quality of life scores and psychological well-being among Syrian refugees

4.1. Abstract

This study aims to explore the link between the quality of life and psychological well-being among the Syrian refugees who live under stressful conditions. Previous findings have suggested that some aspects of the self-reported quality of life among the Syrian refugees in the Kurdistan Region of Iraq are satisfactory compared with samples obtained from other refugees (Aziz et al., 2014). However, Aziz *et al.* (2014) suggest that further research into the psychological quality of life domain of Syrian refugees might be necessary. This is largely because these scores are much lower than those reported by other studies on refugees. Ryff's eudaimonic model of well-being across six components was profiled with the quality of life measure. One hundred and fifty individuals were selected from the refugees' camps in Erbil. The results show that a significant relationship exists between the psychological quality of life and environmental mastery and positive relations with others. Multiple regression analysis suggests that environmental mastery and positive relations with others predict a unique variance in psychological quality of life, after controlling for some demographic and health variables. The current findings suggest that two key psychological mechanisms are related to the psychological quality of life among the Syrian refugees in the Kurdistan Region of Iraq. These findings might be important indicators of possible factors to explore when considering or promoting the psychological quality of life of refugees.

4.2. Introduction

American Psychological Dictionary defines the term ‘well-being’ as “*a state of happiness and contentment, with low levels of distress, overall good physical and mental health and outlook, or good quality of life*” (VandenBos, 2015. p 1154). A growing body of research recognizes the importance of well-being to human growth and attempts to understand the concept of well-being from a perspective of positive psychology. Well-being is typically categorized as two distinct, but related constructs; psychological well-being and subjective well-being.

4.2.1. Overview of psychological well-being

As a concept, psychological well-being initially related to self-adjustment and healthy human functioning (Keyes et al., 2002). It is also associated with an individual’s growth and their existential challenges of life measuring well-being for long-term life engagement (Chen et al., 2013; Lindfors & Lundberg, 2002; Ryff, 1989b). Several theories provided different forms of psychological well-being. For example, research by Ryan and Deci (2001) conceptualized psychological well-being within the self-determination theory (SDT) The SDT basically proposes three fundamental psychological needs – autonomy, relatedness, and competence – that work as a motivating factor in helping individuals to attain psychological well-being.

Ryff (1989b) also proposed a relatively unique and broader multidimensional aspects of psychological well-being called eudaimonic well-being. Eudaimonic well-being refers to human growth and existence of life challenges that could be achieved by having a meaning and purpose in one’s life while seeking to attain self-actualization. Within this multidimensional model, psychological well-being is conceptualized as including six dimensions relating to human functions. Furthermore, in order to construct psychological well-being model, Ryff (2014) conducted an extensive research by considering variety of theories and research pertaining to positive human functioning. Moreover, Ryff (1989a; 2014) has drawn attention to the idea that psychological well-being could determine life cycle changes, demonstrating that psychological well-being can measure long-term life engagement from a positive perspective. Within the Ryff’s framework, psychological well-being can be best presented with six different but related components. These factors are

self-acceptance, positive relations with others, environmental mastery, autonomy, purpose in life and personal growth.

Each of the domains is presented as follows. First, **self-acceptance** refers to seeking a joyful and pleasant life achievement, despite any potential life restrictions. **Positive relations with others** signifies to improve strong, warm and trustful relationships with other people. **Environmental mastery** involves the ability of reformatting the environment in favor of personal needs. **Autonomy** is associated with seeking to protect individuality and social conditions where people tend to have personal authority and self-determination. **Purpose in life** presents discovery of meaning in life and being active to identify and cope with life challenges. **Personal growth** characterizes individual's lasting development in their capacities and talents (Ryff, 1989a; Ryff, 1989b; Ryff & Keyes, 1995) Moreover, Ryff (2014) suggested that each of these dimensions has a notable contrast to indicate the extent to which an individual has a positive feeling. It is clear from Table 4 that these domains considered a range of senses that recorded high and low scores, focusing on being happy, feeling good, and satisfied with life or feeling positive.

Table 4: Psychological well-being domains, considering high and low scores for feelings

| Psychological well-being dimensions | High scorer | Low scorer |
|-------------------------------------|--|--|
| <i>Autonomy</i> | Has the ability to resist social pressure and behave in a doubtless way while evaluating self through personal criteria. | Considers others' judgments and feels under social pressure to act or think in specific ways. |
| <i>Environmental mastery</i> | Is aware of a self-ability to manage the environment while controlling the external activities and choosing or creating conditions suitable to personal needs. | Has difficulty in managing everyday needs and feels powerless to improve or change the external surroundings. |
| <i>Personal growth</i> | Has the ability to grow and expand with a feeling of continuous development to achieve his or her potential through more activities and self-knowledge. | Has a feeling of personal stagnancy while lacking a sense of amelioration or development over time. |
| <i>Positive relations</i> | Has satisfactory and trusting relationships with others; also, has strong sympathy, intimacy, and affection while building successful social networks. | Has a few poor social relationships and faces difficulties having warm or open relations. Worried about others and prefers isolation in interpersonal relationships. |

| | | |
|------------------------|---|---|
| <i>Purpose in life</i> | Has clear goals in life and feels that there is a meaning to past and present life, which introduces the purpose of life and the objectives of living. | Has few goals with a poor sense of meaning in life; has no outlook or faith in the meaning in life. |
| <i>Self-acceptance</i> | Is self-satisfied and has a positive attitude towards self; also, understands the diverse aspects of self, including good and bad features, and feels confident about the experience. | Is disgruntled with self and has a sense of shame about past life. |

Through reviewing extensive research that proliferated around psychological well-being Ryff (2014) found a great deal of previous research into psychological well-being are investigated lots of different questions such as how these various changes well-being change with moving across the age, how psychological well-being is associated with other variables like personality traits, and to how extent well-being help to build bridges in the family life, work and healthcare.

4.2.2. Subjective well-being illustrated through quality of life

Subjective well-being exemplifies the hedonic tradition. It refers to short term pleasant aspects of human existence such as happiness and quality of life (Diener, Larsen, Levine, & Emmons, 1985; Ryan & Deci, 2001). Subjective well-being also consists of life satisfaction, including an individual's global cognitive evaluation of the quality of their lives, and emotions reactions, relative higher frequency of positive affect over negative affect (Andrews, Robinson, & Wrightsman, 1991; Campbell, 1981; Diener, 1984).

There is some evidence showing convergence of quality of life and subjective well-being. This is well-exemplified by Diener (2006, p 153) who defined subjective well-being as "*an umbrella term for different valuations that people make regarding their lives, the events happening to them, their bodies and minds, and the circumstances in which they live.*" This definition clearly refers to values and life circumstances, and shows similarities with the WHOQOL definition. Therefore, Camfield and Skevington (2008) concluded that the subjective well-being definition strongly converges with the WHO definition of quality of life (WHOQOL group, 1995).

Additionally, Wilson and Cleary (1995) characterized the quality of life as subjective well-being referring to an individual's happiness and life satisfaction. Keyes *et*

al. (2002) also argued that subjective well-being is more likely to present a global assessment of the quality of life. The researchers believe that subjective well-being can be a good indicator of the quality of life because it measures unique expectations, values, and previous experiences (Diener, 1984; Diener & Suh, 1997). Therefore, previous research suggested that the quality of life may also refer to the subjective well-being using to measure individuals' well-being for a short period (Chen *et al.*, 2013; Keyes *et al.*, 2002; Maltby, Day, & Barber, 2005).

Although the quality of life is initially considered to be an adjunct of health concepts (Ferrans, Zerwic, Wilbur, & Larson, 2005), it became a perfect predictor to measure psychological health (Fayers & Machin, 2000), physical health and social functions, in an attempt to assess wider meaning of life quality (Carr, Higginson, & Robinson, 2003; Group, 1998). According to Saxena, Orley, and WHOQOL Group (1997), quality of life is related to people's perception of their life position in cultural context, it is also connected to the individual's goals that they seek to accomplish their life tasks. Research pay attention to address health dissimilarities among people to raise the profile of the quality of life in an attempt to make it international goals.

4.2.3. Distinction between subjective well-being and psychological well-being

Several studies have investigated the relationship between subjective well-being and psychological well-being. For instance, Keyes *et al.* (2002) pointed out that the two concepts appear to be related, but in fact, they are two distinct constructions of well-being. Although these structures are significantly relevant to one another, each of them follows a unique tradition of overall well-being. Moreover, both concepts are extremely important in terms of understanding well-being comprehensively (Chen *et al.*, 2013; Keyes *et al.*, 2002). Some studies have indicated that there is an overall positive correlation between quality of life and well-being (Akinyemi *et al.*, 2012; Tang & Fox, 2001). However, considering that quality of life and psychological well-being and theoretically relevant constructs with one another by sharing some common variance, Tett, Steele, and Beauregard (2003) argued that it is possible that one domain pertaining to each of the constructs may be responsible for the occurring significant relationship. It is even possible that the two components can be correlated with each other in adverse directions with standard variables. These are the

evidences showing that it is important to investigate the correlations relating to each component of well-being with the psychological quality of life.

Diener *et al.* (2003) pointed out health condition could assess as an important factor to establish psychological well-being, as such; it may consider being a strong determinant of quality of life. This perspective of health and well-being can be grouped to establish three domains of quality of life by donating people's perception of quality of life in each particular domain. The first domain comprises of psychological component relating to individual's cognitive and emotional situation ranging from meaning in life to the frequency of positive and negative feelings. The second domain is physical health associated with general physical health such as sleep, physical pain and performance of necessary task in daily living activities. The final domain involves social relationships where individual focus on interpersonal relationships, social roles, social support and sexual satisfaction. Thus, since the WHOQOL is a multi-dimensional measure and includes a psychological component, it is useful to apply as an assessment of measuring psychological well-being among Syrian refugees.

4.2.4. Previous findings and the aims of the study

Recent evidence suggests that studying the quality of life of individuals who live under stressful conditions might be useful in providing a clear understanding of their mental health and a better perception of their life quality (Akinyemi *et al.*, 2012; Martin-Herz, Zatzick, & McMahon, 2012). Quality of life index could be considered a good scale to assess the impact of ill health or psychological distress (Jenkins, Hoste, Meyer, & Blissett, 2011). Thus, quality of life index has been widely used to examine individuals in poor health conditions (Guyatt, Feeny, & Patrick, 1993; Heins *et al.*, 2016; Knudsen, Eidemak, & Molsted, 2016). However, research addressing life quality and well-being among displaced people clearly demonstrated that the risk of mental illness increases due to the poor humanitarian conditions (Abebe, Lien, & Hjelde, 2014; Schick *et al.*, 2016).

Although some national and international organizations provide basic needs and preventive aids to refugees, they are mainly unable to fully meet the needs of such displaced people. Due to living under the stressful life conditions, that raises the risk of psychological health. Therefore, this raises the importance of studying quality of life

among refugees. (Taloyan, Johansson, Saleh-Statinn, & Al-Windi, 2011). With regard to this, some studies indicated that refugees live in highly stressful conditions that might make them vulnerable to mental illness as a result of their traumatic experiences (Akinyemi et al., 2012; Fazel et al., 2005; Tang & Fox, 2001) alongside being under the high risk of suffering psychological illnesses. (Ekblad & ROTH, 1997; Tang & Fox, 2001).

Furthermore, several recent studies have pointed out that refugees who live under threat reported low levels of psychological health (Aziz et al., 2014; Panter - Brick et al., 2014, see chapter 2). Therefore, while providing basic needs of refugees, it is also essential to pay attention to their welfare and psychological care in order to support their psychological health. This would promote a better understanding of psychological health of refugees.

With this in mind, examining the quality of life among Syrian refugees would provide scientific evidence in an attempt to encourage governmental and non - governmental organizations pays more attention to psychological needs of those who live in refugee camps. Although there is a few studies showing that Syrian refugees have lower levels of psychological quality of life compared with other refugees in different places, such as the Gaza Strip and the West of Africa (Aziz et al., 2014), evidences are limited. Therefore, due to the lack of scientific evidence regarding Syrian refugees' quality of life and psychological well-being, with a large extent of displaced persons, this study would provide important implications for the overall future health and well-being of individuals living under the stressful conditions. Given that the importance of the previous finding have revealed that Syrian refugees have lower levels of psychological quality of life domain compared with other refugees in different places, such as the Gaza Strip and the West of Africa (Aziz *et al.*, 2014).

Accordingly, the aim of this study is to explore the link between the quality of life and psychological well-being among the Syrian refugees who live under stressful conditions. It is also important to understand this link through well-being that would be beneficial to understand the high and low levels of quality of life within the refugee sample regarding the wider context of well-being. This understanding would help to explain the nature of the high and low scores on the quality of life psychological health index and perhaps reveal the reasons why refugees recorded these scores Although quality of life and

psychological well-being are two different approaches, but theoretically related conceptualizations of well-being, psychological well-being might be an appropriate candidate for providing a better understanding of psychological quality of life. Therefore, examining psychological well-being in conjunction with quality of life could be advantageous in providing a better perception of refugees' well-being with regard to longer-term life engagement. From this perspective, there might be some significant findings that can lead us to have a better understanding of the subjective quality of life regarding the psychological well-being model and this may provide a better perception of the refugees' living conditions.

Despite the enormous number of refugees in the world, studies relating to their psychological well-being of the refugees seem to remain scarce, and there are only a few studies related to psychological well-being among the refugees in the literature. Since the conflict in Syria began in 2011, and during searching the literature it has been noticed that there is a lack of psychological prior research studies related to the Syrian refugees and this might be because, fundamentally conducting a study on the refugees have many challenges like, First, ongoing conflict and the difficulty getting a permission to contact with this group makes the researcher has a problem to accept this type of population to run a study. Second, the lack of the ability to control the research process by controlling access to apply a study with the timing issue and the place of contacts might affect negatively of finishing the study (Mackenzie, McDowell, & Pittaway, 2007). Therefore, this group requires more attention and researchers need to undertake more studies relating to psychological well-being. This would also help us to gain a better understanding of the link between psychological quality of life and psychological well-being and how this relationship is might be differences between male and female. This study also aims to examine which aspects of psychological well-being predict unique variance in psychological quality of life after controlling for some demographic variables. This would help us to explain how psychological well-being can be understood within the psychological quality of life.

4.3. Method

4.3.1. The research sample

The respondents consisted of one hundred and fifty (75 males, 75 females) Syrian refugees from the refugee camps in Erbil, Kurdistan camps located in Qushtpa, Kawrgosk, Basirma and Darashakran in January 2014. Ages ranged from 18 to 60 ($M = 28$ years, $SD = 9.5$). A representative sample was selected for the study in order to ensure that all relevant types of refugees are included in the sample in an attempt to eliminate participant-related bias. Four camps were selected and each camp was divided into four zones and between 9 and 10 individuals were chosen from each of the zones. A total of between 37 and 38 participants were chosen from each of the camps. Demographic information such as gender, age, education level and marital status was collected from each participant. In addition, the interview was only conducted after all ethical issues had been considered and consent forms signed by the participants. Since the target sample also included some illiterate participants and participants with low levels of educational background, items in each of the measures used in the study were read it for those participants by the researchers and answers from the participants were recorded.

The manual published by the World Health Organization (1996) suggested that to apply the quality of life scale; it is necessary to select an equal number of male and female for the research sample. With regard to education two of the four groups recorded high levels of education, in particular, 47% of the respondents reported as completing secondary education, while 36% of the sample reported as completing a tertiary level of education. Regarding marital status, 52% of participants reported as being single while 47% total participants were living as married. Furthermore, concerning health, 59% of the respondents reported as having healthy lives, and the majority of participants (95%) reported no health issues at all.

The study was performed in the camps at participants' convenient time. All participants provided an informed consent form, where they informed that their responses would remain confidential, before taking part the study. Gaining access to the camps for conducting the research was also obtained from the General Director of Academic Missions and Cultural Relations Cooperating with the Democracy and Human Rights Research Institute (DHRI) and Public Aid Organization (PAO).

4.3.2. Measures

4.3.2.1. Psychological quality of life

The World Health Organization Quality of Life (WHOQOL-BREF; WHO, 1997) is a 26-item questionnaire derived from the WHOQOL-100 and a widely used assessment to measure four domains of quality of life; physical health, psychological quality of life, environmental health, and social relationships. Psychological quality of life domain was used, for further detail about the scale look at section 3.3.2 of the chapter three.

4.3.2.2. Psychological well-being

PWB was assessed with 18-item scales of psychological well-being. The scale consists of six subscales: autonomy, positive relations with others, environmental mastery, personal growth, purpose in life and self-acceptance. The original measure of psychological well-being included 120 items, but Ryff also created three different versions of the scale. The second format consisted of 84 items, the third comprised 54 and the last had 42. . Although there are other versions of the PWB scales, the 18-item scale is used for cross-cultural surveys, the scales showed good psychometric properties (Burns & Machin, 2009; Ryff & Keyes, 1995; Springer & Hauser, 2006).

In this study, the short version of the Ryff scale is used across six subscales, including 18 items as follows:

- Autonomy with three items (e.g., “I have confidence in my opinions, even if they are contrary to the general consensus”).
- Environmental mastery with three items (e.g., “In general, I feel I am in charge of the situation in which I live”).
- Personal growth with three items (e.g., “For me, life has been a continuous process of learning, changing and growth”).
- Positive relations with others with three items (e.g., “People would describe me as a giving person, willing to share my time with others”).
- Purpose in life with three items (e.g., “Some people wander aimlessly through life, but I am not one of them”).

- Self-acceptance with three items (e.g., “I like most aspects of my personality”) (Springer & Hauser, 2006). To the best of our knowledge, there was no adaptation of 18-items PWB into Arabic language at the time of conducting the study. Therefore, the scale was translated from English to Arabic. Language equivalency of the scale was reviewed by bilingual experts and reliability analysis was assured before conducting the study.

4.3 Ethics

The study procedure received ethical approval from the University of Leicester Psychology Ethic Board. The ethical protocols was in accordance with principles set out in the codes of Ethical Guidelines for Psychological Research of the British Psychological Society (http://www.bps.org.uk/sites/default/files/documents/code_of_human_research_ethics.pdf).

4.4 Results

4.4.1 Descriptive statistics

the score of the psychological quality of life measure was analysed and compared with six subscales contained within the concept of psychological well-being. In addition, the demographic variables were calculated. The results related to the psychological quality of life and the six subscales in the psychological well-being measure. Descriptive statistics of the research sample were analysed. Table 5 illustrates the descriptive statistics of the study variables, including the Cronbach’s alpha score, mean, median, standard deviation, Skewness and kurtosis.

Table 5: Cronbach’s alpha score obtained in the domains of psychological quality of life and psychological well-being

| WHOQOL-BREF Raw scores (Scale from 1 to 5) | | | | | | |
|--|----------|-------|--------|------|----------|----------|
| | α | Mean | Median | SD | Skewness | Kurtosis |
| Psychological quality of life | .73 | 20.73 | 21.00 | 3.51 | -.41 | -.49 |
| Psychological well-being domains (Scale from 1 to 6) | | | | | | |
| Domains | α | Mean | Median | SD | Skewness | Kurtosis |
| Autonomy | .61 | 11.35 | 12.50 | 2.56 | -.10 | .20 |
| Environmental Mastery | .76 | 12.82 | 13.00 | 3.17 | -.19 | -.83 |

| | | | | | | |
|--------------------|-----|-------|-------|------|------|------|
| Personal Growth | .68 | 12.88 | 13.00 | 2.45 | -.63 | 1.73 |
| Positive Relations | .66 | 11.39 | 11.00 | 3.05 | .30 | -.82 |
| Purpose in Life | .70 | 12.41 | 11.00 | 3.23 | -.22 | -.49 |
| Self-Acceptance | .80 | 12.65 | 12.00 | 3.24 | -.44 | .32 |

4.4.2 Bivariate correlation

Product moment coefficient is used to identify the relationship between the psychological quality of life and psychological well-being domains. A Pearson correlation assessed the relationship between the six dimensions of psychological well-being and psychological quality of life component of quality of life. Table 6 presents an analysis, illustrating the correlations between all the variables.

Table 6: Pearson's correlation coefficient between psychological well-being and psychological quality of life

| Component | Pearson Correlation | Strength of Correlation | Significance |
|--------------------------------------|---------------------|-------------------------|--------------|
| psychological quality of life | | | |
| Autonomy | .04 | None | P=0.66 |
| Environmental mastery | .29** | Medium | p<0.001 |
| Personal Growth | -.04 | None | P=0.64 |
| Positive Relation with others | .31** | Medium | p<0.001 |
| Purpose in life | -.12 | None | P=0.15 |
| Self –acceptance | -.06 | None | P=0.49 |

* Significant at p<0.05 (2-tailed). ** Significant at p<0.01 (2-tailed)
Strength of the correlation based on guidelines by (McGrath & Meyer, 2006).

As observed in Table 6, significant positive correlations were found for the psychological quality of life subscale with the two dimensions of psychological well-being. The results show a significant correlation with the environmental mastery and the positive relations with others domains. Nevertheless, the results show a non-significant correlation with autonomy, the purpose in life, self-acceptance, and personal growth domain. To interpret the correlation coefficient to represent the effect size between psychological quality of life, and the environmental mastery and the positive relations with others domains, the stands out from the results of the relationship between both variables are medium.

The Z-Score is used to examine the extent to which gender effect the relationship between psychological well-being and psychological quality of life. As such, is psychological well-being more important predictor of psychological quality of life for men or women? Table 7 shows the results of the differences in correlation of environmental mastery component and psychological quality of life between male ($r = .48$) and female ($r = 0.15$) ($Z = 2.24$; $P. \text{ value} = 0.03 < p.05$) suggesting that the relationship is larger for males than females. As well, the differences in correlation of positive relations and psychological quality of life male ($r = .59$) and female ($r = 0.05$) ($Z = 3.79$; $P. \text{ value} = .00 < p.05$), suggesting that the association is larger for males than females

Table 7 Male and female correlation and Z-Score of significance of the difference between the Correlations of psychological quality of life and psychological well-being components according to gender.

| Psychological well-being | Psychological Quality of life | | | |
|--------------------------|-------------------------------|--------|---------|----------|
| | <i>r</i> | | Z-Score | P. value |
| | Male | Female | | |
| Autonomy | 0.13 | -0.04 | 1.01 | 0.31 |
| Environmental mastery | .48** | 0.15 | 2.24 | 0.03 |
| Personal growth | 0.01 | -0.08 | 0.57 | 0.57 |
| Positive relations | .59** | 0.05 | 3.79 | 0.00 |
| Purpose in life | 0.02 | .26* | -1.46 | 0.14 |
| Self-acceptance | 0.02 | -0.14 | 0.98 | 0.33 |

*. Correlation is significant at the .05 level.

**. Correlation is significant at the .01 level

4.4.3 Multiple regression

To further discover the relationship between psychological quality of life and the six domains of psychological well-being, multiple regressions were performed examining the predictive power of psychological quality of life with the six domains of well-being. Table 8 presents psychological quality of life as dependent variable and all the psychological well-being scales as predictor variables. Multiple regressions were performed. The interactions between two continuous grades were also included. In the first

step (Model 1), demographic variables were entered, including gender, age, education, marital status, health status and illness status. The second step (Model 2) comprised psychological well-being domains, including environmental mastery, autonomy, positive relations with others, self-acceptance, personal growth and purpose in life.

Table 8 Regression analysis with psychological quality of life as a dependent variable, and gender, age, education, marital status, health, and illness status, and psychological well-being as predictor variables

| Psychological quality of life | | | | |
|--------------------------------|-------|------|-------|-----|
| Step 1 | B | B | t | Sig |
| Gender | -.36 | -.05 | -.55 | .59 |
| Age | -.02 | -.06 | -.47 | .64 |
| Education | -.40 | -.10 | -1.13 | .26 |
| Marital status | .85 | .14 | 1.34 | .18 |
| Health status | -.16 | -.04 | -.41 | .68 |
| Illness status | -1.79 | -.12 | -1.22 | .23 |
| Step 2 | B | B | t | Sig |
| Gender | -.42 | -.06 | -.68 | .50 |
| Age | -.03 | -.08 | -.66 | .51 |
| Education | -.55 | -.13 | -1.54 | .13 |
| Marital status | .86 | .15 | 1.40 | .16 |
| Health status | -.04 | -.01 | -.10 | .92 |
| Illness status | -.74 | -.05 | -.52 | .61 |
| Autonomy | .03 | .02 | .25 | .80 |
| Environmental mastery | .31 | .28 | 2.94 | .00 |
| Personal growth | -.05 | -.04 | -.44 | .66 |
| Positive relations with others | .22 | .19 | 2.15 | .03 |
| Purpose in life | -.17 | -.16 | -1.97 | .05 |
| Self-acceptance | -.42 | -.06 | -.68 | .50 |

Table 8 highlights the results of examining the data using the multiple regressions for the psychological quality of life variable in the first stage (Model 1) of the regression analysis of the control variables that include sex, age, education level, marital status, health status and illness status. The results of the regression analysis of psychological quality of life were: ($F [6,143] = 1.062$, $r = .21$, $r^2 = .04$, $\text{adj } r^2 = .002$, $p > .05$). Non-significant predicting was recorded with all demographic variables and the health and illness status variables. In the second stage (Model 2), after inserting the six components of psychological well-being, a statistically significant change indicated R^2 for psychological quality of life ($F [6,137] = 7.34$, $r = .63$, $r^2 = .39$, $\text{adj } r^2 = .34$, $p < .001$). Environmental mastery and positive relations with others components accounted for a unique variance in Psychological quality of life. However, surprisingly, other domains of psychological well-being did not show any unique variance with the psychological quality of life.

4.5 Discussion

The present study aimed to examine the relationship between psychological quality of life and psychological well-being across six components – autonomy, environmental mastery, self-acceptance, positive relations with others, personal growth and purpose in life – among Syrian refugees in the north of the Kurdistan Region of Iraq. By reviewing previous studies, a variation in the research results in terms of the nature of the relationship between well-being and quality of life was noticed. For instance, several studies reported a non-significant correlation between quality of life and well-being (Cotton, Levine, Fitzpatrick, Dold, & Targ, 1999; Nyklícek & Kuijpers, 2008; Verdugo Alonso, Arias Martínez, Gómez Sánchez, & Schalock, 2010). In the same vein, Damasio *et al.* (2013) pointed out that, there is no determining effect of well-being to evaluate the quality of life.

The findings of other studies, however, presented different results. For example, de Castro *et al.* (2012) suggested that there is a significant correlation between quality of life and well-being and both variables show positive results in respect of health among cancer patients. Furthermore, clinical studies show that quality of life has a positive correlation with well-being (Gómez, Gutiérrez, Castellanos, Vergara, & Pradilla, 2010b). Moreover, Akinyemi *et al.* (2012) highlighted the value of the association between quality of life and psychological well-being among Nigerian refugees.

The key finding of the current study shows the significant relation between the psychological quality of life of Syrian refugees and the environmental mastery and positive relations with others domains of psychological well-being. To express the association between environmental mastery and psychological quality of life, it could be said that an awareness of a self-ability to manage the environment and control, choose or create conditions suitable to one's personal needs could help an individual to be healthier and to attain a high quality of life. From this result, it could be concluded that if the refugees are able to manage their life conditions, they will perhaps have better mental health and achieve a good quality of life.

To look at the results from the gender perspective reliable variance between men and women in relation to well-being were indicated and to determine whether two correlation coefficients of the psychological quality of life and psychological well-being components are significantly different from each other z-score were addressed. The results show that the males are recorded the highest score in the correlation of psychological quality of life with environmental mastery and having positive relations with others than females, which means the males could have a sense of the ability to have an influence on the events in the life with building strong relationships better than females. The possible explanation for this results could attribute to the social and institutional structures that help men to resistance under stress condition and the social construction of men as the stronger sex. This advantage probably would give the men the more space to move more freely in the refugee camps compare with the women and provide greater opportunities for men to establish social relations in the camps. As well, the previous studies have revealed evidence of gender differences, for instance Pinquart and Sörensen (2001) pointed out that with stressful condition female are more likely records poor level of well-being compare with male. The result form cross-cultural study also show that women have lower rates in relation to well-being and mental health (Maccoby, 1998).

In the main, the results illustrates that a positive social network may afford the opportunity to improve one's psychological quality of life. Accordingly, it could be said that positive relations will almost certainly help the refugees to obtain social support from

their families and friends and this support may contribute to an increase in psychological resistance in adverse conditions. Helgeson (2003) demonstrated that social support has significant effectiveness when individual experiences high levels of stress as it works as a buffer against the adverse impact of stressful conditions. Also, with reference to assistance from the social environment, Lewis *et al.* (2001) established that a supportive social network seems to play an important role in mitigating the influence of traumatic life events. Furthermore, Young, Russell, and Powers (2004) concluded that socially supportive relations that contribute to improving feelings of safety are associated positively with physical and mental health. This result is not surprising because when individuals have satisfactory and trusting relations with others, they will build strong empathy and be able to understand the give and take of human relationships; knowing this will perhaps lead to an enhancement of their quality of life levels.

These two factors might have the strongest link to raising life quality. The main focus of this result is to help researchers determine the extent to which social relations and the ability to manage the physical and social environment might influence the quality of life. To anticipate the relationship between quality of life and psychological well-being, these concepts should be considered along together to ensure a wider understanding of human welfare in difficult life conditions. In the overall, these findings are important for the human rights organizations and governments that are responsible for sheltering refugees to understand the psychological aspects when they implement actions to help displaced people. Consideration needs to be given to the social networks among refugees and providing enough space for them to move inside or outside the camps.

4.6 Conclusion

To summarize, studying the link between the psychological quality of life and psychological well-being domains is helpful to discover any link between them. The results of the current study will help to provide a better perception of the quality of life among the refugee sample regarding the wider context of well-being. It may also explain the nature of the scores on the psychological quality of life index and the reason for the refugees recording high or low scores for quality of life. Moreover, this is important when assessing the psychological quality of life of individuals over an extended period. However, while

this study did emphasize the link between psychological quality of life and psychological well-being, this relationship requires further investigation among refugees who have poor living conditions associated with a lower quality of life. In addition, this needs to be researched more deeply in order to identify the potential factors that could affect or correlate with well-being among refugees.

Part B

An overview of the psychological perspectives of the conflict effect on prejudice and forgiveness.

This part comprises Chapters Five, Six and Seven.

Chapter Five

The psychological perspectives of the conflict effects on prejudice and forgiveness

5.1. Introduction

In this chapter, a literature review relating to internally displaced persons is given and the key issue of the current chapter is focused on presenting an overview of the international crisis of the internally displaced persons. In addition, a more detailed discussion of the situation of the Iraqi internally displaced persons living in the Kurdistan region of Iraq is presented. This chapter also discusses how mass exodus can raise prejudicial attitudes among displaced people and host communities. Some details about how prejudicial attitudes might be linked with the psychological well-being and to what extent this correlation is affected by gender are also discussed. This chapter spotlights the post-conflict period, exploring how forgiveness might be considered as an important factor in helping victims move forward and rebuild a favourable relationship with the offenders. Furthermore, the link between the forgiveness process and an individual's psychological well-being is detailed in this chapter. In short, this chapter presents a theoretical review of the connection of the psychological well-being with the prejudice attitudes and forgiveness process among individuals experiencing conflict conditions.

5.2. Overview of Internally Displaced Persons

The term “internally displaced persons” refers to those individuals who are forced to move from their home to a safe area but are restricted within their country and they are unable to pass through international borders. The internally displaced persons now occupy a significant area of global concern, providing appropriate help is a challenge for the international community, and this may continue into the future. Cohen and Deng (1998, P 17) in discussing internally displaced persons in relation to the international community, declared that *“what distinguishes the internally displaced and makes them of concern to the international community is the coercion that impels their movement, the human rights abuse they suffer as a result of their displacement, and the lack of protection for them within their own countries”*.

Insecurity is the main characteristic of internally displaced people and the United Nations (UN) presented a comprehensive definition of internally displaced people. According to F. M. Deng, Special Representative of the UN Secretary-General, Internally displaced people are those individuals *“who have been forced to flee or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of armed conflict, situations of generalized violence, violations of human rights or natural or human-made disasters, and who have not crossed an internationally recognized state border”* (Stavropoulou, 1998, p 519).

Substantially, the main issue of internally displaced persons that need to be addressed is the massive size of the movement and the availability of providing aid. According to the Norwegian Refugee Council’s Internal Displacement Monitoring Centre (IDMC), report on (May 2015) the number of the internally displaced persons was estimated at more than 38 million internally displaced people from 59 countries worldwide in 2014. The ten countries that witnessed the highest number of internally displaced persons were; Syria, Colombia, Iraq, Sudan, DR Congo, Pakistan, South Sudan, Somalia, Nigeria, and Turkey. The number of internally displaced persons in these countries are, respectively; 7.600.0000, 6.044.200, 3.367.000, 3.100.000, 2.756.600, 1.900.000, 1.900.000, 1.498.000, 1.106.800, 1.075.300, and 953.700, these numbers representing 82% of the overall displaced people in the world, see Figure 4.

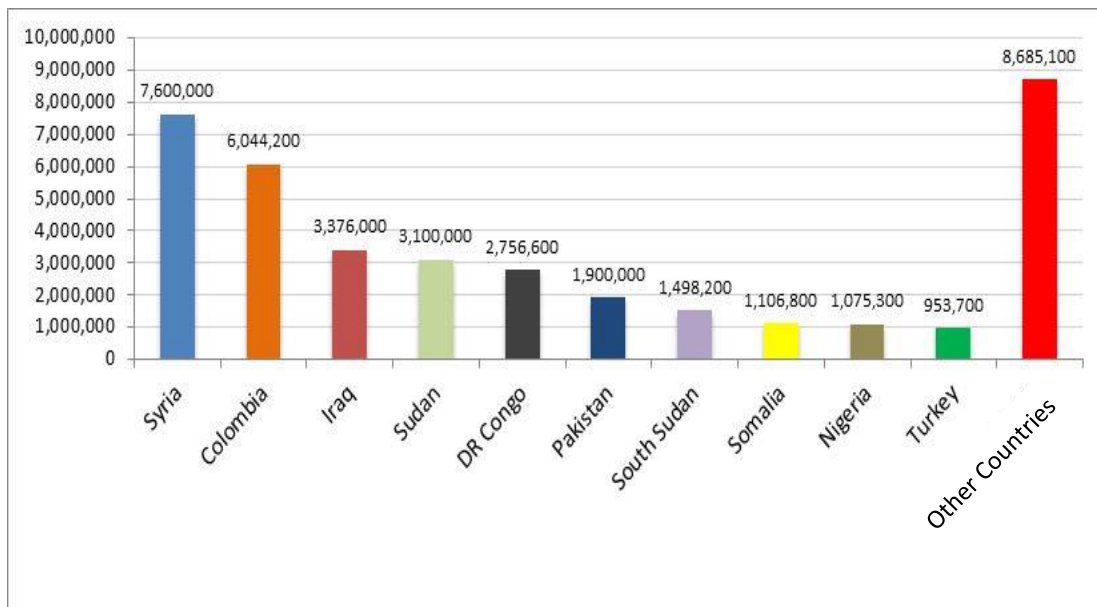


Figure 4 The number of internally displaced persons in the worldwide, alongside the top 10 countries in terms of internally displaced persons. (Alexandra *et al.*, May 2015).

As can be seen from the graph above, the three countries with the most number of the internally displaced are Syria, Colombia, and Iraq and the percentage of the internally displaced persons in these countries are more than 44% of the total internally displaced persons in the world. Furthermore, 90 % of the overall internally displaced persons of the Middle East and North Africa are in Iraq and Syria. These numbers show that displaced people face arbitrary removal from their homes, with this being against their wishes. It is also, indicates that the respective governmental authorities in these areas are unable to provide security and prevent such displacement (Alexandra *et al.*, May 2015). The internally displaced person's movement has the potential to cause serious issues for the host area, especially in regards to that location being required to reduce any negative impacts resulting from the migration. Literature has demonstrated that displaced individuals often faced chronic problems like insecurity and poverty. Due to most such individuals possessing poor resources and the inability to move across borders. The internally displaced persons may also face environmentally challenging situations such as economic problems. Security burdens placed on them by their host community may also be highly restrictive in this sense (Jacobsen, 2002).

5.3. Displacement in Iraq

Increase the levels of violence in Iraq, especially during the attacks by armed groups known as the Islamic State of Iraq and Syria (ISIS)¹ in 2013, the number of internally displaced persons rose dramatically. According to the United Nations Office for the Coordination of Humanitarian Affairs (27, January, 2015) report, the number of internally displaced persons in Iraq rose from approximately 85,000 individuals in January 2014 to 2,200,000 individuals in January 2015. The most recent report by The International Organization for Migration (February 2016) noted that the number of Internally displaced persons had reached more than 3.3 million individuals - in Iraq, 68% of them are hosted in Central North Iraq, and 28% are hosted in the Kurdistan Region of Iraq (KR-I). The dramatic increase number of displaced people in Iraq highlights the presence of a humanitarian crisis, one that requires significant and urgent aid.

A huge number of displaced have been moved to the Kurdistan Region of Iraq, the International Organization for Migration (February 2016) report show that 929,298 internally displaced persons now live in the Kurdistan region. In Erbil, the number is estimated to 360,522 individuals (this comprising 11%) of the internally displaced persons, Dahuk hosts 404,424 individuals (12%) of the internally displaced persons, and Sulaymaniyah hosts 164,352 individuals (5%) of the internally displaced persons. Although the Kurdistan region is in the midst of an economic crisis, it is also facing an enormous number of displaced people flooding into the region as a result of ISIS violence. As such, this movement has the potential to deteriorate the local living conditions and therefore negatively affect the local community.

The main procedures that are applied to support the displaced people could be accepted as a specific administrative mode of state activity, with this being designed to act in accordance with the respective circumstances of the conflict. For instance, basic programs exist to help them, such as humanitarian food relief and the installing of temporary laws regarding mobility, settlement, and property. While previous studies have shown that, mass exoduses to new areas have high likelihood of causing an unpleasant and

¹ - At 2014 this group shortened the name "Islamic State of Iraq and Syria" (ISIS) to "Islamic State" (IS) to show their expansionist ambitions. However, the (ISIS) name is more common in the official reports and the mass media.

harmful environment to develop between the host community and displaced individuals (Hughes, Kiecolt, Keith, & Demo, 2015; López, Arredondo, & Salcedo, 2011).

Consequently, investigating prejudice and forgiveness, as they relates to the context of the given conflict, might be helpful in terms of gaining a better perception of the psychological issues faced by the internally displaced persons and host communities in the Kurdistan region of Iraq.

5.4. Theoretical background of mass exodus riskiness for displaced people and the host community

In spite of war having an adverse influence on the individuals' lives, moving from a war zone to a safe place does not mean the end of suffering after having been displaced and living in the refugee camps. Truly, such movements might lead to other problems such as a rise in the negative attitudes between the host community and the displaced people that need to be considered as a serious issue, and thus, this topic requires more attention. Moreover, the stages of the conflict are commensurate with a number of circumstances such as the nature of the host community, the history of relations between the host community and the displaced people (Cordesman et al., 2010) and the given economic conditions or available resources of the host country (Esses, Jackson, Dovidio, & Hodson, 2008).

Previous studies point out that the displacement may result in significant consequences for both the displaced people and the host community (Hughes et al., 2015; López et al., 2011). Such movements can generate social conflict and clashes that could push people into justifying their negative behaviour and the use of violence against the displaced. Several theories were examined through a social-psychology context to address how the Internally Displaced Persons Movement might lead to negative attitudes and conflict with the host community.

5.4.1. Realistic Conflict Theory

This theory suggests that competition is a fundamental factor in the conflict between groups, which might lead to raising prejudicial attitudes because individuals are likely to hate out-group members due to the competition for resources (Hughes et al., 2015;

Whitley & Kite, 2009). A study by Esses, Jackson, Dovidio and Hodson (2008) proposed three steps to explain the competition and conflict that arises amongst these groups. First, competition might lead to applying different strategies to remove the source of the rivalry. Second, evaluate the riskiness of continuing the conflict; this evaluation would potentially be an attempt to eradicate the dispute. Finally, both groups will try to terminate the dispute through reducing prejudice and discriminatory attitudes. However, this theory suggests that the negative situational factors and ideologies might be considered as the main challenges that could lead to continuing and increased levels of prejudicial attitudes among the groups (Esses et al., 2008).

Nevertheless, according to Duckitt (1992), the main weakness of this theory is that it focuses on only one type of competition which is between powerful peer groups. Meanwhile, the theory does not take into consideration another sort of competition, which might arise between dominant and minority groups. This competition and conflict often arises when a majority group denies recognition of a minority group's basic rights.

5.4.2. Relative Deprivation Theory

Relative deprivation theory originates from the results of research applied to the US soldiers during the Second World War (Whitley & Kite, 2009). According to this theory, individuals feel dissatisfied due to two fundamental issues; the feeling of deprivation based on a previous life and social comparison. Greenberg (1996) pointed out that the feeling of relative deprivation is similar to the sense of unfairness or the sensing of a low level of distributive justice. This occurs within an individual's perception as given towards the unfair distribution of resources. For instance, the individuals will be dissatisfied if they feel their life conditions in the past were better than that experienced in their current situation (Tyler & Smith, 1998). A sense of deprivation also comes from the feeling that resources are not distributed fairly due to inequitable and in-group favoritism (Greenberg, 1996). Similarly, Duckitt and Mphuthing (2002) and Pettigrew *et al.* (2008) both concluded that feelings of dissatisfaction have a high likelihood of producing hostility against the group that is observed as benefiting at one's expense. Prejudicial sentiments are perhaps one way of expressing this feeling.

5.4.3. Social Identity Theory

The principle of this theory is derived from the idea of being a member of a given group, such as family, college or any other social institution (Kruglanski & Higgins, 2013). This theory suggests that social membership is the main factor affecting the attitudes of individuals (Robinson & Tajfel, 1996). According to the social identity theory, prejudice attitudes arises when individuals consider themselves as part of a group and, to protect this group, they try to favour in-group members over other group members (N. Miller & Brewer, 1984; Wilder & Shapiro, 1991). Consequently, the rise of prejudiced attitudes could lead to conflict or increase already existing conflict. In support of this perspective, many studies have indicated that the attitudes of individuals, as belonging to respective social groups, might have negative impacts on the beliefs and attitudes of other people (Augoustinos & Reynolds, 2001; Wilder & Shapiro, 1991) and this attitude might turn into prejudice and discrimination being aimed towards others (Whitley & Kite, 2009).

However, this theory pointed out that social identity might help to reduce the effects of such negative attitudes for minority group members. When an individual engages in an inter-group way, he/she will derive psychological benefits from being a group member (Ashforth & Mael, 1989; Tajfel & Turner, 2004), providing a boost to his/her self-esteem (Crocker & Luhtanen, 1990) and increased feelings of possessing an advantage in comparison to others (J. Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). Furthermore, this theory assumes that during the conflict the individuals would give a high degree of value to the in-group and distance themselves from the out-group to reduce the adverse effects of the conflict (Branscombe, Ellemers, Spears, & Doosje, 1999).

5.4.4. Integrated Threat Theory

To provide a unified vision of the previous theories, Stephan et al. (2002) and Stephan and Stephan (2000) indicated three types of perceived threat that relate to prejudicial attitudes. First, perceptions of realistic threats are derived from competition and intergroup conflict. Second, intergroup anxiety occurs from the discomfort felt when reacting with a member (or members) of another's group. Finally, perceptions of symbolic threats arise when the people of one group believe that the other group is dissimilar in regards to beliefs, attitudes, moral standards or values. This theory also suggests that

feelings pertaining to the perceived differences between the out-group and in-group members can lead to conflict, especially if one group believes that the other group seeks to destroy its cultural substrates (Biernat, Vescio, & Theno, 1996) see Figure 5. Likewise, Mummendey, Kessler, Klink and Mielke (1999) pointed out that competition for resources, as arises between groups, could be perceived as constituting a threat and this may lead to conflict.

From the above discussion, and to gain a better understanding of the attitudes held by individuals, the integrated threat theory is employed, as a psychosocial approach reviewing the prejudiced attitudes. This theory has been undertaken to highlight the attitudes that displayed by people within an in-group and out-group frame. This theory also, considered as a comprehensive framework for explaining intergroup relations and those factors that can lead to the expression of prejudice (Whitley & Kite, 2009).

5.5. Prejudicial Attitudes and Psychological Well-Being

Conflict most likely has an adverse impact on the different psychological aspects that relate to psychological well-being. For instance, some studies have indicated that prejudice might negatively affect mastery and self-esteem (Crocker & Major, 1989; Jackson et al., 2012), with this having the potential to make a person feel hopelessness or despondent (Branscombe *et al.*, 1999). Prejudice also may lead to adverse effects being felt on the relations with out-group individuals (Levin, van Laar, & Sidanius, 2003). Previous studies have indicated that there is an adverse relationship between negative attitudes and overall well-being. For instance, Dinh, Holmberg, Ho and Haynes (2014) have suggested that some specific forms of prejudice (such as sexism and racism) have a negative correlation with psychological well-being.

In a review of the association between prejudice and well-being, Branscombe *et al.* (1999) pointed out that prejudiced attitudes of the dominant group against the minority group probably have an adverse impact upon well-being. Nevertheless, successful engagement and identification with the in-group might lead to positive effects being witnessed on well-being. Additionally, a number of studies have highlighted that prejudice might positively affect well-being, especially when the individual engages and identifies with his or her own group (Arroyo & Zigler, 1995; Grossman, Wirt, & Davids, 1985).

To explain how social identity might increase psychological well-being, Branscombe *et al.* (1999) suggested a model named “the rejection-identification model,” with this highlighting both sides of the effects of prejudice on psychological well-being and the contempt given towards individuals. Branscombe *et al.* (1999) further elucidated that individuals try to alleviate negative attitudes from the dominant group via engagement with a minority group. As exclusion can lead to harmful feelings for an individual, being a member of an in-group might be successful in protecting an individual’s well-being, see figure 5.

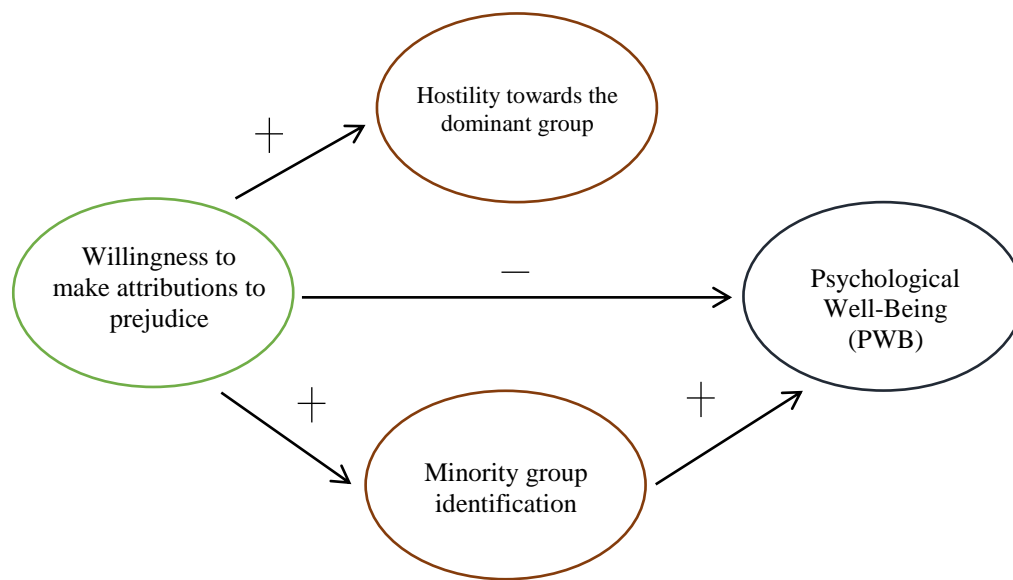


Figure 5 The dual effects of imputations to prejudicial attitudes on psychological well-being through the rejection-identification model perspective. (Branscombe *et al.*, 1999).

To illustrate the dynamic relations between individuals’ attitudes and their psychological well-being, we have employed the rejection-identification model (Branscombe *et al.*, 1999). It is believed that this model can help us gain a better understanding of the nature of the relationship between prejudice and psychological well-being. In short, this model shows how group identification promotes social identity positively, thus resulting in positive psychological well-being (Hughes *et al.*, 2015).

5.6. The Theoretical Context of Forgiveness and the Post-Conflict Period

Forgiveness is a key positive trait of an individual (Seligman & Csikszentmihalyi, 2000). It also refers to a positive adaptive process, demonstrated through the building of positive feelings, compassion, sympathy, and generosity. Likewise, forgiveness means ignoring negative feelings, behaviors, and cognitions, undertaken to deal with the transgressions of others (Enright, 1991; Hocker & Wilmot, 1985; Maltby, Macaskill, & Gillett, 2007). Forgiveness includes acceptance being given towards past events, without anger, while simultaneously trying to develop or restore positive feelings and establishing relations with others (Enright, 2001). In a study conducted by Smith and McCullough (2001), concluded that forgiveness is substantially related to prosaically motivation change makes the offended less motivated to do harm while having more motivation to carry out beneficial actions towards the offender.

Many theoretical contexts have been used by researchers to explain the conception of forgiveness. The majority have agreed that forgiveness is a perplexing concept and a complex process (Allers & Smit, 2010; Enright & Fitzgibbons, 2000) that includes an emotional process that could be either self-focused or focussed on others (Fitzgibbons, 1986; Toussaint & Friedman, 2009). It may also consist of behavioral intentions (H. D. Johnson, Wernli, & LaVoie, 2013) and leads to considerations as to what future reactions will be (Toussaint & Friedman, 2009; E. Worthington & Scherer, 2004). Forgiveness might also be a cognitive process that relates to an individual's belief regarding the worthiness and goodness of the victim (H. D. Johnson et al., 2013). As well as, forgiveness is a core aspect of rebuilding relations (McCullough, Sandage, & Worthington Jr, 1997) and of producing, the ability to make decisions to forgive after being hurt (DiBlasio, 1998).

5.7. Enright's Perspective of Studying Forgiveness

In general, earlier literature indicated two types of forgiveness, which occurs after been hurt and been oppressed. First, interpersonal forgiveness relates to the response given by individuals towards an offense, achieved by addressing and resolving the given harmful situation with the offender (Bono, McCullough, & Root, 2008) or fostering the ability to extend forgiveness towards others in an effort to invoke reconciliation between rival groups (Szigeti, 2014; Younger, Piferi, Jobe, & Lawler, 2004). Moreover, interpersonal

forgiveness may relate to protecting oneself from anger and resentment and gaining justice by punishing the offender (Maltby *et al.*, 2007).

Second, intrapersonal forgiveness refers to the emotional processes that assist in people reaching the ability to forgive (H. D. Johnson *et al.*, 2013). This usually relates to a person's ability to understand the emotions and motivations of the offender (McCullough *et al.*, 1997). In other words, intrapersonal forgiveness focuses on the victims' beliefs and feelings. This leads to decisions that impact upon the mental health of the victim without being influenced by the behavior of the offender (Gordon, Baucom, & Snyder, 2000; Kalayjian & Paloutzian, 2009).

In relation to intrapersonal forgiveness, Enright suggests a model called the "Process Models," with this includes three domains; affective, behavioral and cognitive aspects (Enright & Human Development Study Group., 1991). This model is considered comprehensive and gives a thorough explanation of the forgiveness process (Worthington Jr, 2006). Moreover, Hepp-Dax (1996) has pointed out that the advantages of Enright's model of forgiveness derive from its multidimensional structure and the fact that it incorporates affective, cognitive and behavioral components – aspects that are considered to be inherently involved in forgiveness.

According to this model, forgiveness is started, when the person is able to confront and defeat anger, negative emotions, behaviors and thoughts. With spontaneous growth, the individual seeks to decrease the negative feelings held towards the offender (Enright, 2001; Enright, Freedman, Rique, Enright, & North, 1998). As well as this, the model holds that, forgiveness to be complete, all three dimensions identified in the model - affective, behavioural and cognitive – need to change (Enright & Fitzgibbons, 2000). These dimensions are considered to be an outline of the process that one undertakes when dealing with the negative sentiments held towards the aggressor while recognising the victim's decision to forgive. The result of this process might lead to a reduction in negative feelings being held, with this potentially having a positive impact upon the offender (Enright & Coyle, 1998).

Originally, this model includes four phases:

- The first is the "Uncovering Phase": Here, a person is "aware of the problem and the concomitant emotional pain associated with deep, unjust injury" (Enright *et al.*, 1998).

p52). This stage is related to the ability to face the nature of the offense alongside discovering the negative impact of being insulted. To reach this point, the offender is requested to give clarification as to the nature and cause of the offense.

- The second stage is the “Decision Phase”: Here, an individual “gains an accurate understanding of the nature of forgiveness and makes a decision to commit to forgiving on the basis of this understanding” (Enright & Fitzgibbons, 2000. p 67).
- The third stage is the “Work Phase.” that involves practical steps being made towards forgiveness. At this step, a person should achieve a cognitive perception of the offender. The development of a revised vision of the offender can lead to positive change – this from the offender, the victim and the relationship between them both (Enright *et al.*, 1998).
- The final stage is the “Deepening Phase.” Here, the individual “finds increasing meaning in the suffering, feels more connected to others, and experiences decreased negative affect and, at times, renewed purpose in life” (Enright & Fitzgibbons, 2000. p 67). At this stage, the individual might realise the advantages of forgiving rather than being angry or unforgiving. Enright *et al.* (1998) believe that this model will provide a useful basis for researching the specific aspects of the forgiveness process, thus being suitable for a variety of research areas such as mental health and conflict resolution.

5.3. The Forgiveness Process and Well-Being

Forgiveness has become an important subject of study that might assist to understand how people are able to rebuild the relations effectively with the offender after the conflict whilst ensuring that their mental health remains protected. The majority of the literature have examined the interaction between forgiveness and hedonic well-being that focused on mental health and short term life engagement. For instance, earlier studies have been carried out as to the interaction of forgiveness and well-being, whereupon it has consistently been found that forgiveness might have a positive impact upon well-being (Church *et al.*, 2013; Cox *et al.*, 2012; Toussaint & Friedman, 2009; E. Worthington *et al.*, 2007).

Moreover, Sandage and Jankowski (2010) have demonstrated that individuals who

record higher levels of forgiveness experienced better levels of well-being. Coyle and Enright (1997) also pointed out that forgiveness may be considered to be a source of strength for individuals in helping to improve their well-being. In a study conducted by Bono *et al.* (2008) on 115 students who underwent a serious interpersonal experience, individual differences in the relations between forgiveness and well-being were investigated. The study also sought to test the influence of feelings of closeness on forgiveness. The results of the study demonstrated that increased levels of forgiveness were correlated with increases in well-being (such as being more satisfied with life, experiencing less negative moods and witnessing increased positive feeling).

After reviewing a large number of published studies, it has been noticed that surprisingly, there is a lack of studies that investigate eudaimonic Psychological well-being and forgiveness. Also, it has been noticed that the majority of the earlier studies under the title psychological well-being investigated the hedonic well-being with forgiveness. Yet, Maltby *et al.* (2005) examined the link between forgiveness and both hedonic\ eudaimonic happiness and suggested that eudaimonic happiness correlated positively with two components of forgiveness that are (positive effect and positive behaviour), which are more promising factors to indicate eudaimonic happiness. As such, it is necessary to address these issues by further investigating the association between forgiveness and eudaimonic psychological well-being.

5.4. The Research Aim

Earlier findings have demonstrated that conflict usually leads to raising prejudicial attitudes (Jackson *et al.*, 2012) and it has negative consequences for psychological well-being, especially among displaced people (Schweitzer *et al.*, 2008). Therefore, the hypothesis that motivated the current study was, through measuring psychological well-being among the Internally displaced people, it might allow gaining a better understanding of well-being in terms of conflict and post-conflict situations. Moreover, the main point of current research is to connect these ideas to the lives of Iraqi Internally displaced people. Only a few studies have related psychological well-being with Internally displaced people or have researched the association between psychological well-being, prejudicial attitudes, and forgiveness.

The previous studies on the Syrian refugees have placed emphasis on quality of life and well-being, primarily due to believing that these variables might be related to the context of refugees who are newly settled in Iraq (see Chapters Three and Four). Thus, our focus was to measure the psychological issues that arise amongst the refugees who had faced unpleasant situation because of the war. However, in the fact that the displaced individuals of Syria are Kurdish ethnic origin and they are moving to a Kurdish region. Also, historically, Syrians people did not have any negative experiences with the Kurds in Iraq, and there was no issue of forgiveness or any reason for prejudicial behaviour or sentiments. As such, it could be true to assume that Syrian refugees may not be an appropriate sample for measuring forgiveness or prejudice.

However, after deciding that a refugee sample is probably not a suitable candidate for applying to further studies. In consideration of the research variables, the researchers decided to look for an alternative sample for our further studies. It has been found that the Iraqi displaced people of Arab nationality, namely those who moved to the Kurdistan region, might be appropriate candidates for further research investigating the relation between prejudice, forgiveness, and well-being. This appropriateness derives from three main points. Firstly, the mass exodus of the displaced people has led to a deterioration of life conditions amongst the local community (The International Organization for Migration, May, 2015). Secondly, the Internally displaced people are of Arab nationality, and they have a different ethnic background from the host community (who are Kurds). It is believed that these differences will probably negatively affect their relations (Augoustinos & Reynolds, 2001). Finally, both Arab and Kurdish nationalists have a long history of conflict and violence (Cordesman *et al.*, 2010; Hanauer *et al.*, 2011).

The second part of this thesis contains two studies - Study Three (see Chapter Six) and Study Four (see Chapter Seven). Both studies pertain to Arab displaced who have settled in the Kurdistan region of Iraq. Study Three explored the association between prejudice and psychological well-being amongst both Kurdish and Arab nationalities. For measuring prejudice attitudes, the implicit association test (IAT) program was used (as includes an objective measure and a self-report questionnaire) (Greenwald *et al.*, 1998). The main challenge that may face the internally displaced people is the ability to recover from the impact of violence and the rebuilding of a positive connection with offenders,

which is considered as an important issue for the displaced individuals to achieve a peaceful life and positive well-being. In Study Four (see Chapter Seven), the aim was to investigate psychological well-being and its relationship with intrapersonal forgiveness across three domains: behavioural, emotional, and cognition, using the short version of the Enright scale (McLernon *et al.*, 2004). The main purpose of our investigation is to gain wider understand as to how extended forgiveness is linked to psychological well-being.

Chapter Six

Exploring the association between Explicit and Implicit Prejudice with Psychological Well-Being among two different nationalities

6.1. Abstract

The key findings from previous literature indicated that mass exodus might lead to a conflict between displaced people and the host community because of the dissimilarity of ethnic, religious or social backgrounds. The purpose of the present study is measure implicit prejudice to identify the relationship between prejudice and psychological well-being. Similarly, another aim was to extend the previous work to identify the nature of the relationship between prejudice and psychological well-being among Kurdish and Arabic nationalities while also investigating the role of gender. Two hundred and thirty-six individuals were chosen from both Arabic and Kurdish nationalities, aged 18 to 77 ($M = 35$ years, $SD = 14.34$). To measure prejudicial attitudes the implicit-association test (IAT) program was used, and to measure psychological well-being the Ryff scale was used. The results from the mean statistics for scores on prejudicial attitudes showed both nationalities had significantly low scores on the explicit prejudice test using a self-report questionnaire. However, they did show prejudicial attitudes on the implicit test. Also, the findings indicated that prejudicial attitudes were negatively associated with three domains of psychological well-being namely, autonomy, positive relations with others, and purpose in life.

6.2. Introduction

The previous findings indicated that mass migration from one area to another area is likely to cause many problems for the host community, which may create a negative psychological impact, especially among displaced people (Rothgerber, 1997; The World Bank, March, 2015). Additionally, López *et al.* (2011) suggested that the displaced people might be treated with hostility and subjected to persecution by the host community assuming that their decampment leads to an increase in negative events. Moreover, previous literature has indicated that displacement may have negative repercussions on the social lives of both displaced people and residents (Dinh *et al.*, 2014; Rothgerber, 1997). Also, it might cause conflicts and prejudicial trends between the displaced people and the host community (Hughes *et al.*, 2015; López *et al.*, 2011).

The evidence about the relationship between prejudice and well-being is inconclusive. For instance, some studies suggested that prejudice might positively correlate with well-being (Arroyo & Zigler, 1995; Grossman *et al.*, 1985) especially when the individual engages and identifies with his or her group (Branscombe *et al.*, 1999). On the other hand, other studies have indicated that there are adverse relations between negative attitudes and overall well-being. This perspective was exemplified in the study undertaken by Dinh *et al.* (2014) that suggested there are specific forms of prejudice such as sexism and racism that have a negative correlation with psychological well-being. Therefore, one of the interesting issues is in seeing to what extent these established findings might be applied to the current situation and extending the study related to prejudice and psychological well-being.

Due to the history of conflict between the internally displaced persons and host communities (Cordesman *et al.*, 2010), it might be necessary to know the attitudes between both groups under the conditions of displacement. Hypothesizing that if the displacement situation has an adverse effect on psychological life, it may also affect social attitudes towards both the displaced people and the host community. Assuming that prejudice may have negative consequences on both social and psychological lives it could be important to investigate the prejudicial attitudes between Kurds and Arabs in terms of nationalism. Also, it may be important to identify the nature of the relationship between negative attitudes and psychological well-being domains. By studying these relationships, it might be possible to

realize how well-being is achieved in individuals' lives when living under stressful conditions and in term of conflict.

The literature review shows that there are two approaches to measuring a human's attitude. First, explicit approaches by using self-report questionnaire to collect the data (Dovidio et al., 2002; Greenwald & Banaji, 1995). Second, implicit approaches by using an objective measure, which relates to observing automatic activation of individuals. A number of studies point out that explicit and implicit attitudes might be dissimilar, especially when the person is dealing with sensitive or serious issues (Blair, 2001; Dovidio & Fazio, 1992; Dovidio, 2001; T. Wilson, Lindsey, & Schooler, 2000). Although the self-report questionnaire is considered an important way to collect information about individuals' attitudes, it also has a limitation that is related to awareness of attitudes. In other words, the individuals' attitudes might be indistinct, or they might not be aware of the reality of their attitudes. For example, Wilson *et al.* (2000) pointed out that during the explicit test individuals tended to shape their responses, and they tried to find a benefit in every action. Therefore, it may be difficult to reach an accurate answer.

Past research has also documented gender differences in various areas of psychology, for example, several studies examined the gender differences between males and females in prejudicial attitudes (Ekehammar, Akrami, & Araya, 2003; Whitley & Kite, 2009), and psychological well-being (Pinquart & Sörensen, 2001). However, there is a lack of studies investigating the gender differences in the relationship between prejudice and psychological well-being. The rationale of investigating gender differences in these two variables is knowing to what extent gender plays a role in the relationship between psychological well-being components and prejudicial attitudes and, essentially, whether a prejudicial attitude is more important predictor of psychological well-being for females or males. Consequently, it is necessary to study implicitly prejudiced attitudes because it gives us the opportunity to measure the influence of response that is challenging to observe or controlled by the person. According to Dovidio *et al.* (2002), implicit attitudes are more challenging to monitor or control because they include influenced responses. Also, the individuals might not realize that their answer is an indicator of their attitude. Therefore, the present study aimed to utilise both explicit and implicit approaches, and to explore to

what extent prejudicial attitudes are related to psychological well-being domains among Kurdish and Arabic people through applying an IAT program.

6.3. Method

6.3.1. The research sample

Participants in the study included 234 individuals from two nationalities (117 Arab and 117 Kurdish) who lived in the Kurdistan region. Respondents between ages 18 to 77 ($M = 35$ years, $SD = 14.34$) from both genders were chosen. Concerning other demographic distribution in the sample, in terms of education, 33% reported having completed secondary education, and 32% as having finished a tertiary level of education. Regarding marital status, 27% of the research samples were married while 44% were single.

Furthermore, the research sample included two different nationalities who lived under different conditions. The study focused on the internally displaced persons of the Arab nationality who live in the Kurdistan region and the Kurdish nationals who are native to the area. The majority of internally displaced persons live in shelters built by UNHCR cooperating with the Kurdistan regional government (KRG). The study was applied in different locations, to obtain a suitable research sample. For the Arab individuals, this study is conducted within two shelters, Ankawa and Bahrka. Additionally, some of the Arab people who live in private houses in the city such as Shawish and Daratu were chosen. In choosing the Kurdish individuals, several districts of the city were selected such as Zanko, Shorish, Azadi and Ekan; 29 to 30 people were chosen from each area to take part in the study.

6.3.2. Measures

6.3.2.1. Prejudice measure

For measuring prejudicial attitudes, the Implicit-association Test (IAT), designed by Greenwald, McGhee, and Schwartz (1998) is used; the test has two different types of scales, which are an explicit measure and an implicit measure. In addition, the Implicit Association Test measure is considered to be a strong method with which to measure

implicit social cognition and this measure has become the most reliable, validated and widely used measure (Hofmann, Gawronski, Gschwendner, Le, & Schmitt, 2005; Lane, Banaji, Nosek, & Greenwald, 2007). This measure, furthermore, is resistant to social presentation concerns and is socially desirable (Greenwald, Poehlman, Uhlmann, & Banaji, 2009; Lane et al., 2007). The Implicit Association Test (IAT), has received much attention in research literature because it can address issues around self-reporting scales such as social desirability as well as being a beneficial predictor of real behaviour (Greenwald et al., 2009; Nosek, Greenwald, & Banaji, 2007). Therefore, it could be said that this measure is a potentially promising resource for measuring prejudice with more details as follows.

a. Explicit measure

The self-report questionnaire is applied to measure explicit prejudice among the research sample. The researchers tended to modify the prejudice measure (Greenwald, Nosek, & Banaji, 2003) to make it appropriate for the current study. The scale included 9 questions. All items except the second and the third items were scored via a seven-point response scale. The positive items started from 1 for (strongly agree) to 7 for (strongly disagree), and the scores are reversed for the negative items. The second and the third items scored within ten- points to show the strength of feeling towards his and others' nationality — Kurdish toward Arab and vice versa. The alternatives start with 1, which refers to the strength of positive feeling and ends with 10, which refers to the strength of negative feeling. Due to the scale being in the English language, it was translated into the Arabic and Kurdish languages by language experts. Then the Arabic and Kurdish version of the scales were given to other specialists to translate into the English language. Finally, both copies of the scales (the original and the translated ones) were shown to some experts of the English language to match both versions in order to assess the translation.

b. Implicit measure

The implicit-association test is commonly used to define the strength of a person's automatic associations in the mental coding of items in the memory, through two methods. First, measuring the error rate of the data during classify of the tasks on a computer. Second, measures the time that each participant needs to respond for each stimulus. The

implicit test measures how rapidly the individual can categorize various words and images; theoretically, most people can identify words and images more rapidly with fewer errors when they come from closely related categories consistent with the person's feelings and beliefs. However, while switching the elements around and presenting words and images that are not compatible with the individual beliefs, it is expected that the person will need a longer time to give the correct answer with a greater likelihood of making mistakes. As such, it could be said that taking a longer time to present the right answer and making errors can refer to existing implicit attitudes (Dovidio et al., 2002; Greenwald et al., 1998; Maison, Greenwald, & Bruin, 2001).

Greenwald *et al.* (1998) point out that there is dissimilarity between implicit and self-report measures because implicit measures focus on reflecting feelings and thoughts, which work outside of consciousness. Moreover, the implicit test helps to discover unintentional bias among people who consider themselves unprejudiced but do not realize their real attitude (Maison et al., 2001). The importance of using the implicit test to measure attitudes is because the participant might show a positive attitude towards the out-group when they answer the self-report questionnaire, probably due to a social desirability factor. However, applying the implicit test might be helpful to record contrary results. However, during the review of the original Implicit Association Test program, it has been noticed that this program is suitable for educated people only, which means that illiterate individuals are unable to take part in the test. Moreover, there is no Arabic or Kurdish version of this test to apply it in the current research sample. Therefore, the first goal was designing a new Implicit Association Test program based on the original program to address this limitation.

Owing to the large number of the participants being illiterate or having low levels of education, the program was updated and modified to make it suitable for both literate and illiterate individuals through using different colours with stimuli to identify the alternatives, with added audios to help the participants hear the instructions and questions that related to the test (see Appendix B). For instance, asking about the participant's gender (male or female) the participant has to press one of two colour options like *Yellow for male and Blue for female*. If the participant chooses the Blue colour, the program will say *You chose Blue, which means you are female. If it is your gender press Green (the forward arrow) and*

continue. If it is not your gender press the Black button, the 'undo arrow' (Back) and try again. After that, he or she needs to press the Green colour to go to the next question, see figure 6.



Figure 6 shows how colours were used to design of the program and the way of choosing the alternatives by the participants to determine their gender.

Moreover, considering that the original program uses the English language the second update of the program used the Arabic and Kurdish languages. Therefore, this program can be regarded as the first program using both languages. A pilot study was applied that included some steps to find appropriate stimuli for the test. First, 60 images were collected which are related to Kurdish and Arabic cultures. The images were shown to 30 Kurdish and 30 Arabic participants to assess and determine into which each ethnic group these images belonged. The criteria for choosing the images were that any picture reaching 80% or higher would be approved for the test. Based on that ratio, 24 images were chosen from both ethnic groups and 12 pictures from each nationality. Finally, 24 words were selected, 12 words with a positive meaning, and 12 with a negative meaning from the Glover (2010) test.

c. The Implicit-association Test design

In the current study, Macintosh software was used to design the program. The test included five tasks, and each level had a specific goal. Figure 7 shows the section of each task that constitutes the Implicit Association Test measures in the current study; it also explains the sequence of materials in the current experiment. Moreover, through this

measure, it will be possible evaluate the association between an attribute dimension and target concept discrimination.

The first step of Figure 7 is called a Concept Recognition Task that distinguishes images that have been classified as symbols of Iraqi Arab nationalism from those recognizable as reflecting Iraqi Kurdish nationalism. The second step of the test is called the Associated Attribute Recognition task. The aim of the first and the second tasks is to help the participant classify words and images within particular groups. After introducing the stimuli, in the third step, the participants will start combining the task through classifying both words and the images into a particular category. In the fourth step, called the Reversing Target Task, the participants will learn how reversal assignments response to classify the objectives. The final stage called reversing the combined task, the participants after reverse targets will classify both words and the images again into a particular category (Greenwald et al., 1998). For more details on the IAT program design, (See Appendix-B).

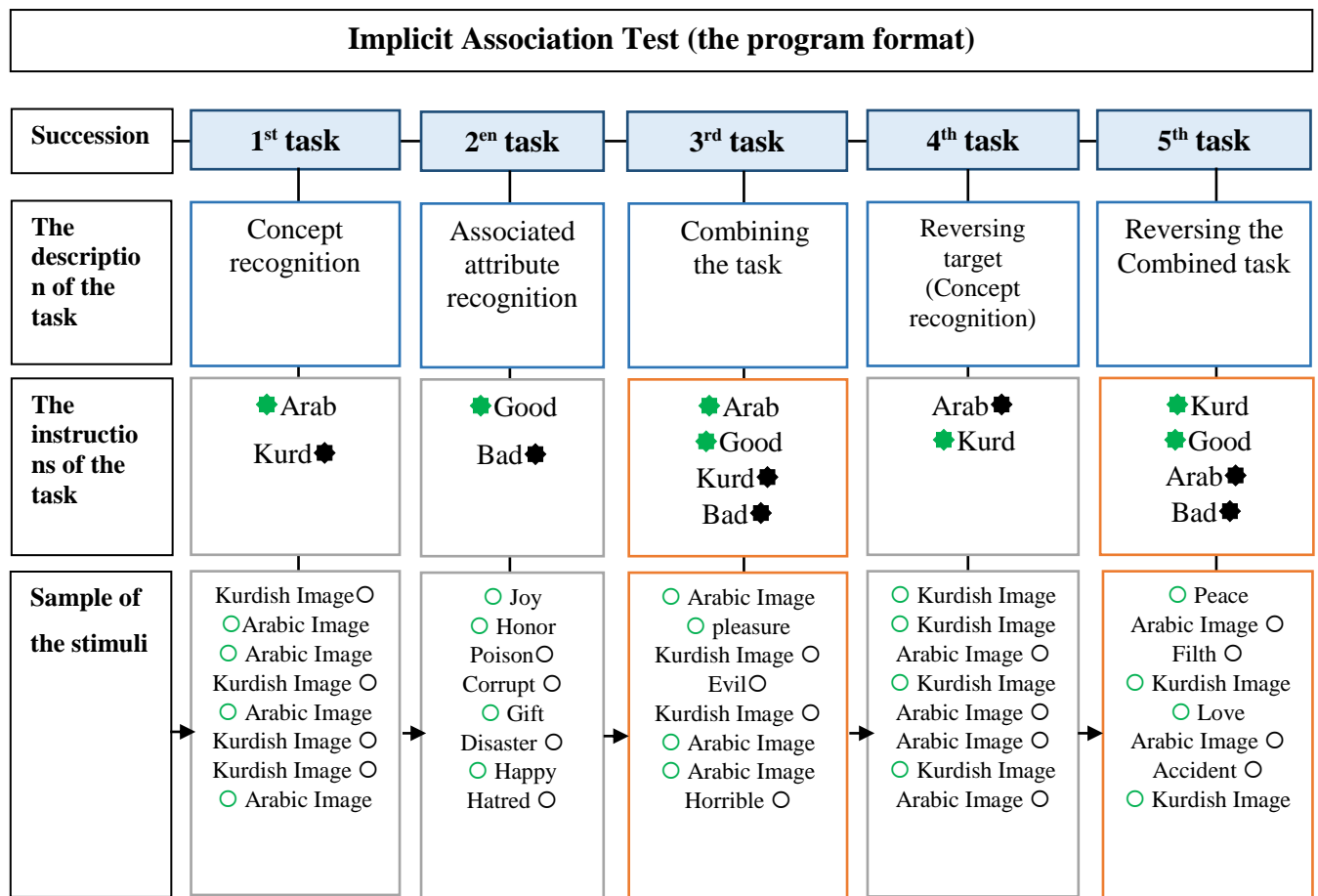


Figure 7 Show the Implicit Association Test through schematic description and present the aim of the tasks in each stage of the IAT experiment and display stimuli at each stage.

a. The procedure

To carry out the study iPads with monitor size 9.7in and a screen resolution of 2048 x 1536 pixels were used. In addition, a special room was prepared for participants to avoid any distraction that might happen during the test. The instructions for all the tasks were administered on the iPads, and given to the participants. Furthermore, the participants were informed that they had to be as fast and accurate as possible when they started the implicit test.

The central idea of the Implicit-association Test is that the participants have to categorize correctly the stimuli that are shown in the center of the screen by pressing one of the two keys located at the bottom of the screen (green & black). The green button is related to positive stimuli, and the black button is associated with negative stimuli. The participant has to classify the stimuli in each task based on the program instructions.

Furthermore, if the participant chooses the correct answer for the stimulus, the next stimulus will appear directly. The participant has to continue with the responses until the end of the task, see figure 8.

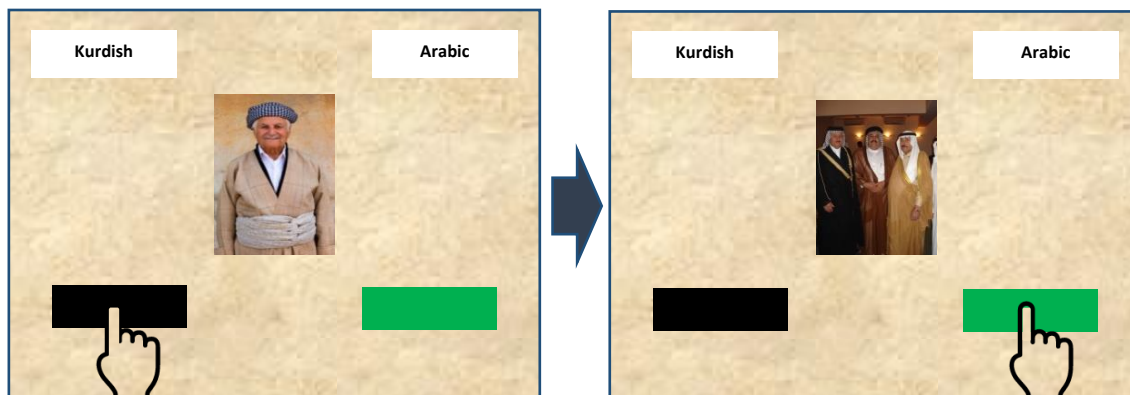


Figure 8 Show how the program works during the selection of the correct response to the stimulus by pressing the correct key

Furthermore, if the participant makes an error by choosing the wrong answer, an (X) symbol will appear in the middle of the screen. The participant has to select the correct answer by pressing the right button to move to the next stimulus. Also, the participant needs to continue sorting the pictorial stimuli until the end of the test (see figure 9). The criterion for evaluating the prejudicial attitudes of the research sample is by measuring the length of time that it takes to respond to the stimuli and by recording the error rates during the responses.



Figure 9 Shows how the program works in during the selection of the wrong response to the stimulus by pressing the wrong key and the participants need to re-select the correct answer to move to the next stimulus.

6.3.2.2. Psychological Well-being

To measure psychological well-being, the Ryff scale was used that included 42 items across six dimensions. Autonomy: 7 items (e.g. “I am not afraid to voice my opinions, even when they are in opposition to the opinions of most people”). Environmental Mastery: 7 items (e.g. “I am quite good at managing the many responsibilities of my daily life”). Personal Growth: 7 items, (e.g. “For me, life has been a continuous process of learning, changing, and growth”). Positive Relations with Others: 7 items (e.g. “People would describe me as a giving person, willing to share my time with others”). The purpose in Life: 7 items (e.g. “Some people wander aimlessly through life, but I am not one of them”). Self-Acceptance: 7 items (e.g. “When I compare myself to friends and acquaintances, it makes me feel good about who I am”) (Hauser, Springer, & Pudrovskaya, 2005; Ryff, 1989a; Ryff, 1989b; Seifert, 2005).

The scale score comprises six alternatives and the response options, ranging from 1– disagree totally to 6 – agree totally, and the scores were reversed for the negative items. The scale was translated into Arabic and Kurdish because the research sample was unable to speak English, and the researchers were unable to find a Kurdish or Arabic version of the psychological well-being scale. To determine the reliability of the translation, the translation was sent to language experts to review the scale and evaluate the accuracy of the translation from English to Kurdish and Arabic.

6.4. Ethics

At the University of Leicester, the researcher received the ethical approval for the study. The ethical process was confirmed according to the British Psychological Society’s guidelines (http://www.bps.org.uk/sites/default/files/documents/code_of_human_research_ethics.pdf). All participants were 18 years old or above, and participants were given a choice of whether or not to take part in the study. Additionally, the researchers got an official permission letter to visit the shelters that were obtained from the general director of academic missions of the Kurdistan regional government / Iraq.

6.5. Results

6.5.1. Descriptive statistic

Presenting descriptive values includes Cronbach's alpha score, means, standard deviations, median, skewness and kurtosis score of the variables. Table 9 shows a score of Prejudice measurement, the current data for each task of the implicit test includes the speed of response (in milliseconds) and error rates. As well, the 6 components of the psychological well-being were analysed.

Table 9 Cronbach's alpha, Score obtained in Self-report and Implicit tests of Prejudice and psychological well-being domains

| Prejudice | α | Mean | SD | Median | Skewness | Kurtosis |
|-----------------------|----------|----------|---------|----------|----------|----------|
| Self-report | 0.65 | 34.91 | 7.76 | 34 | 14 | 54 |
| Implicit tests | α | Mean | SD | Median | 0.07 | -0.61 |
| First task | 0.74 | 29.23 ms | 6.64 ms | 28.31 ms | 0.58 | 0.43 |
| Second task | 0.75 | 28.94 ms | 7.05 ms | 27.37 ms | 0.60 | 0.63 |
| Third task | 0.74 | 32.46 ms | 7.22 ms | 31.60 ms | 0.24 | -0.14 |
| Fourth task | 0.73 | 27.82 ms | 6.49 ms | 27.27 ms | 0.48 | 0.31 |
| Fifth task | 0.74 | 31.28 ms | 7.57 ms | 30.48 ms | 0.39 | -0.76 |
| PWB | α | Mean | SD | Median | Skewness | Kurtosis |
| Autonomy | 0.61 | 22.92 | 4.61 | 23.00 | 0.06 | -0.18 |
| Environmental mastery | 0.59 | 23.10 | 4.46 | 23.00 | 0.21 | 0.19 |
| Personal Growth | 0.61 | 23.70 | 4.38 | 24.00 | -0.12 | -0.38 |
| Positive Relations | 0.68 | 23.76 | 5.47 | 24.00 | 0.07 | -0.26 |
| Purpose in life | 0.64 | 20.70 | 4.64 | 20.00 | 0.65 | 0.79 |
| Self-acceptance | 0.66 | 22.18 | 5.15 | 22.00 | -0.02 | -0.32 |

In reviewing Table 9, the internal consistency of explicit prejudice using Cronbach's alpha's is ($\alpha = 0.65$). Also, the Cronbach's alpha's of implicit prejudice measure was ($\alpha = 0.74$). Regarding implicit prejudice tasks, the Cronbach's alpha score coefficients of the tasks were as follows: (the first task $\alpha = 0.74$), the second task $\alpha = 0.75$, the third task $\alpha = 0.74$ the fourth task $\alpha = 0.73$ and the fifth task $\alpha = 0.74$). In addition, with regarding of the psychological well-being subscale scores, The Cronbach's alpha's for the five subscales of the psychological well-being measure were Autonomy ($\alpha = .61$), Personal Growth ($\alpha = .61$), Positive Relations ($\alpha = .68$), Purpose in life ($\alpha = .64$), and Self-acceptance ($\alpha = .66$). Though two of these statistics are above .60 and might be considered 'acceptable' (Kline, 2000). However, the Cronbach's alpha's score of Environmental mastery domain was ($\alpha = .59$), and it is considered relatively low reliability.

6.5.2. One sample T.test

As shown in the table 10 the means scores and the comparisons value of both explicit prejudice attitude and psychological well-being are considerably different. To address these differences are statistically significant one sample, t.test is conducted from 234 participants of Kurdish and Arabic nationalities and the general population. The result shows that the participants from both nationalities show a statistically significant low level of explicit prejudice attitude, at the .00 level of significance, from the normed value of 43. ($M = 34.91$, $SD = 7.76$) compared with general population, $t(233) = 15.97$, $p < .00$. As well, both nationalities show a statistically significant low level of psychological well-being, at the .00 level of significance, from the normed value of 147. ($M = 138.95$, $SD = 17.77$) compared with general population, $t(233) = 9.93$, $p < .00$.

Table 10 One sample T-Test of explicit prejudice and psychological well-being

| | Mean | SD | Comparison Value | <i>t</i> | df | Sig. (2-tailed) | Mean Difference |
|--------------------------|--------|-------|------------------|----------|-----|-----------------|-----------------|
| Explicit prejudice | 34.91 | 7.76 | 43 | 15.97 | 233 | .00 | -8.09 |
| Psychological well-being | 138.95 | 17.77 | 147 | 6.93 | 233 | .00 | -8.05 |

6.5.3. Independent sample T.test

An independent sample t-test was used, to identify the significance of the differences between Arab and Kurdish explicit prejudice. Table 11 shows that those of an Arabic nationality reported significantly lower levels of prejudice than those of a Kurdish nationality.

Table 11 Independent sample t-test of explicit prejudice between Arab and Kurdish nationality

| | Nationality | N | Mean | SD | <i>t</i> | df | Sig. (2-tailed) |
|--------------------|-------------|-----|-------|------|----------|-----|-----------------|
| Explicit prejudice | Arab | 117 | 31.25 | 7.60 | 5.68 | 232 | .000 |
| | Kurd | 117 | 38.56 | 5.99 | | | |

To identify the significance of the differences between Arab and Kurdish nationalism on the implicit test, independent sample t-test was used to reviewing tables 12 to 15. At the first task the results from Table 12, show that the Arabic and Kurdish individuals show non-significant differences on the stimuli rely on reaction time or errors made.

Table 12 Independent sample t-test of implicit prejudice between Arab and Kurdish nationality, the first task is related to concept recognition

| First task recognition | Nationality | Mean | SD | <i>t</i> | df | Sig. (2-tailed) |
|---------------------------|-------------|----------|---------|----------|-----|-----------------|
| The Arabic Stimuli Time | Arab | 14.76 ms | 3.64 ms | 0.94 | 232 | .351 |
| | Kurd | 14.26 ms | 4.40 ms | | | |
| The Arabic Stimuli Error | Arab | 0.98 | 1.13 | 1.42 | 232 | .156 |
| | Kurd | 1.26 | 1.75 | | | |
| The Kurdish Stimuli Time | Arab | 15.58 ms | 3.61 ms | 1.03 | 232 | .305 |
| | Kurd | 16.13 ms | 4.46 ms | | | |
| The Kurdish Stimuli Error | Arab | 0.62 | 0.85 | 1.89 | 232 | .061 |
| | Kurd | 0.88 | 1.26 | | | |

At the third task, Arabic nationality reported a significantly lower level of implicit prejudice than Kurdish nationality. For the **Arabic stimuli** rely on reaction time, and error. However, Arabic participants reported the significantly higher level of **Kurdish stimuli** relies on reaction time. On the other hand, Arabic participants reported significantly lowest level on the **Kurdish stimuli** relies on error account. See Table 13

Table 13 independent sample t-test of implicit prejudice between Arab and Kurdish nationality, the third task combined with pleasant and unpleasant attributes.

| The third task combine | Nationality | Mean | SD | <i>t</i> | df | Sig. (2-tailed) |
|------------------------------|-------------|---------|---------|----------|-----|-----------------|
| The Arabic Stimuli Time | Arab | 7.93 ms | 1.72 ms | 4.17 | 232 | .000 |
| | Kurd | 9.20 ms | 2.82 ms | | | |
| The Arabic Stimuli Error | Arab | 0.16 | 0.41 | 7.67 | 232 | .000 |
| | Kurd | 1.17 | 1.36 | | | |
| The Kurdish Stimuli Time | Arab | 7.68 ms | 1.97 ms | 6.69 | 232 | .000 |
| | Kurd | 5.96 ms | 1.98 ms | | | |
| The Kurdish Stimuli Error | Arab | 0.52 | 1.10 | 5.19 | 232 | .000 |
| | Kurd | 1.36 | 1.36 | | | |

At the Fourth task the Table 14, show that Arabic participants reported significantly highest level on implicit prejudice than Kurdish participants on Arabic stimuli rely on time account. However, Arabic participants reported significantly lower levels compared with Kurdish participants of the **Arabic Stimuli** relies on error account. Nevertheless, Arabic participants reported significantly higher levels of **Kurdish stimuli** rely on time account. Regarding on the **Kurdish stimuli** rely on error account Arabic participants reported significantly higher levels compared with Kurdish participants

Table 14 Independent sample t-test of Implicit prejudice between Arab and Kurdish nationality, the fourth task, reversing target (concept recognition).

| The fourth task reversing target | Nationality | Mean | SD | <i>t</i> | df | Sig. (2-tailed) |
|----------------------------------|-------------|----------|---------|----------|-----|-----------------|
| The Arabic Stimuli Time | Arab | 14.57 ms | 3.65 ms | 5.53 | 232 | .000 |
| | Kurd | 12.11 ms | 3.12 ms | | | |
| The Arabic Stimuli Error | Arab | 0.78 | 0.82 | 3.67 | 232 | .000 |
| | Kurd | 1.32 | 1.39 | | | |
| The Kurdish Stimuli Time | Arab | 14.97 ms | 3.31 ms | 8.10 | 232 | .000 |
| | Kurd | 11.72 ms | 2.81 ms | | | |
| The Kurdish Stimuli Error | Arab | 1.36 | 1.16 | 2.18 | 232 | .030 |
| | Kurd | 1.00 | 1.35 | | | |

The fifth task Table 15 the results shows. Arabic participants reported significantly higher levels of implicit prejudice than the Kurdish participants. At the **Arabic stimuli** rely on time account and error. Regarding the **Kurdish stimuli** rely on time account and error account the Arabic participants reported significantly higher levels of implicit prejudice than the Kurdish participants.

Table 15 Independent sample *t-test* of implicit prejudice between Arab and Kurdish nationality, fifth task combined with pleasant and unpleasant attributes.

| The fifth task combine | Nationality | Mean | SD | <i>t</i> | df | Sig. (2-tailed) |
|---------------------------|-------------|---------|---------|----------|-----|-----------------|
| The Arabic Stimuli Time | Arab | 9.27 ms | 2.30 ms | 7.72 | 232 | .000 |
| | Kurd | 6.99 ms | 2.20 ms | | | |
| The Arabic Stimuli Error | Arab | 1.09 | 1.30 | 2.87 | 232 | .005 |
| | Kurd | 0.64 | 1.11 | | | |
| The Kurdish Stimuli Time | Arab | 8.93 ms | 1.86 ms | 8.46 | 232 | .000 |
| | Kurd | 6.45 ms | 2.58 ms | | | |
| The Kurdish Stimuli Error | Arab | 0.88 | 0.96 | 4.32 | 232 | .000 |
| | Kurd | 0.40 | 0.71 | | | |

6.5.4. Bivariate correlations

A Pearson correlation analysis was performed to examine the relationship between the prejudice attitudes and the psychological well-being components. Table 16 demonstrates the inter-correlations between the explicit, implicit attitudes and psychological well-being components. The results show a significant negative correlation between explicit Prejudice and the two domains of psychological well-being, Autonomy and a positive relation with others. Non-significant correlation was recorded with other psychological well-being components: Environmental mastery, Self –acceptance, Personal growth, and Purpose in life. Likewise, the table shows the correlations between the implicit test measurements in terms of time account and a negative significant effect size associations occurred for the Purpose in life domain. However, non-significant correlations were recorded with other psychological well-being dimensions. Also, an implicit test- error account indicated a significant relation with the Positive Relation with Others domains, but non-significant correlations were recorded with other psychological well-being dimensions.

One of the criteria for evaluating the correlation between the variables is considering the effect size of the relations. Although statistical significance shows exist significance, however, it does not demonstrate the size of the effect between the variables, the effect size, therefore, as a reliable path might be helpful to indicate the magnitude of the relations between the variables (Sullivan & Feinn, 2012). The effect size emphasizes the size of the correlations between the variables without affecting with sample size. Also, it considered as a substantial tool in explaining and report the effectiveness (Coe, 2002). The aim of using the effect size in the current study is to quantify the size of the relations between prejudice attitudes and psychological well-being components. With considering the effect size criteria McGrath and Meyer (2006) pointed out that there are different effect-size measures that use to examine the relation between a dichotomous.

First effect size criteria for Pearson correlation coefficients and standard regression that cited the effect size criteria .1 = small, .3 = medium and .5 = large (J. Cohen, 1988). The second effect size criteria are point-biserial correlation coefficient that considered the effect size criteria, small = .1, medium = .24 and large = .37, from reading the Pearson Product moment is of mathematical equivalence to point-biserial. Therefore, could one use the .1, .24, .37 as effect size criteria for Pearson product moment correlation coefficients

and regression coefficients (McGrath & Meyer, 2006) To interpret the correlation coefficient to represent the effect size between explicit, implicit prejudice attitudes and psychological well-being domains, the stands out from the results the relationship between both variables is small.

Table 16 Pearson's product-moment correlation coefficient for Prejudice and psychological well-being domains

| Component | Pearson Correlation | Strength of Correlation | Significance |
|-------------------------------|---------------------|-------------------------|--------------|
| Explicit prejudice attitude | | | |
| Autonomy | -.14* | Small | P=0.03 |
| Environmental mastery | -.08 | None | P=0.22 |
| Personal Growth | .06 | None | P=0.36 |
| Positive Relation with others | -.15* | Small | P=0.02 |
| Purpose in life | .06 | None | P=0.35 |
| Self –acceptance | -.05 | None | P=0.41 |
| Implicit Test Time | | | |
| Autonomy | -.12 | None | P=0.06 |
| Environmental mastery | -.06 | None | P=0.41 |
| Personal Growth | .04 | None | P=0.60 |
| Positive Relation with others | -.05 | None | P=0.49 |
| Purpose in life | -.17* | Small | P=0.01 |
| Self –acceptance | -.10 | None | P=0.14 |
| Implicit test-Error | | | |
| Autonomy | .09 | None | P=0.18 |
| Environmental mastery | .03 | None | P=0.66 |
| Personal Growth | .04 | None | P=0.50 |
| Positive Relation with others | -.17* | Small | P=0.02 |
| Purpose in life | .03 | None | P=0.60 |
| Self –acceptance | .04 | None | P=0.52 |

* Significant at $p < 0.05$ (2-tailed).

** Significant at $p < 0.01$ (2-tailed)

Strength of the correlation based on guidelines by (McGrath & Meyer, 2006).

The Z-Score examined to identify does gender moderate the relationship between psychological well-being components and explicit and implicit prejudice attitude and, as such, are explicit and implicit prejudice attitude more important predictor of psychological well-being for female or male? Table 17, show the results of the differences in correlation of personal growth component, explicit prejudice attitude between male ($r=.10$) and female ($-.19^*$) ($Z= -2.21$; $P. \text{ value} = 0.03 < p0.05$) suggesting that the association is larger for females than males. As well, the differences in correlation of purpose in life component and implicit prejudice attitude-error male ($r= -.26$) and female ($r=-.06$) ($Z = 2.46$; $P. \text{ value} = .01 < p.05$), suggesting that the association is larger for males than females

Table 17 Male and female correlation and Z-Score of significance of the difference between the Correlations of explicit and implicit prejudice attitude and psychological well-being components according to gender.

| | Explicit prejudice attitude | | | | Implicit prejudice attitude-error | | | | Implicit prejudice attitude-time | | | |
|-----------------------|-----------------------------|--------|---------|----------|-----------------------------------|--------|---------|----------|----------------------------------|--------|---------|----------|
| | <i>r</i> | | Z-Score | P. value | <i>r</i> | | Z-Score | P. value | <i>r</i> | | Z-Score | P. value |
| | Male | Female | | | Male | Female | | | Male | Female | | |
| Autonomy | -0.23* | -0.05 | -1.40 | 0.16 | -0.20* | -0.07 | -1.00 | 0.32 | 0.10 | 0.12 | -0.15 | 0.88 |
| Environmental mastery | -0.09 | -0.06 | -0.23 | 0.82 | 0.03 | -0.18 | 1.60 | 0.11 | -0.06 | 0.20* | -1.99 | 0.05 |
| Personal growth | 0.10 | -0.19* | -2.21 | 0.03 | -0.10 | 0.16 | -1.98 | 0.05 | -0.02 | 0.13 | -1.14 | 0.26 |
| Positive relations | -0.22* | -0.07 | -1.16 | 0.25 | -0.14 | 0.04 | -1.37 | 0.17 | 0.18 | 0.21* | -0.24 | 0.81 |
| Purpose in life | 0.13 | 0.00 | 0.99 | 0.32 | -0.26** | -0.06 | 2.46 | 0.01 | 0.13 | -0.07 | 1.52 | 0.13 |
| Self-acceptance | -0.02 | -0.09 | 0.53 | 0.60 | -0.18 | -0.04 | -1.07 | 0.28 | 0.08 | 0.05 | 0.23 | 0.82 |

**. Correlation is significant at the .01 level

*. Correlation is significant at the .05 level.

6.5.5. Multiple regressions

A series of standard multiple regressions were run to indicate which aspects of psychological well-being domains have unique prediction with prejudice attitudes, after controlling nationality, sex, age, education level and marital status. Table 18 presents psychological well-being components as dependent variables and explicit and implicit prejudice as predictor variables, and multiple regressions were performed. It included the interactions between two continuous grades. At the first stage (Model 1) demographic variables were recorded, including nationality, gender, age, the level of education and marital status. At the second stage (Model 2), the explicit and implicit prejudice were added.

Table 18 Regression Analysis psychological well-being measure as the dependent variable, and nationality, gender, age, education, marital status, and prejudice attitude used as predictor variables

| | Autonomy | | | | Environmental Mastery | | | | Personal Growth | | | |
|---------------------------|----------|---------|-------|------|-----------------------|---------|-------|-------|-----------------|---------|-------|------|
| Model-1 | B | β | t | Sig. | B | β | t | Sig. | B | β | t | Sig. |
| Nationality | -0.60 | -0.07 | -0.97 | 0.33 | -0.58 | 0.61 | -0.95 | 0.34 | -0.45 | -0.05 | -0.75 | 0.45 |
| Gender | 0.25 | 0.03 | 0.40 | 0.69 | 1.10 | 0.62 | 1.79 | 0.07 | 0.101 | 0.01 | 0.17 | 0.87 |
| Age | 0.73 | 0.14 | 2.07 | 0.04 | 0.12 | 0.35 | 0.36 | 0.72 | -0.44 | -0.09 | -1.28 | 0.20 |
| Education | 0.67 | 0.17 | 2.35 | 0.02 | -0.19 | 0.28 | -0.67 | 0.50 | 0.37 | 0.10 | 1.34 | 0.18 |
| Marital States | 0.04 | 0.02 | 0.16 | 0.87 | -0.25 | 0.21 | -1.18 | 0.24 | -0.03 | -0.01 | -0.16 | 0.88 |
| Model-2 | B | β | t | Sig. | B | β | t | Sig. | B | β | t | Sig. |
| Nationality | -0.48 | -0.053 | -0.68 | 0.50 | -0.48 | 0.70 | -0.69 | 0.49 | -1.08 | -0.12 | -1.56 | 0.12 |
| Gender | 0.58 | 0.063 | 0.92 | 0.36 | 1.34 | 0.63 | 2.15 | 0.033 | 0.08 | 0.01 | 0.13 | 0.89 |
| Gender | 0.65 | 0.129 | 1.85 | 0.07 | 0.06 | 0.35 | 0.16 | 0.88 | -0.47 | -0.10 | -1.37 | 0.17 |
| Age | 0.52 | 0.130 | 1.79 | 0.08 | -0.30 | 0.29 | -1.03 | 0.31 | 0.47 | 0.12 | 1.66 | 0.10 |
| Education | 0.00 | 0.001 | 0.02 | 0.98 | -0.28 | 0.22 | -1.31 | 0.19 | -0.02 | -0.01 | -0.11 | 0.91 |
| Marital States | -0.06 | -0.094 | -1.26 | 0.21 | -0.04 | 0.04 | -0.10 | 0.32 | 0.06 | 0.11 | 1.48 | 0.14 |
| Explicit prejudice | -0.02 | -0.111 | -1.65 | 0.10 | -0.01 | 0.01 | -0.89 | 0.38 | 0.01 | 0.07 | 1.04 | 0.30 |
| Implicit prejudice -Time | 0.04 | 0.090 | 1.26 | 0.21 | 0.04 | 0.03 | 1.15 | 0.25 | 0.04 | 0.09 | 1.24 | 0.22 |
| Implicit prejudice -Error | -0.60 | -0.07 | -0.97 | 0.33 | -0.48 | 0.70 | -0.69 | 0.49 | -1.08 | -0.12 | -1.56 | 0.12 |

| | Positive Relations | | | | Purpose in Life | | | | Self-acceptance | | | |
|---------------------------|--------------------|---------|-------|------|-----------------|---------|-------|------|-----------------|---------|-------|------|
| Model-1 | B | β | t | Sig. | B | β | t | Sig. | B | β | t | Sig. |
| Nationality | -0.65 | -0.06 | -0.91 | 0.36 | 0.75 | 0.08 | 1.21 | 0.23 | 0.23 | 0.02 | 0.34 | 0.74 |
| Gender | -0.12 | -0.01 | -0.17 | 0.87 | 0.23 | 0.03 | 0.38 | 0.71 | 0.45 | 0.04 | 0.65 | 0.52 |
| Age | 1.11 | 0.19 | 2.76 | 0.01 | 0.90 | 0.18 | 2.53 | 0.01 | 0.29 | 0.05 | 0.74 | 0.46 |
| Education | 1.17 | 0.25 | 3.64 | 0.00 | 0.71 | 0.17 | 2.47 | 0.01 | 1.16 | 0.26 | 3.66 | 0.00 |
| Marital States | -0.45 | -0.13 | -1.82 | 0.07 | 0.22 | 0.08 | 1.01 | 0.31 | 0.06 | 0.02 | 0.24 | 0.81 |
| Model-2 | B | β | t | Sig. | B | β | t | Sig. | B | β | t | Sig. |
| Nationality | -0.72 | -0.07 | -0.90 | 0.37 | 0.28 | 0.03 | 0.40 | 0.69 | 0.22 | 0.02 | 0.27 | 0.79 |
| Gender | 0.35 | 0.03 | 0.49 | 0.69 | 0.26 | 0.03 | 0.41 | 0.68 | 0.62 | 0.06 | 0.87 | 0.39 |
| Age | 0.91 | 0.15 | 2.28 | 0.03 | 0.97 | 0.19 | 2.74 | 0.01 | 0.27 | 0.05 | 0.68 | 0.50 |
| Education | 1.03 | 0.22 | 3.12 | 0.00 | 0.75 | 0.18 | 2.56 | 0.01 | 1.09 | 0.24 | 3.33 | 0.00 |
| Marital States | -0.54 | -0.16 | -2.20 | 0.03 | 0.29 | 0.10 | 1.34 | 0.18 | 0.06 | 0.02 | 0.23 | 0.82 |
| Explicit prejudice | -0.07 | -0.10 | -1.38 | 0.17 | 0.06 | 0.11 | 1.42 | 0.16 | -0.02 | -0.03 | -0.33 | 0.74 |
| Implicit prejudice -Time | 0.00 | 0.02 | 0.28 | 0.78 | -0.03 | -0.17 | -2.60 | 0.01 | -0.01 | -0.08 | -1.16 | 0.25 |
| Implicit prejudice -Error | 0.13 | 0.23 | 3.33 | 0.00 | -0.03 | -0.07 | -0.95 | 0.34 | 0.01 | 0.03 | 0.36 | 0.72 |

Form the table 18 the results of the multiple regressions for psychological well-being components are showed into the first stage (Step 1) of the regression analysis, demographic variables were recorded including nationality, sex, age, education level, and marital status. The results showed different correlations psychological well-being components as follow; (Autonomy, $F [5,228] = 2.84$, $r = .24$, $r^2 = .06$, $\text{adj } r^2 = .04$, $p < .05$; environmental mastery, $F [5,228] = 1.57$, $r = .18$, $r^2 = .03$, $\text{adj } r^2 = .01$, $p > .05$; personal growth, $F [5,228] = 1.57$, $r = .15$, $r^2 = .02$, $\text{adj } r^2 = .00$, $p > .05$; positive relations, $F [5,228] = 6.79$, $r = .36$, $r^2 = .13$, $\text{adj } r^2 = .11$, $p < .00$; purpose in life, $F [5,228] = 3.28$, $r = .26$, $r^2 = .08$, $\text{adj } r^2 = .05$, $p < .01$; Self-acceptance; $F [5,228] = 3.57$, $r = .27$, $r^2 = .07$, $\text{adj } r^2 = .05$, $p < .01$. The regressions of education demonstrate for unique variance in autonomy, positive relations, purpose in life, and self-acceptance ($\beta = .17$, $p < .02$), ($\beta = .25$, $p < .00$), ($\beta = .17$, $p < .01$), ($\beta = .26$, $p < .00$). Moreover age demonstrate for unique variance in autonomy, positive relations and purpose in life account ($\beta = .15$, $p < .05$), ($\beta = .19$, $p < .01$), ($\beta = .18$, $p < .01$). The result however, shows non-significant predict, with implicit prejudice with time account.

At the second stage (Model 2), after insertion the explicit and implicit prejudice attitudes statistically significant changes were indicated in R2 for psychological well-being aspects (Autonomy, $\Delta R^2 = .05$, $p < .01$; Environmental Mastery, $\Delta R^2 = .01$, $p > .05$; Personal Growth, $\Delta R^2 = .01$, $p > .05$; Positive Relations, $\Delta R^2 = .15$, $p < .00$; Purpose in Life, $\Delta R^2 = .07$, $p < .01$; Self-acceptance, $\Delta R^2 = .05$, $p < .01$). The implicit prejudice show unique variance in Positive Relations, ($\beta = .23$, $p < .00$) and purpose in life ($\beta = -.07$, $p < .01$). However, surprisingly, the explicit prejudice did not record any unique variance with psychological well-being domains.

6.6. Discussion

This study measures prejudicial attitudes through reviewing the explicit and implicit test results. Also, long-standing issues of how negative attitudes might affect individuals' well-being are re-examined through assessing two viewpoints: integrated threat theory (Whitley & Kite, 2009) and the rejection-identification model (Branscombe *et al.*, 1999). These frameworks are necessary to evaluate prejudicial attitudes and understanding the associations between prejudicial attitudes and psychological well-being among Kurdish and

Arab nationals. To measure prejudicial attitudes the implicit association test was employed that includes explicit and implicit measures.

This study would contribute to the supporting literature in the predictive validity of implicit measurement (Greenwald *et al.*, 1998; Nosek *et al.*, 2005). The results might be helpful in identifying how implicit attitude related to individuals' behaviour. In particular, the earlier research has helped to identify an association between implicit and explicit attitudes (Dovidio *et al.*, 2002; Maison *et al.*, 2001). This study demonstrates how implicit and explicit attitudes can systematically correlate with psychological well-being domains through illustrating how these attitudes might influence the mental health of the individuals from both nationalities. Furthermore, these findings might be useful when considering the nature of relations between prejudicial attitudes and psychological well-being domains including autonomy, environmental mastery, personal growth, positive relation with others, purpose in life, and self-acceptance.

From comparing the results of the explicit and implicit measures of the implicit association test, the program provided an important indication that the implicit measure might be more resistant to self-reporting factors. Contrary to expectations, comparing the arithmetic means of explicitly prejudicial attitudes with the test value shows that both nationalities recorded low levels of explicit prejudicial attitudes. Yet, as expected, the current study shows that the host community group who are Kurdish tends to be more prejudicial compared with those internally displaced people of an Arab nationality. The findings of the current study support the previous research that found the host communities are likely to be more prejudicial compared with a minority group (Pettigrew & Meertens, 1995; Zarate, Garcia, Garza, & Hitlan, 2004; Zick, Pettigrew, & Wagner, 2008).

Nevertheless, the participants recorded different results on the implicit measure; in each task, the participants recorded different answers. The first task was related to concept recognition, and although Kurdish nationals recorded a different score of prejudice, non-significant prejudice differences were recorded. However, at the third task, that related to concept recognition and presented the Kurdish nationality in unpleasant terms, Kurdish participants recorded the highest and most significant score of prejudice. Conversely, after changing the conditions of the stimuli where Arab nationality stimuli were presented with

unpleasant terms and Kurdish nationality stimuli were presented with pleasant terms, Arab participants recorded the highest and most significant level of prejudice.

From the results it is seen that the participants recorded low prejudice attitudes in the explicit test while they show high prejudice in the implicit test. This result might be related to social desirability factors in that people prefer to hide negative attitudes towards the subject to avoid being criticised. These differences in the results were supported by previous studies that suggest that individuals probably show their real attitude when they have less control of their behaviour. The participants also might display dissimilar answers when using self-report measures (Blair, 2001; Dovidio, 2001; T. Wilson *et al.*, 2000). In addition, the indication that both nationalities have negative attitudes towards each other is probably a result of conflict (Rothgerber, 1997; H. J. Smith & Pettigrew, 2015), competition (Esses *et al.*, 2008), and feeling threatened as part of the out-group (Stephan *et al.*, 2002).

The most obvious finding to emerge from the analysis was a negative association between explicit and implicit prejudice and psychological well-being. Additionally, the results of this investigation show that explicit and implicit prejudice has a unique prediction on some domains of psychological well-being such as autonomy, personal growth, positive relation with others and purpose in life. This finding supports the previous research that investigated the relation between prejudice and psychological well-being (Dinh *et al.*, 2014; Magallares, 2012; Schaafsma, 2011; Seaton & Yip, 2009). However, the results show that the negative relationship between psychological well-being and prejudice does not include all well-being domains which means prejudice might not result in lower levels of well-being in all situations. The possible explanation for this result can be viewed through the rejection-identification model. Branscombe *et al.* (1999) and Crocker and Major (1989) indicated that there are individual differences on the influence of prejudice on PWB.

Moreover, through considering the effect size criteria, the results show that the correlation between prejudicial attitudes and psychological well-being components is small. The possible explanation of these results may be found in research by Richard, Bond Jr, and Stokes-Zoota (2003) during the investigation of more than 25,000 studies of 8 million individuals. A large number of conclusions are listed alongside meta-analytic information about the quantity and variability of corresponding effects. They found that deliberate and

obvious manipulations of emotion and the correlation of the social psychological phenomena yielded a value of $r = .21$. So, it could be concluded that although deliberate manipulations the effect sizes are medium and on average effect sizes are small so in this light the correlations. Also, while the study has not manipulated the variables, it could be said the results of the current study are suitable and realistic.

From this result, we could conclude that conflict and mass movement may cause an adverse action or judgment from the host community and in some aspects might have a negative influence on displaced persons well-being due to increasing the negative attitudes toward the internally displaced people. Therefore, it is necessary for human rights organizations to consider the influence of the exodus movement on the host community and prepare a comprehensive program to educate the host community of the human crisis that the internally displaced are facing. Also, to rebuild a positive relationship between the host community and the displaced people to reduce the harmful consequences of prejudicial attitudes.

Whilst examining the gender differences in the relation to the prejudicial attitudes and psychological wellbeing components, most researchers investigating prejudice have demonstrated that men have consistently demonstrated greater prejudice than women (Akrami, Ekehammar, & Araya, 2000; Hoxter & Lester, 1994; Qualls, Cox, & Schehr, 1992). Furthermore, Ekehammar, Akrami, and Araya (2003) concluded that the female is more likely show higher implicit prejudicial attitudes than the male while males show higher explicit prejudice than females. Contrary to the Ekehammar et al. (2003) results, the present findings indicate a significant difference between male and female prejudicial attitudes and psychological well-being components. The females show higher significant differences in relation to explicit prejudice and the personal growth component while males show higher significant differences in relation to implicit prejudice and purpose in life.

The current study demonstrates the usefulness of the theoretical research on prejudice and its consequences on well-being. Furthermore, the study proposes that the Integrated Threat Theory and the Rejection-Identification Model might provide a productive way for further elucidating the social and psychological processes. It may also help to gain a better perception of how humans' attitudes interact with different psychological aspects. These findings may allow us to discover positive and beneficial ways to maintain individuals'

psychological quality of life with growing positive relations over the course of life. This study displays the value of combining the rejection-identification model with integrated threat theory to explain how prejudice influences psychological well-being among Kurdish and Arabic nationals.

Measuring prejudicial attitudes through self-report questionnaires is challenging because of the social desirability factor and the IAT program was originally designed to address two key limitations of self-report scales. First, people perhaps are unwilling to show their real attitudes, and secondly, they might be unable to precisely report their attitudes (Greenwald *et al.*, 1998). So, the implicit association test program design is based on physiological approaches that might help to improve our understanding of some characteristics of prejudiced attitudes. However, through using the implicit association test program and recognizing the individuals' perceptions toward the subjects might be challenging means it does not present any clarification regarding how to interpret the results. Also, because the test used is designed specifically for Arabic and Kurdish nationalities, generalizing the results of the other refugee groups might be challenging. Additionally, the current work did not examine the impact or the interactions of other variables, since it is possible that there are other subjective and objective factors that may interact with well-being such as, social identity, self-esteem, and resilience.

6.7. Conclusion

To sum up, the present research highlighted how a prejudicial attitude is negatively correlated with psychological well-being. Our investigation included two different perspectives that are using both explicit and implicit measures to evaluate the prejudicial attitude among the research sample. Considering that the implicit association test program included two different methods (the self-report questionnaire and the objective measure), the results show that there is a distance between the self-report questionnaire results and the objective measure of prejudicial attitudes. In other words, while the participants showed a low level of prejudicial attitudes on the self-report questionnaire they recorded a high level of prejudicial attitudes on the objective measure. These frameworks may help us to understand better who expresses prejudice, and in which areas it has a link with psychological well-being and the nature of this connection between both variables.

However, it is also possible there are other subjective and objective factors that may interact with well-being such as, social identity, self-esteem, and resilience. Therefore, it could be said that further studies in this area might be of value to identify the factors that interact with the well-being.

Chapter Seven

Exploring the association between intrapersonal forgiveness and psychological well-being among internally displaced people in the Kurdistan region of Iraq

7.1. Abstract

The conflict in Iraq has a long and intense history, and talking about the concept of forgiveness is probably painful and difficult to accept, especially for the individuals who suffered because of the conflict. Thus it is necessary to investigate forgiveness among the Iraqi displaced who have been affected by the conflict. A number of theoretical and empirical studies display an interest in the role of intrapersonal forgiveness after the conflict with regard to well-being. In addition, the earlier findings suggested that forgiveness might help to improve well-being. Therefore, the current study focused on measuring intrapersonal forgiveness among Iraqi internal displaced people and, examined the association between forgiveness and psychological well-being. Also, it explored the gender differences in the relationship between both variables. To measure psychological well-being the Ryff scale across 6 components was used, and to measure intrapersonal forgiveness the short version of the Enright scale across three domains was used. 350 Iraqi people took part in this study. The results showed that the participants recorded low levels of forgiveness in all dimensions. As well as this, they recorded a low level of psychological well-being. Forgiveness dimensions were positively and strongly associated with psychological well-being domains. To sum up, it could be said that forgiveness and psychological well-being have an important place in the positive psychology that helps individuals to have experience of healthy growth in the social community.

7.2. Introduction

There is a large volume of published papers describing the role of forgiveness in improving well-being. For instance, recent evidence indicates that forgiveness has a positive impact on health and well-being (Bono *et al.*, 2008; Church *et al.*, 2013; Cox *et al.*, 2012), and is negatively associated with psychological distress (Toussaint, Williams, Musick, & Everson, 2001). In addition, the people who recorded higher levels of forgiveness experienced a better standard of well-being (Freedman & Enright, 1996; Noor, Brown, & Prentice, 2008; Sandage & Jankowski, 2010). Similarly, Fehr, Gelfand, and Nag (2010) point out that forgiveness might be considered a healthy phenomenon within the social situations that help members of the community accept each other. It is also regarded as a successful way to heal wounds and to end conflicts between individuals (Staub, 2005; Tutu, 2000).

Previous findings also indicate that forgiveness might help to improve social relations. For instance, Worthington and Scherer (2004) and McCullough (2000) assume that forgiveness relates to some relational skills such as dealing with the stress of adverse emotions and reinforces emotion-regulation strategies that make the person less likely to harm others. Furthermore, Enright and the Human Development Study Group (1996) suggest that forgiveness might help individuals to gain moral strength and improve relationships based on the intrinsic worth of self and other.

Overall, the studies have been inconsistent and contradictory about the relationship between forgiveness and well-being; some studies claim that forgiveness may not associate with well-being. For instance, in a study on 121 females that live in domestic violence shelters, Gordon, Burton, and Porter (2004) point out that women who experience violence and who have been forgiving in these situations are more likely to return to their abusive partners. Also, McNulty (2010) highlighted that forgiveness probably leads to a rise in psychological and physical transgressions between couples because the offender might not feel guilty after being forgiven by the victim. Moreover, McCullough, Bellah, Kilpatrick, and Johnson (2001) were also unable to indicate any non-significant association between well-being and forgiveness motivation. Therefore, it could be said that to determine whether forgiveness has a positive and beneficial or an adverse and harmful effect is reliant

on characteristics of the relationship and situation in which it occurs (McNulty & Fincham, 2012).

To summarize the previous findings, a number of issues can be highlighted. First, many studies have emphasized that a stressful life might be negatively associated with well-being (Huijts, Kleijn, van Emmerik, Noordhof, & Smith, 2012; Martin-Herz et al., 2012). Secondly, the people who experience conflict conditions usually record low levels of forgiveness (McLernon *et al.*, 2004). Finally, most of the studies that examined forgiveness in a conflict situation were related to measuring forgiveness after the conflict (Cehajic, Brown, & Castano, 2008; Hewstone et al., 2004; McLernon et al., 2004), finding the association with reconciliation (McGlynn*, Niens, Cairns, & Hewstone, 2004; Tam et al., 2008) and physical and mental health (Lawler-Row, 2010; Myers, Hewstone, & Cairns, 2009). Nevertheless, no study has been found investigating the link between forgiveness and psychological well-being in conflict situations among the Iraqi internally displaced persons.

The conflict in Iraq has a long and violent history (Cordesman *et al.*, 2010), and after ISIS attacks the violence has intensified causing an unpleasant living situation for many individuals in the region. Despite the fact that displaced people are receiving basic aid that offers a minimum level of living standards, they need more attention from a psychological perspective because they may have faced serious risks during the conflict (Davies, 2012; Global Protection Cluster Working Group, 2010). The earlier studies show that being displaced probably has an adverse effect on mental health and well-being (Schaafsma, 2011; Seaton & Yip, 2009), and forgiveness might have a beneficial impact on well-being. For instance, earlier studies pointed out that forgiveness has a positive effect on health (Bono *et al.*, 2008) and well-being (Toussaint & Friedman, 2009).

The current study aims to examine forgiveness that might lead to positive reactions in the social sphere of life. Also, it assesses how extending forgiveness is helpful in promoting mental health, especially when this response is linked with interactive events and how it helps to enhance individuals' level of wellbeing. Furthermore, the study's aim is to explore the connection between forgiveness and psychological well-being. The assumption of the relationship between well-being and forgiveness includes the idea that forgiveness has a positive result on individuals' emotions and behaviours, and forgiveness might have a

positive link with positive changes in cognitive beliefs. From this perspective, this study aims to examine the associations between the domains of forgiveness and psychological well-being. Another key question is about whether the gender differences are related to forgiveness or psychological well-being. Therefore, another aim of this study examines the gender differences in forgiveness and psychological well-being to understand to what extent gender plays a role in the relationship between forgiveness and psychological well-being; primarily, is forgiveness the more significant predictor of psychological well-being for females or males?

Therefore, the current research may give a wider view to understanding how these variables interact. Also, examining the relationship between well-being and forgiveness might help to identify the type and strength of the relationship between these variables among individuals who have experienced a stressful life. This current study tries to highlight forgiveness through assessing the emotional, behavioural and cognitive process of forgiveness among internally displaced people and predict the situation after the conflict ends. Therefore, it is necessary to find an effective way to address this violence by examining post-conflict and the building of forgiveness between societies as well as considering that forgiveness might lead to an improvement in mental health and well-being. It could hypothesize that making a decision to forgive and having the ability to build a positive emotional attitude towards the offender might lead to growth in positive feeling and a rise in the level of psychological well-being.

7.3. Method

7.3.1. The research sample

Participants consisted of 350 internally displaced people of Arab nationality who live in the Kurdistan Region of Iraq. They are equally split by gender (175 men and 175 women) and are aged between 18 and 80 years ($M= 37.04$; $SD= 13.59$). The research sample was selected from the displaced people who live in the Erbil Governorate, and because the sample was located in many areas, the researcher tried to choose the sample from different locations. The majority of the internally displaced people are lives in a shelter that was built through cooperation between UNHCR and the Kurdistan regional government (KRG). Some of them live outside the camps in a housing complex or live in a

private house. The researchers choose the participants from inside and outside the camps. The study was applied to five areas, and in each area, 70 individuals were selected. Three shelters: Kawr Gosk, Zaiton collective and Ainkawa; and two districts: Mamostayan and Shorish were chosen.

35.4% of the participants were between 18-28 year ($n = 124$), and 25% of the participants were between 40-50 years ($n = 88$).¹ In terms of education, 33.1% of them reported having completed a secondary level of education ($n= 116$), and 32% of them had completed a tertiary level ($n= 112$) of education. 63.1% were recorded as married ($n= 221$) and 30.6% were recorded as single ($n=107$). Regarding to their health status, 53.7% ($n= 195$) of responders reported having healthy lives, and 73.4% ($n=257$) of them had no health issues.

7.3.2. Measures

7.3.2.1. Forgiveness

To measure intrapersonal forgiveness, Enright developed the forgiveness inventory measure (EFI) that includes the three domains of emotion, behaviour, and cognition toward the guilty person. The scale includes 60 items to measure the entity of intrapersonal forgiveness (Subkoviak *et al.*, 1995). Additionally, Enright scale is considered to be one of the few scales that have established psychometric properties, which are widely used to measure forgiveness. It is also one of the objective measures for the individual forgives to an offender who causes unfair and deep hurt (Balkin, Harris, Freeman, & Huntington, 2014; Hanke & Fischer, 2013; Orathinkal, Vansteenwegen, Enright, & Stroobants, 2007).

McLernon, Cairns, Hewstone, and Smith, (2004) designed a short version of Enright inventory forgiveness scale including 22 items. In addition, after calculating both versions of the forgiveness scale by using all items, the validity and reliability of the short version of the Enright scale shows a highly significant of internal consistency (.96) and is nearly identical to the long version (.94) (McLernon *et al.*, 2004; Orathinkal *et al.*, 2007; Subkoviak *et al.*, 1995).

At first, the scale displayed some questions relating to the nature of the incident that, the participants might face. The incident was classified according to the type of harm, and classifying their types injuries, and each type is scored as follows, (psychological harm =1,

physical harm =2, and bereavement=3). As well as this, the participants are asked to show the depth of hurt via five points from 1 that meant “no hurt” to 5 which referred to “a great deal of hurts.” To identify the time of the incident, the participants are asked to estimate the time via four points starting with “1”= days ago, “2”= weeks ago, “3”= months ago, and “4”= years ago (Subkoviak *et al.*, 1995).

After these questions, the participants are asked to complete the forgiveness scale that includes three dimensions. The first 8 items comprised the emotional component, which includes positive items (e.g., I feel kindness towards him/her/them) and negative items (e.g., I feel disgust towards him/her/them). The next 6 items comprised the behaviour component that included both positive and negative items (e.g., regarding this person or persons I do or would punish him/hers/them). The final 8 items comprised the cognition component that included both positive and negative items (e.g., regarding the person(s) I think he/she/they are worthless). One additional item is given at the end of the measure as a final question that asked about the extent to which they forgave the person who was responsible for the harmful situation (McLernon *et al.*, 2004).

The measure is scored within 6 degrees for each item from 1 to 6 degrees, “1” meaning the individual strongly disagreed with the item and “6” meaning the person strongly agreed with the item. The final item is scored within 3 degrees: “1”= Not at all, “2”= Trying to forgive and “3”= complete forgiveness. According to these degrees, the range of scores of the overall forgiveness would be 135 as a maximum score and as a 23 minimum score.

7.3.2.2. Psychological well-being

For measuring psychological well-being the Ryff scale, 42 items is used, for further detail about the scale look at section 6.3.2.2. in chapter 6.

7.4. Ethics

The researchers received ethical approval from the school of psychology at the University of Leicester to allow them to study the research sample. The ethical process was approved according to the British Psychological Society’s guidelines (http://www.bps.org.uk/sites/default/files/documents/code_of_human_research_ethics.pdf). The participants were aged 18 years and above. Furthermore, to ensure the ability to work

in the specified area, official permission was obtained from the director of academic missions of the Kurdistan regional government / Iraq. As well as this, approval from the authorities concerned to access the displaced camps was obtained.

7.5. Results

7.5.1. Hurt experience

Table 19 displays the hurt experience of the participants, regarding the perceived degree of hurt. 214 of the participants (61.1%) reported that they experienced a great deal of hurts, and only 1 individual (0.3%) reported that he did not experience hurt. Furthermore, regarding the length of time, the majority of the participants (298, a percentage of 85.1%) indicated that they were harmed one year ago. To identify the type of the injury, Table 18 shows that 147 of the participants (42.2%) reported that they had faced a bereavement situation. 119 of them (34.2 %) reported that they had experienced psychological hurt, and 82 of the participants (23.6 %) reported that they experienced being physically injured.

Table 19 this table shows the frequencies of the individual responses to the hurt experienced that includes Grade of Injury, Length of Time and Injury Category.

| Hurt experience | N | Percentage % |
|-------------------------|-----|--------------|
| Grade of Injury | | |
| No hurt | 1 | 0.3 % |
| A little | 17 | 4.9 % |
| Some | 36 | 10.3 % |
| Much | 82 | 23.4 % |
| A great deal | 214 | 61.1 % |
| Length of Time | | |
| Days ago | 2 | 0.6 % |
| Weeks ago | 7 | 2.0 % |
| Months ago | 43 | 12.3 % |
| Years ago | 298 | 85.1 % |
| *Injury Category | | |
| Psychologically harmful | 119 | 34.2 % |
| physically harmful | 82 | 23.6 % |
| Bereavement | 147 | 42.2 % |

N = 350

* There was two missing value in the injury category

7.5.2. Descriptive statistic

Table 20 illustrates the results obtained from the preliminary analysis of three-component of forgiveness with six components of PWB, including Mean, Std. Deviation, Median, skewness and kurtosis score. Also, to obtain the internal consistency we conducted the value of Cronbach's alpha to the research variables.

Table 20 Cronbach's alpha, Score obtained for intrapersonal forgiveness and psychological well-being domains scales.

| Forgiveness | α | Mean | SD | Median | Skewness | Kurtosis |
|-----------------------|----------|-------|------|--------|----------|----------|
| Emotional | 0.75 | 19.38 | 7.41 | 19.00 | 1.07 | 1.35 |
| Behaviour | 0.71 | 15.10 | 5.11 | 16.00 | 0.15 | -0.44 |
| Cognitiveal | 0.76 | 17.73 | 7.53 | 17.00 | 0.71 | 0.36 |
| PWB | α | Mean | SD | Median | Skewness | Kurtosis |
| Autonomy | 0.61 | 22.25 | 4.72 | 22.00 | 0.26 | 0.17 |
| Environmental Mastery | 0.62 | 23.83 | 4.77 | 24.00 | 0.41 | 0.38 |
| Personal Growth | 0.62 | 21.42 | 5.03 | 21.00 | 0.17 | -0.18 |
| Positive Relations | 0.63 | 22.89 | 5.12 | 23.00 | 0.09 | -0.13 |
| Purpose in life | 0.58 | 24.73 | 5.01 | 24.00 | 0.28 | 0.17 |
| Self-acceptance | 0.63 | 23.02 | 5.22 | 23.00 | -0.11 | -0.10 |

7.5.3. One sample T.test

As shown in the table 21 the means score and the comparisons value of both forgiveness and psychological well-being are considerably different. To address these differences are statistically significant one sample, t.test is conducted from 350 participants of internally displaced people and the general population. The result shows that the participants show a statistically significant low level of forgiveness, at the .00 level of significance, from the normed value of 79. ($M = 52.21$, $SD=16.13$) compared with general population, $t(349) = 31.07$, $p < .00$. As well, the research sample show a statistically significant low level of psychological well-being, at the .00 level of significance, from the normed value of 147. ($M = 138.13$, $SD=18.76$) compared with general population, $t(349) = 8.84$, $p < .00$.

Table 21 One sample T-Test of forgiveness and psychological well-being

| | Mean | SD | Comparison Value | <i>t</i> | df | Sig. (2-tailed) | Mean Difference |
|--------------------------|--------|-------|------------------|----------|-----|-----------------|-----------------|
| Forgiveness | 52.21 | 16.13 | 79 | 31.07 | 349 | .00 | -26.79 |
| Psychological well-being | 138.13 | 18.78 | 147 | 8.84 | 349 | .00 | -8.87 |

7.5.4. Bivariate correlation

7.5.4.1. Correlation of hurt experience with forgiveness and psychological well-being domains

The correlation was identified between hurt experience in terms of the depth of the pain, the length of time, and injury type. A significant positive relation between the Emotional domains with the length of the time they had been hurt was indicated. However, non-significant correlations were recorded with other domains of both variables. Moreover, the depth of the pain showed no significant correlation with any domains of both variables. Type of Injury showed non-significant correlation with forgiveness domains. However, regarding the psychological well-being domains, significant negative correlation was indicated with Type of Injury and Self-acceptance domains, see Table 22

Table 22 the correlation of hurt experience with forgiveness and psychological well-being domains.

| | The depth of the pain | Time of the injury | Type of Injury |
|-----------------------|-----------------------|--------------------|----------------|
| Emotional | .062 | .114* | .093 |
| Behaviour | -.023 | .088 | -.043 |
| Cognitiveal | -.014 | .059 | -.005 |
| Autonomy | .022 | -.029 | .086 |
| Environmental Mastery | -.032 | .079 | -.043 |
| Personal Growth | .092 | .079 | .015 |
| Positive Relations | -.069 | .049 | .082 |
| Purpose in life | .026 | .061 | .078 |
| Self-acceptance | -.046 | .045 | -.127* |

7.5.4.2. Correlation between forgiveness and psychological well-being domains

To investigate the relation between forgiveness and psychological well-being bivariate correlation is used; the prediction of this study is both trait forgiveness subscales and psychological well-being components would be positively associated. In the Table 23, as expected, the results indicated that the overall forgiveness measure is significantly related to psychological well-being measure. Following the forgiveness subscale, the Emotional domain recorded significantly small positive correlations with all psychological well-being domains. Whereas the behaviour component recorded a small significant correlation with two domains of psychological well-being, which are; Purpose in life and Self-acceptance. Finally, the cognitional component recorded a small significant correlation with four domains of psychological well-being which are Environmental Mastery, Positive Relations, Purpose in Life, and Self-acceptance. To interpret the correlation coefficient to represent the effect size between forgiveness and psychological well-being components, all components show small effect size.

Table 23 Pearson's product-moment correlation coefficient for intrapersonal forgiveness and psychological well-being domains

| Component | Pearson Correlation | Strength of Correlation | Significance |
|-------------------------------|---------------------|-------------------------|--------------|
| Emotional forgiveness | | | |
| Autonomy | 0.17* | Small | P=0.03 |
| Environmental mastery | 0.15** | Small | P<0.01 |
| Personal Growth | 0.13* | Small | P=0.01 |
| Positive Relation with others | 0.16** | Small | P<0.00 |
| Purpose in life | 0.16** | Small | P<0.00 |
| Self –acceptance | 0.19** | Small | P=0.00 |
| Behaviour forgiveness | | | |
| Autonomy | 0.05 | None | P=0.34 |
| Environmental mastery | 0.04 | None | P=0.41 |
| Personal Growth | 0.06 | None | P=0.26 |
| Positive Relation with others | 0.09 | None | P=0.10 |

| | | | |
|-------------------------------|--------|-------|--------|
| Purpose in life | 0.08 | None | P=0.16 |
| Self –acceptance | 0.13* | Small | P=0.02 |
| Cognitive forgiveness | | | |
| Autonomy | 0.08 | None | P=0.12 |
| Environmental mastery | 0.14** | Small | P<0.01 |
| Personal Growth | 0.09 | None | P=0.08 |
| Positive Relation with others | 0.18** | Small | P<0.00 |
| Purpose in life | 0.14** | Small | P<0.01 |
| Self –acceptance | 0.12* | Small | P=0.03 |

* Significant at $p < 0.05$ (2-tailed).

** Significant at $p < 0.01$ (2-tailed)

Strength of the correlation based on guidelines by (McGrath & Meyer, 2006).

The Z-Score examined to classify does gender moderate the relationship between psychological well-being and forgiveness and, as such, is forgiveness a more important predictor of psychological well-being for women or men? Table 24 show that there is no significant of the differences in the correlations forgiveness components and psychological well-being between both genders.

Table 24 Male and female correlation and Z-Score of significance of the difference between the Correlations of Forgiveness components and psychological well-being components according to gender.

| | Emotional | | | | Behaviour | | | | Cognitional | | | |
|-----------------------|-----------|--------|---------|----------|-----------|--------|---------|----------|-------------|--------|---------|----------|
| | <i>r</i> | | Z-Score | P. value | <i>r</i> | | Z-Score | P. value | <i>r</i> | | Z-Score | P. value |
| | Male | Female | | | Male | Female | | | Male | Female | | |
| Autonomy | 0.15 | 0.09 | 0.57 | 0.58 | 0.02 | 0.08 | -0.56 | 0.58 | 0.09 | 0.07 | 0.19 | 0.85 |
| Environmental mastery | 0.10 | 0.19* | -0.85 | 0.39 | 0.01 | 0.07 | -0.56 | 0.58 | 0.09 | 0.19* | -0.95 | 0.34 |
| Personal growth | 0.20** | 0.07 | 1.23 | 0.22 | 0.06 | 0.05 | 0.09 | 0.91 | 0.16* | 0.02 | 1.31 | 0.19 |
| Positive relations | 0.14 | 0.19* | -0.48 | 0.63 | 0.07 | 0.11 | -0.37 | 0.71 | 0.23** | 0.12 | 1.05 | 0.29 |
| Purpose in life | 0.19* | 0.13 | 0.57 | 0.56 | 0.09 | 0.06 | 0.28 | 0.78 | 0.18* | 0.10 | 0.76 | 0.45 |
| Self-acceptance | 0.29** | 0.09 | 1.93 | 0.05 | 0.13 | 0.12 | 0.09 | 0.93 | 0.18* | 0.05 | 1.22 | 0.22 |

**. Correlation is significant at the .01 level

*. Correlation is significant at the .05 level.

7.5.5. Multiple regression analysis

A series of standard linear multiple regressions were run to indicate which aspects of the psychological well-being domains have unique prediction with forgiveness domains after controlling sex, age, education level, marital status, health status, and illness Status. Table 25 presents psychological well-being components as dependent variable and forgiveness dimension as predictor variables. At the first stage (Model 1) demographic variables were recorded gender, age, the level of education, marital status, health Status, and illness Status. At the second stage (Model 2) emotional, behavior and cognition domains of forgiveness were added.

Table 25 Regression Analysis with psychological well-being domains as the dependent variable, and nationality, gender, age, education, marital status, health status, illnesses status, and forgiveness domains used as predictor variables.

| | Autonomy | | | | Environmental Mastery | | | | Personal Growth | | | |
|----------------|----------|---------|-------|------|-----------------------|---------|-------|------|-----------------|---------|-------|------|
| Model-1 | B | β | t | Sig. | B | β | t | Sig. | B | β | t | Sig. |
| Gender | 0.54 | 0.06 | 1.03 | 0.30 | 0.60 | 0.06 | 1.15 | 0.25 | 0.79 | 0.08 | 1.42 | 0.16 |
| Age | -0.35 | -0.09 | -1.58 | 0.11 | -0.38 | -0.10 | -1.69 | 0.09 | -0.07 | -0.02 | -0.31 | 0.76 |
| Education | 0.03 | 0.01 | 0.09 | 0.93 | 0.24 | 0.05 | 0.83 | 0.41 | 0.13 | 0.02 | 0.44 | 0.66 |
| Marital States | 0.17 | 0.03 | 0.55 | 0.59 | -0.35 | -0.07 | -1.15 | 0.25 | -0.31 | -0.05 | -0.93 | 0.35 |
| Model-2 | B | β | t | Sig. | B | β | t | Sig. | B | β | t | Sig. |
| Gender | 0.51 | 0.05 | 0.98 | 0.33 | 0.58 | 0.06 | 1.12 | 0.26 | 0.76 | 0.08 | 1.37 | 0.17 |
| Age | 0.01 | 0.00 | 0.04 | 0.97 | 0.21 | 0.04 | 0.76 | 0.45 | 0.12 | 0.02 | 0.38 | 0.70 |
| Education | 0.18 | 0.03 | 0.57 | 0.57 | -0.34 | -0.06 | -1.10 | 0.27 | -0.30 | -0.05 | -0.93 | 0.35 |
| Marital States | 0.07 | 0.10 | 1.65 | 0.10 | 0.07 | 0.11 | 1.87 | 0.06 | 0.08 | 0.11 | 1.82 | 0.07 |
| Emotion | -0.02 | -0.02 | -0.36 | 0.72 | -0.06 | -0.07 | -1.02 | 0.31 | -0.01 | -0.01 | -0.19 | 0.85 |
| Behavior | 0.03 | 0.05 | 0.70 | 0.48 | 0.07 | 0.12 | 1.85 | 0.07 | 0.03 | 0.05 | 0.76 | 0.45 |
| Cognition | 0.51 | 0.05 | 0.98 | 0.33 | 0.58 | 0.06 | 1.12 | 0.26 | 0.76 | 0.08 | 1.37 | 0.17 |

| | Positive Relations | | | | Purpose in life | | | | Self-acceptance | | | |
|----------------|--------------------|---------|-------|------|-----------------|---------|-------|------|-----------------|---------|-------|------|
| Model-1 | B | β | t | Sig. | B | β | t | Sig. | B | β | t | Sig. |
| Gender | -0.16 | -0.02 | -0.27 | 0.78 | 0.46 | 0.05 | 0.82 | 0.41 | 1.64 | 0.16 | 2.85 | 0.00 |
| Age | 0.10 | 0.02 | 0.39 | 0.69 | -0.02 | -0.01 | -0.10 | 0.92 | -0.36 | -0.08 | -1.45 | 0.15 |
| Education | 0.25 | 0.05 | 0.81 | 0.42 | 0.04 | 0.01 | 0.14 | 0.89 | 0.11 | 0.02 | 0.34 | 0.73 |
| Marital States | 0.21 | 0.04 | 0.63 | 0.53 | 0.60 | 0.11 | 1.82 | 0.07 | 0.46 | 0.08 | 1.35 | 0.18 |
| Model-2 | B | β | t | Sig. | B | β | t | Sig. | B | β | t | Sig. |
| Gender | -0.19 | -0.02 | -0.35 | 0.73 | 0.42 | 0.04 | 0.77 | 0.44 | 1.57 | 0.15 | 2.78 | 0.01 |
| Age | 0.23 | 0.04 | 0.75 | 0.45 | 0.02 | 0.00 | 0.06 | 0.95 | 0.09 | 0.02 | 0.28 | 0.78 |
| Education | 0.21 | 0.04 | 0.63 | 0.53 | 0.61 | 0.11 | 1.87 | 0.06 | 0.44 | 0.07 | 1.31 | 0.19 |
| Marital States | 0.08 | 0.11 | 1.82 | 0.07 | 0.09 | 0.13 | 2.15 | 0.03 | 0.11 | 0.15 | 2.50 | 0.01 |
| Emotion | -0.04 | -0.04 | -0.61 | 0.54 | -0.04 | -0.04 | -0.65 | 0.52 | 0.03 | 0.03 | 0.53 | 0.60 |
| Behaviour | 0.10 | 0.15 | 2.37 | 0.02 | 0.07 | 0.10 | 1.54 | 0.12 | 0.02 | 0.03 | 0.49 | 0.63 |
| Cognition | -0.19 | -0.02 | -0.35 | 0.73 | 0.42 | 0.04 | 0.77 | 0.44 | 1.57 | 0.15 | 2.78 | 0.01 |

Form the table 25 the results of the multiple regressions for psychological well-being components are showed into the first stage (Model 1) of the regression analysis, of control variables that include sex, age, education level, marital status. The results showed different correlations psychological well-being components as follow; (Autonomy, $F [4.345] = .75$, $r = .09$, $r^2 = .01$, $\text{adj } r^2 = -.01$, $p > .05$; environmental mastery, $F [4.345] = 2.15$, $r = .16$, $r^2 = .02$, $\text{adj } r^2 = .01$, $p > .05$; personal growth, $F [4.345] = .90$, $r = .10$, $r^2 = .01$, $\text{adj } r^2 = -.00$, $p > .05$; positive relations, $F [4.345] = .28$, $r = .6$, $r^2 = .00$, $\text{adj } r^2 = -.01$, $p > .05$; purpose in life, $F [4.345] = 1.08$, $r = .11$, $r^2 = .01$, $\text{adj } r^2 = .00$, $p > .05$; Self-acceptance; $F [4.345] = 2.42$, $r = .17$, $r^2 = .03$, $\text{adj } r^2 = .02$, $p < .05$. The regressions of gender demonstrate for unique variance in self-acceptance ($\beta = .16$, $p < .01$).

At the second stage (Model 2), after insertion the forgiveness components a statistically significant change was indicated in R^2 for psychological well-being aspects (Autonomy, $\Delta R^2 = .01$, $p > .05$; Environmental Mastery, $\Delta R^2 = .03$, $p > .01$; Personal Growth, $\Delta R^2 = .01$, $p > .05$; Positive Relations, $\Delta R^2 = .03$, $p < .02$); Purpose in Life, $\Delta R^2 = .02$, $p < .05$; Self-acceptance, $\Delta R^2 = .04$, $p < .01$). Behaviour component shows unique variance in Positive Relations, ($\beta = .15$, $p < .02$) and cognition component shows unique

variance in Self-acceptance ($\beta = .15, p < .01$). However, surprisingly, the emotional component did not record any unique variance with psychological well-being domains.

7.6. Discussion

An initial objective of the study was to identify forgiveness and psychological well-being levels among the internally displaced persons who live in the Kurdistan Region/Iraq. The study's aim was to investigate the association between the forgiveness components of emotion, behaviour, and cognitive activity with the psychological well-being components of Autonomy, Environmental Mastery, Personal Growth, Positive Relations, Purpose in Life, and Self-Acceptance. As expected, the current study found that the research sample recorded low levels of forgiveness and psychological well-being. From the study's viewpoint, it has been assumed that after the conflict it would be difficult to expect forgiveness from the individual after experiencing a harmful situation. This result was supported by a previous study that indicates that people who are moved from a conflict and installed in refugee camps record poor levels of forgiveness (McLernon *et al.*, 2004).

It is possible to express the current results from two perspectives. First, with regard to the outcome of the conflict, Ventevogel, Jordans, Reis, and de Jong (2013) highlighted that as a result of conflict individuals are more likely to have poor ability to recover because of loss or sadness. Also, they might seek to punishment rather than forgiveness (Paula, 2016). Secondly, although the displaced people are now living in a safe and peaceful area, the future of the conflict is not clear. Therefore, they cannot expect any sure progress in their living conditions. This explanation based on earlier studies such as those of Northern Ireland (Hewstone *et al.*, 2004; McLernon *et al.*, 2004) could be accepted. In addition, the process of forgiveness might have links with other factors, such as allowing the offender to take responsibility, and showing regret as proof that the infringement will not happen in the future (Gold & Weiner, 2000).

Another aim of the current study was to investigate the correlation of painful experience with forgiveness and psychological well-being dimensions, testing these using the bivariate correlation. In the current actual results, the depth of the pain and injury inflicted was not a predictor of forgiveness or psychological well-being. As well as this, the time of the injury and the injury type was not a general indicator of forgiveness and

psychological well-being. Nevertheless, McLernon *et al.* (2004) showed that forgiveness has a negative relationship with the severity of an injury. This differs from the findings presented here that suggest that more investigation relating to some individual factors like resilience and personality is required. It could be said these factors may make some individuals view their injuries from a different perspective based on their personality traits and experience. The conceptual framework used to indicate the individual factors that affect an individual's tendency to forgive and well-being may help us to understand how people think based on their beliefs and their attitudes. Perhaps we need this vision for our future research to investigate these variables.

The current study also indicated the association between intrapersonal forgiveness components and psychological well-being domains. The important contribution of this study is in assessing how multiple types of forgiveness are linked with well-being in multiple contexts — hypothesizing that forgiveness could be associated positively with psychological well-being. The results of bivariate correlation supported the hypothesis that shows the emotional and cognitional component of forgiveness has a strong and positive relationship with psychological well-being components. However, the behavioural component of forgiveness recorded weak links with the overall psychological well-being components. In addition, through considering the effect size criteria, the results show that the correlation between forgiveness components and psychological well-being components is small.

Also, in addressing the differences between males and females in relation to forgiveness and psychological well-being the current finding showed non-significant differences based of gender. Similarly, Toussaint and Webb (2005) ran a study on 127 participants from community residents in California, San Diego Counties and Orange in Los Angeles, and they found that both males and females are equally forgiving. Also, in a study investigating empathy and forgiveness in 324 British undergraduates, Macaskill, Maltby, and Day (2002) reported that even though females show a higher level of empathy than males, they did not show any significant differences with males in relationship to forgiveness.

In statistical modelling, using regression analysis is important for estimating the relationships among variables that help to assess how the value of the dependent variable

might change after adding independent variables. In the current study, knowing the association between the forgiveness and psychological well-being could be helpful to know to what extent forgiveness can predict individual's well-being. In a narrower sense, through assessing the level of forgiveness of the refugees, we could predict the refugee's well-being. As such, to decide whether there are any unique predictions between the three dimensions of forgiveness and the psychological well-being domains and after using multiple regressions, we found that the emotional component is a predictor of the self-acceptance domain of psychological well-being. Furthermore, the cognition component is a predictor of the positive relationship domain of psychological well-being. However, surprisingly, the results did not indicate any predictions of the behaviour domain with any components of psychological well-being. This result might be explained by the fact that in refugees how lives under stress react emotionally and cognitively to the new living conditions, and it is most likely associated with their well-being.

7.7. Conclusion

From the recent results, we could conclude that intrapersonal forgiveness is associated positively with psychological well-being and the significant correlation was with the emotional and cognitional component of forgiveness. Nevertheless, the behavioural component of forgiveness is correlated with only one dimension of psychological well-being. These results determined that the emotional and cognitional components of forgiveness are the more promising variables to predicted psychological well-being among the displaced individuals. Additionally, the emotional and cognitional processes of forgiveness might be more productive in helping people living in a stressful situation to achieve psychological well-being.

Part C

**Investigating resilience and people's ability to survive
from harmful situations and how it is associated with
well-being**

This part comprises chapters, Eight, Nine, and Ten

Chapter Eight

A general review of resilience, surviving adverse situations and well-being.

8.1. Introduction

A large number of displaced people across the globe continue to be affected by conflict. Despite the fact that the number of displaced people has risen dramatically in recent years, minimal attention has been paid to those factors that might influence their well-being (Alexandra et al., May 2015). Therefore, identifying the factors that help individuals survive harmful life conditions is essential, and the literature suggested that resilience might be the most promising factor to promote well-being. In this chapter, an outline of the theoretical foundations that relate to resilience and how resilience leads to reduced levels of stress and heightened well-being among displaced individuals is given. The overview of this chapter aims to present a comprehensible understanding as to why some individuals possess a better ability to survive difficult situations than others, who give up when facing the same life conditions. The key point of the chapter is an attempt to display how individual differences can lead to better perceptions of a person's well-being, highlighting the usefulness of resilience in promoting well-being in adverse life conditions.

8.2. Definitions of Resilience

The term ‘resilience’ has been used within academic discourses for decades. The wide-ranging nature of the concept has made it difficult to derive a standard definition. Theoretical and empirical perspectives of resilience indicate that it comprises of dispositional personality traits (Wagnild & Young, 1993), biological and cognitive executive functions (Cicchetti & Curtis, 2006) and the ability to respond or recover adaptively to environmental demands (J. Block & Kremen, 1996; Jacelon, 1997; B. W. Smith et al., 2008). Notwithstanding the different conceptualisations within psychological literature, it is clear that psychological resilience is adaptive and important to successful long-term emotional functioning.

In consideration of the disparate definitions given towards the notion of resilience, some agreement could be found in previous research that resilience is a dynamic technique that pertains to an individual’s ability to successfully adapt to the changing demands of a stressful experience (J. Block & Kremen, 1996; Luthar, Cicchetti, & Becker, 2000; Tugade & Fredrickson, 2004). This also relates to the competent functioning of being able to bounce back in adverse situations (Masten, Powell, & Luthar, 2003; Newman, 2005), thus being considered a mechanism that protects individuals from psychological adversity (Rutter, 1990). Polk (1997) understands resilience as moving forward and possessing the ability to transform negative events into an opportunity to grow. Moreover, Davydov, Stewart, Ritchie and Chaudieu (2010) indicate that resilience is the result of successful adaptation and recovery from adverse experiences.

A further definition is given by the American Psychological Association’s (APA) Dictionary of Psychology (2015), describing resilience as:

Adapting to difficult or challenging life experiences, especially through mental, emotional, and behavioural flexibility and adjustment to external and internal demands. Some factors contribute to how well people adapt to adversities, predominant among them (a) the ways in which individuals view and engage with the world, (b) the availability and quality of social resources, and (c) specific coping strategies" (VandenBos, 2015. p 910).

Likewise, Garmezy (1993) presents a comprehensive definition by describing the fundamental elements of resilience, noting that:

The central element in the study of resilience lies in the power of recovery and in the ability to return once again to those patterns of adaptation and competence that characterized the individual prior to the pre-stress period... 'To spring back' does not suggest that one is incapable of being wounded or injured. Metaphorically, it is descriptively appropriate to consider that under adversity; a [resilient] individual can bend... yet subsequently recover... (p 129).

In addition, resilience can potentially be affected by a number of factors, such as individual differences (Toms *et al.*, 2012), life conditions (Rutter, 1999) and the extent of pressure (Anda, Butchart, Felitti, & Brown, 2010). Furthermore, resilience is significantly rooted in human strength, as is exhibited in the face of exposure to risk factors (Bonanno, 2004; Bonanno & Mancini, 2008; Hoge, Austin, & Pollack, 2007). Furthermore, there are several important factors that intersect with the notion of resilience, namely:

- Resilience is a multidimensional concept, thus making it difficult to identify a defining characteristic (Newman, 2005). A number of actions are also associated with resilience – such as the forming and possession of good relationships, being optimistic towards the world, continuing on the same path and gaining self-confidence (Luthar & Cicchetti, 2000);
- Resilience strategies may differ from person-to-person, thus being a personalised procedure whereby each person enacts different strategies, finding the best approach in light of their respective experiences, skills, and strengths; and
- Although everyone has the ability to be resilient, people with mental health issues cannot easily achieve it (Newman, 2005).

8.3. The Theoretical Background of Resilience

Earlier literature has attempted to produce a clear and comprehensive viewpoint as to how resilience is to be understood through diverse dimensions. Recent research has further explained that resilience might be considered to be multidimensional in that it varies with context, age, time, cultural origin and gender (Richardson, 2002; Tusaie & Dyer, 2004; Werner & Smith, 1992). Such studies have respectively operationalised psychological resilience in two ways.

First, resilience has been studied as a process in which psychological characteristics or processes interact with particular negative events, here noting how such characteristics ameliorate or buffer the impact of the negative event (J. Johnson, Wood, Gooding, Taylor, & Tarrier, 2011). Resilience from this perspective is considered as a psychological coping strategy employed when facing stress, this approach paying attention to those factors that mediate the positive responses given to psychological stress (Tusaie & Dyer, 2004). Within the last few decades, some studies of resilience have been published describing the phenomenon as a dynamic process able to be learned at any time and in any context (Flach, 1980; Flach, 1988). In illustration, Fonagy, Steele, Steele, Higgitt and Target (1994) define resilience as:

"an indication of a process which characterizes a complex social system at a moment in time... resilience cannot be seen as anything other than a set of social and intrapsychic processes which take place across time given felicitous combinations of child attributes, family, social and cultural environments" (p. 233).

The second approach to understanding resilience pertains to gaining a more comprehensive understanding of the physiological responses given towards stress and the common interplay between physical symptoms and psychological distress (Tusaie & Dyer, 2004). In other words, this approach acquaints resilience as a trait (Maltby *et al.*, 2015; Masten, 1994). Denoting resilience as a trait can be seen in Wagnild and Young's (1993) work, whereby resilience is held to be a personality characteristic that mitigates the adverse influences of stress and improves the adaptation undertaken by individuals. In an earlier study, Miller (1988) determined resilience as a trait through an examination of the responses people give to the pressure of life events, ultimately concluding that a combination of personality factors and body chemistry influences an individual's ability to be resilient. Overall, the studies approached from this perspective concentrate on recognising the psychological and physical characteristics that allow individuals to grow and rise above difficult situations (Jacelon, 1997).

Both approaches with their differences should not be considered as competing approaches, instead they provide greater understandings to be reached as to the dimensions of resilience, thus allowing an accurate and nuanced appreciation of the conceptualisation and measurement of resilience from different angles (Maltby *et al.*, 2015). As such, this

paper utilises the approach that assesses resilience as a trait by presenting the recent model, that provided by Maltby (2015).

8.4. Resilience as a trait the EEA Resilience Holling Model

Several studies conducted show resilience as a trait more than a process and the initial attention that focused on trait resilience was presented by Block & Block (1980) through using the "ego resilience" to describe an organism's flexibility of responding to environmental changes. In addition, the trait resilience system was supported by extensive academic articles that range from biologically, socially and environmentally resilient systems (Folke et al., 2004). The initial work that investigated resilience as a trait based on an ecological system theory was undertaken by Holling (1996) that examined resilience through three dimensions. Engineering resilience "*return to a global equilibrium following a disturbance*", ecological resilience "*amount of disturbance that a system can absorb before it changes state — Ecological resilience is based on the demonstrated property of alternative stable states in ecological systems, while engineering resilience implies only one stable state (and global equilibrium)*" (Munn, 2002. p 530), and adaptive resilience which refers to the ability to manage and accommodate change, and adapt to disturbances (Maltby et al., 2016).

Recently Maltby *et al.* (2015) developed an appropriate and valuable approach to assessing resilience as a trait, by conducting Holling's model of resilience with another resilience measure. One of the principles that have been relied upon by Maltby *et al.* (2015) was assessing a number of ecological systems to describe resilience that suggested resilience is the ability of the organism to undertake renewal and reorganization of the ecosystem state after disturbance and change. The resilience model assesses resilience as a trait across three dimensions. The first dimension of this model is "**Engineering resilience**", this referring to the ability to rebound and find a new equilibrium following an encounter with disturbing events. This component is incorporated in accordance with a biological perspective being given towards resilience (Maltby *et al.*, 2015; Shade *et al.*, 2011). Moreover, in psychological literature, engineering resilience is considered to be an ability to rebound back to the original state following an encounter with a difficult experience (American Psychological Association, 2015; Maltby *et al.*, 2015).

The second dimension, “**Ecological resilience**”, refers to the ability to possess strength and continuity in the face of volatile conditions (Maltby *et al.*, 2015). In literature, ecological resilience has been rated as self-confidence, ultimately denoting an ability to navigate through the different events that arise within a person’s life (Maltby *et al.*, 2015; Skomorovsky & Stevens, 2013). The final dimension, “**Adaptive resilience**”, relates to an individual's ability to restructure and modify themselves in light of their respective life conditions (Maltby *et al.*, 2015). The adaptive capacity is also related to an individual’s ability to adapt successfully and adjust to being flexible during the given disturbances (Lorenz, 2013; Maltby *et al.*, 2015; Yuen, Wong, Holroyd, & Tang, 2014). In these papers, resilience is considered as a trait rather than a process. Consequently, it has been suggested that Maltby *et al.*’s (2015) model to be the most appropriate for use in measuring resilience within the present study. The reason for choosing the **EEA resilience model** is because this model was developed and established compared with five other comprehensive scales of psychological resilience that are the Hardiness Scale 1989, Ego-Resiliency Scale 1996, the Connor-Davidson Resilience Scale 2003, the Brief Resilience Scale 2008 and the Psychological Resilience Scale 1993. The results show that the Holling model is more dependent and reboots measure of resilience (Maltby *et al.*, 2015).

8.5. Resilience and life stress

The wide range of stressors found across the diversity of human life that provoke stress have long captured the attention of researchers, primarily in regards to identifying the factors that can help an individual overcome their respective psychological pressures (Studley & Chung, 2015). An individual's ability to weather adversity is of great interest to mental health researchers (Avery *et al.*, 2015) as it is often held to be a personality trait that pertains to the ability of individuals to bounce back from adverse experiences and gain flexibility in adapting to the demands of a changing life (Lazarus, 1993).

Literature with a more critical focus has indicated that an individual’s response to a hurtful event does not necessarily have to be negative. Indeed, some people can maintain stability and adapt to a negative encounter, subsequently living a fruitful life. Schweitzer, Melville, Steel and Lacherez (2006) point out in this regard that while it is important to

consider the experiences of a displaced individual as having caused them pain, it should not be assumed that such experiences will necessarily lead to long-term mental disorders. In addition, Steel, Silove, Phan and Bauman (2002) have suggested that refugees are able to adapt to various harmful events without external assistance. These interesting findings lead researchers to conduct investigations as to how an individual's respective characteristics can assist in them dealing with stressors.

Increasingly, researchers have focused on resilience as a factor in helping individuals engage effectively in their reduction of stressful conditions. The basic premise of studying resilience and stress usually holds that individuals who have experienced stressful events will display a wide variety of psychological reactions (Alriksson-Schmidt, Wallander, & Biasini, 2007). For instance, previous studies have pointed out that some individuals have the ability to act positively in light of negative circumstances, achieved by attempting to identify benefits within a given crisis or period of adversity (Affleck, 1999; Folkman, 1997) or in the events of their normal daily life (Folkman, 1997). Further attention has been given to resilience arising as an important factor in explaining how an individual is able to manage different types of pressure (Li, Xu, He, & Wu, 2012; Newman, 2005). This approach also focuses on an individual's ability to build new paths through which they can deal with stress (Lorenz, 2013).

Previous research, in identifying how resilience influences stress, has been inconsistent and contradictory. For instance, some evidence suggests that resilience is negatively associated with psychological distress (Beasley, Thompson, & Davidson, 2003; Mak, Ng, & Wong, 2011). Likewise, Luthar and Cicchetti (2000) report that resilience could be a successful way of overcoming the adverse impact of unpleasant events and can help with the personal reorganisation of an individual's life, subsequently directing that individual towards positive change. However, due to the poor understanding that is possessed in regards to which psychosocial constituents might contribute and associate with an individual's vulnerability to psychological distress, studies have been unable to determine whether stress is causally related to resilience (Dyrbye *et al.*, 2010). Min *et al.* (2013) have also asserted that although resilience could independently help to decrease emotional distress among patients, a lack of evidence remains as to the association between resilience and the reduction of emotional distress.

8.6. Displacements conditions and resilience

Displacement, as an expression, is reflected in different experiences across the globe. This is due to the variety of factors that impel an individual to move from their homeland and the nature of the movement. Therefore, it could be said that the label of displacement is not widely comprehended. The World Health Organization (WHO) (2016) has proffered a suggested definition of displaced people as: *“People who have had to leave their homes as a result of a natural, technological or deliberate event. Displaced people include internally displaced people (people who remain in their own countries) as well as refugees (people who cross international borders).”*

Agrawal and Redford (2009) further point out that the term ‘displacement’ is most often used to signify the physical expulsion of communities from their hometown/homeland as a result of governmental actions or attacks by armed forces.

In considering that a displaced life condition has a negative influence on the individuals, it might be necessary to outline the literature of how typically resilience is related to better mental health outcomes. A large number of displaced people worldwide continue to be affected by mass conflict, this producing mental illness among those living under such stress (Steel *et al.*, 2009). Some studies have suggested that exposure to prolonged, intense and continual stressors might prevent people from dealing with stress, this consequently might affect negatively of an individual’s ability to recover from the encountered harmful situation (M. O. Min, Minnes, Kim, & Singer, 2013; Taylor & Stanton, 2007). Additionally, in a study of Shonkoff, Boyce, and McEwen (2009), it was reported that continuous and repetitive exposure to negative experiences might increase the likelihood of experiencing chronic and acute stress in subsequent years. As a result of two processes – accumulative harm and the biological embedding of difficulty (especially at sensitive developmental stages) – it can take many years before an encounter with conflict manifests in the form of illness.

Similarly, literature has shown that exposure to chronic and hurtful experiences (such as war) is connected with later exposure to psychological disorders (Gavrilovic, Schützwohl, Fazel, & Priebe, 2005; Tempany, 2009). There is no doubt that war has a negative effect on vulnerable populations, this in turn leading displaced people to often

develop mental health problems. Such problems can arise as a result of economic and social stresses that relate to the act of being displaced (Hunt & Gakenyi, 2005; Porter & Haslam, 2005). Even if displaced populations receive support from local charities, non-governmental organisations (NGOs) or the international community, such figures may nevertheless face stressful life conditions and thus encounter difficulties in engaging with their new situation.

However, various studies reported that psychological resilience might play an important role in helping the individual to deal effectively facing adverse situations. For instance, Davydov, Stewart, Ritchie and Chaudieu (2010) pointed out that resilience could be considered an important factor in raising the individual's ability to face negative situations and promote life quality by developing positive responses towards unpleasant and stressful situations. Also, Davydov *et al.* (2010) show that resilience could be viewed as a defence mechanism to improve mental health allowing people to increase their capability in the face of adversity. Likewise, previous studies indicate that resilience may reduce vulnerability (Schneiderman, Ironson, & Siegel, 2005) and increase the ability to adapt to adversity (Cameron, Ungar, & Liebenberg, 2007; Stanton, Revenson, & Tennen, 2007).

Evidence from previous literature about refugees demonstrated that as an impact of war and harmful experiences, being refugees might increase the risk of psychopathology and psychological distress (Mone & Kline, 2003). To address the role of resilience in reducing the negative influence of the traumatic events of the displaced people, several studies investigated resilience in response to harmful events such as natural disasters, wars, and conflict. For instance, Kira, Amer, and Wrobel (2014) pointed out are able to adapt successfully to the new life conditions. Also, Kira *et al.* (2006) reported that refugees with poor recovery from traumatic experiences record low levels of resilience.

8.7. Resilience and Well-Being

Resilience as a positive psychological concept plays an essential role in promoting an individual's well-being. For instance, Klohn (1996) explained that resilience is related to an individual's comprehensive adjustment, social functioning and psychological and physical health. Likewise, in the longitudinal study of Klohn, Vandewater, and Young

(1996) with 208 women aged between 43 and 52 years old, resilience was found to be associated positively with life satisfaction and negatively linked to psychological distress in later midlife. Tugade and Fredrickson (2004) have also demonstrated that resilience might be linked with the use of positive feelings to bounce back from adverse life conditions. It could be said therefore that in order to understand the mechanisms that help individuals adapt to the stressors of life, it might be necessary to present the subject from a positive psychological perspective.

Some studies investigating resilient people have identified several characteristics that can be observed in such individuals – including being self-efficacious, determined and confident (Werner & Smith, 1992), aspects that generate and boost a positive self-image . Resilience could help people to be more optimistic (Klohn, 1996) and hopeful for the future as such individuals tend to be less influenced by adverse stresses (Zaleski, Levey-Thors, & Schiaffino, 1998). As such, positive structures allow resilient individuals to develop positive judgments about themselves, these further reflecting positively on their ability to maximise psychological well-being (W. A. Walsh & Banaji, 1997). In regards to this notion, Fredrickson (2001) has demonstrated that resilience towards harmful life conditions can play a significant role in psychological growth and well-being. Davydov *et al.* (2010) have further suggested that resilience might be considered as a defensive mechanism that helps individuals survive harsh situations, consequently promoting a strong recovery of psychological health. In other words, resilient people are better able to rebound psychosocially following adversity (Bruneau *et al.*, 2003).

Within a work setting, resilience can refer to an individual's ability to avoid problems (Fergus & Zimmerman, 2005). Earlier research has asserted that resilient individuals expect and maintain positive and confident results (Hjemdal, Friborg, Stiles, Martinussen, & Rosenvinge, 2006; Siebert, 2009). Such figures also tend to regard life experiences as opportunities for growth and active learning (Kruger & Prinsloo, 2008; Theron, 2006; Youssef & Luthans, 2007). Additionally, Walsh (2003) has emphasised how resilience can be considered as an ability to work effectively, to learn from difficulties and to engage with life experiences. It could thus hypothesise that people who consider themselves as resilient might be able to transcend stressful situations and achieve a higher degree of well-being.

Likewise, some research has been conducted to investigate the association between well-being and resilience. For instance, Mikulincer and Florian (1998) indicate that resilience is positively correlated with well-being. Likewise, Christopher (2000) reports that greater levels of resilience and life satisfaction are considered as strong predictors of psychological well-being. Nygren *et al.* (2005) have also highlighted a significant association between resilience and some well-being indexes (such as purpose in life, psychological and physical health and a sense of coherence). Tian and Hong (2014), in a similar sense, have illustrated how resilience could be viewed as an individual's ability to maintain their physical and psychological well-being in the face of difficult life conditions. Furthermore, research has also suggested that resilience plays a positive role in improving psychological well-being in adverse conditions (Xu & Ou, 2014).

With regards to the nature of the association between well-being and resilience, some studies have shown that both variables are on the same path. For instance, Lawford and Eiser (2001) have asserted a similarity between resilience and the quality of life concept. Also, Ryff, Love, Essex and Singer (1998) indicate that resilience could be regarded as the ability to preserve or recover a certain level of well-being when facing adverse life conditions. Many studies have attempted to explain psychological well-being as being related to resilience. For instance, Ryff and Singer (2000) have indicated that psychological well-being could play an effective role as a protective factor in helping to decrease distress. Recent evidence from Ryff (2014) has further suggested that eudaimonic well-being could be examined as a protective mechanism employed in situations of adversity.

Literature pertaining to the clinical path has emphasised the importance of resilience in relation to the disparate views held as to well-being among patients. For instance, Yi, Vitaliano, Smith, Yi, and Weinger (2008) have concluded that resilience resources play an important role in indicating the different perceptions given towards quality of life among patients with diabetes. Furthermore, Wenzel *et al.* (2002) have asserted that resilience could help patients reach a better psychological condition, thus improving their quality of life. In the same vein, the study of Tempski *et al.* (2015) investigated the relationship between resilience and quality of life among medical school students, subsequently finding that higher resilience levels are related to a better perception being held as to the quality of life.

8.8. The Aim of Part C

The aim of section C is to explore and understand why some individuals have the ability to cope better with a frustrating situation while, in contrast, others give up when facing similar conditions, and how individual differences can result in better perceptions being held on one's well-being. Here, it has been found that resilience is a good candidate for our study as to well-being. The key issue of this study derives from our belief that our investigation might indicate important factors that pertain to understanding well-being among individuals living under stressful conditions. To shed greater light on the experience of those displaced in the context of their resilience and well-being, we have surveyed the relevant literature. This desire to understand how resilience can promote well-being in the face of difficult life conditions is one of the main motivations for us choosing to study these topics.

This part of the thesis contains two studies (Study Five and Study Six) that have been applied to displaced individuals. The fifth study pertained to the Syrians refugees who live in the Kurdistan region of Iraq. In this study, a self-report questionnaire – the WHOQOL-BREF scale (WHOQOL group, 1995) – for measuring the quality of life was used. To measure resilience, the EEA resilience model (Maltby *et al.*, 2015) was used. The aim of this study is to understand how the resilience trait might influence upon the quality of life in adverse situations. Earlier studies have documented how psychological resilience could be helpful in dealing effectively with difficult situations, particularly in this resulting in a positive effect on quality of life (e.g. Masten & Reed, 2002; Tian & Hong, 2014; Wu, 2011; Xu & Ou, 2014). Furthermore, Davydov, Stewart, Ritchie and Chaudieu (2010) have emphasised that in order for individuals to develop their quality of life, they might need to develop resilience mechanisms.

The sixth study pertained to those Iraqi internally displaced people who live in the Kurdistan region in Erbil. Here, the Ryff scale was used (1989a; 1989b) to measure psychological well-being, and Maltby *et al.*'s (2015) scale were used to measure resilience across three components; engineering, ecological and adaptive resilience. In this regard, the aim was to examine the value of the EEA resilience model in predicting an individual's well-being in terms of long-term life engagement and to what extent EEA resilience is

related to well-being in settings where individuals could be considered to be coping with adversity. This is important given that resilience is thought to be imperative in such situations. Such research also provides a better understanding of the phenomenon in which some individuals, after facing risky or stressful conditions, remain healthy and possessing a high level of well-being while, in contrast, others are unable to deal positively with the same situation.

Thus, in order to address the previous research gap in the field of resilience studies, the present study will investigate the quality of life and psychological well-being as it relates to the employment of resilience in the face of stressful life conditions. Resilience is approached as a positive adaptation process that is utilised following an individual's exposure to a harmful situation. Therefore, in our context, it could be said that refugees and internally displaced people are highly appropriate subjects for our study, especially considering the severity of harmful events that most displaced people experience and the high levels of resilience shown among such populations. The study seeks to produce a better understanding of the relationships that arise between these variables. In addition, there is an expectation that these studies might increase the sensitivity held towards perceiving the needs of displaced people, a result of an increased understanding being possessed as to their life conditions (especially in light of such individuals being separated from their hometowns/homelands and often their family).

Chapter Nine

Exploring the association between quality of life and EEA resilience among Syrian refugees²

9.1. Abstract

The conflict in Syria has had a negative impact upon the lives of Syrians. In previous studies, it has been concluded that refugee existence leads to poorer levels of well-being (see Chapter Three). The current finding, however, shows that although refugees may share the same life conditions, some record high levels of well-being while others demonstrate low levels of well-being (see Chapter Four). The aim of this study is to identify the factors that might connect with well-being within stressful conditions. The goal of the current study is to explore the association between the quality of life and EEA resilience of Syrian refugees who have entered the Kurdistan region of Iraq. Also, to investigate the gender differences in the relationship between both variables. Measures of resilience and quality of life were administered to 120 refugees from camps in the Kurdistan region of Iraq who were chosen as research subjects. The data analysis highlights how the engineering and ecological domains of resilience recorded a significant positive correlation with all domains of quality of life. However, the adaptive domain shows a correlation only with the psychological health domain. Moreover, the multiple regressions show that the engineering domain has a unique prediction as to the psychological health and social relationships domains of quality of life. Likewise, the ecological domain displays a prediction of the social relationships and environment domains on the quality of life scale. These results show that the engineering and ecological domains are a more promising factor in relation to quality of life among the refugees.

² -This paper presented in the Annual Conference that held on 26-28 April by the British psychological Society in Nottingham. <http://eventmobi.com/ac2016/agenda/119098>

9.2. Introduction

The results of previous studies indicate a poor level of quality of life among refugees (Akinyemi *et al.*, 2012; Eljedi *et al.*, 2006; Skevington *et al.*, 2004). In the same vein, the earlier finding indicated that Syrian refugees have a low level of the psychological quality of life in comparison to other refugees (Aziz *et al.*, 2014).

It is widely acknowledged that war and social conflict are one of the most devastating factors in the world. Previous studies have suggested that wars might significantly impair an individual's well-being (Murray, King, Lopez, Tomijima, & Krug, 2002; Teerawichitchainan & Korinek, 2012). To date, the impacts of war on well-being have rarely been investigated in the context of developing countries (Levy & Sidel, 2009). Several recent studies investigating resilience have focused on factors that can explain those positive aspects that can buffer the negative effects of war. Therefore, it could be said studying resilience among displaced individuals is necessary to recognise how individuals deal with stress associated with adverse events. For instance, earlier studies have focused on the importance of resilience in helping individuals deal with the stress associated with violence (Bonanno, 2004).

Several studies have documented how psychological resilience could be helpful in dealing effectively with difficult situations, resilience thereby manifesting as a positive effect on an individual's quality of life (Masten & Reed, 2002; Tian & Hong, 2014; Wu, 2011; Xu & Ou, 2014). As well as this, Davydov, Stewart, Ritchie and Chaudieu (2010) have suggested that in order for individuals to achieve a better quality of life, they may need to develop resilience mechanisms. In consideration of the fact that resilience is related to an individual's ability to better face adverse situations, it is critical to recognise the determinants that assist in the developing of a positive response towards unpleasant and stressful situations.

There are relatively few studies in the area of examining the link between resilience and quality of life. The more recent study conducted by Maltby and college (2015) on 256 university students, investigated the extent of the relation of EEA resilience on subjective well-being, psychological well-being, and physical health. The results show that the EEA resilience has a significant association with psychological and subjective well-being and physical health. Maltby *et al.* (2015) also, concluded that EEA resilience probably would

be helpful to predict the changes in physical health over time. Additionally, Tempiski *et al.* (2015) concluded that resilience might be a successful strategy in reducing emotional distress. Overall, from earlier findings, the association between quality of life and resilience from two perspectives were determined. First, that resilient individuals may possess a better perception of their quality of life, regardless of the environmental conditions (Dyrbye *et al.*, 2010; Tempiski *et al.*, 2015). Secondly, that social support and interventions might play a positive role in improving resilience (Yu *et al.*, 2014).

Many of the resilience-focused studies have given their attention to the effects of resilience on physical health (Perna *et al.*, 2012), mental health (Hildon, Montgomery, Blane, Wiggins, & Netuveli, 2010) and within therapeutic conditions and social support (Netuveli, Wiggins, Montgomery, Hildon, & Blane, 2008; Yu *et al.*, 2014). This indicates a limitation of investigations that have been undertaken as to resilience and quality of life among displaced people who have experienced conflict (such as refugees and internally displaced people). Drawing from an extensive range of sources, it has been noted that those studies as to well-being and resilience within stressful life conditions have been applied to individuals with experience of traumatic situations (Cofini *et al.*, 2014; Ungar, 2013; Wu, 2011), thereby identifying helpful resources that can allow individuals to deal with frustrating situations (Ungar, 2011).

Although millions of Syrian refugees are now settled in refugee camps worldwide, only a few studies have investigated the lives of refugees from the positive psychological perspective. It could suggest that this group requires more attention from researchers and that it is necessary to examine those factors that might help refugees survive adversity. As such, the current study was applied to measuring the quality of life and resilience among Syrian refugees. This, it is hoped, will provide a better understanding as to the link between resilience and quality of life.

Substantially, the current investigation focused on three common themes. First, how engineering, ecological and adaptive (EEA) resilience factors relate to the quality of life. Secondly, the extent to which resilience contributes towards changes in the quality of life. Finally, how the EEA resilience model might provide some predictive values of quality of life. The approach considers how the EEA model contributes to well-being in settings where individuals could be regarded as coping with adversity, given that resilience is

thought to be highly imperative in these situations (American Psychological Association, 2008). It would be beneficial for this study to understand the fluctuations of the quality of life among refugees in terms of the individual context of resilience. This might assist in explaining both the identified high and low levels of quality of life found among individuals in a similar situation.

Therefore, the aim of this study is assessing EEA resilience and quality of life and examining the association between both variables, to identify whether there is any unique prediction between the quality of life and resilience among the Syrian refugees. In brief, the current paper seeks to understand the role of psychological resilience in helping refugees increase their well-being levels within displacement life conditions, noting how through this refugee possibly will be able to recover and move forward with their lives. While several studies examined the gender differences of resilience (Samplin, Ikuta, Malhotra, Szeszko, & DeRosse, 2013; Yasmeen & Khan, 2017) and quality of life (Emery et al., 2004; Hagedoorn, Buunk, Kuijer, Wobbles, & Sanderman, 2000), the differences in the relationship between resilience and quality of life of the displaced people have not been specially assessed as far as the gender differences. As such the current study also aimed to identify to what extent gender plays a role in the relationship between quality of life and resilience and, essentially, is resilience a more important predictor of quality of life for female or male.

9.3. Method

9.3.1. The Research Sample

The research sample consisted of 120 Syrian refugees residing in refugee camps located in the Kurdistan region of Iraq. 60 females and 60 males, aged between 18 and 60 years old ($M = 30.90$ years, $SD = 9.8$) took part in the study. The sample obtained resided in the Erbil Governorate camps located on four sites; Qushtpa, Kawrgosk, Basirma, and Darashakran. Thirty forms were distributed in each camp with equal numbers sought from each gender. Of the respondents; 36 % reported completing secondary education (with 25.7%, the next highest percentage, having achieved a primary level of education). As well, 69.2 % reported being married (with 26.7%, the next highest percentage, reporting being single).

The number of participants recruited to the study was based on a sample size analysis for statistical analysis. The sample size analysis suggested a multiple regression analysis with the quality of life variables as the dependent variables and predictor variables (sex, age, three resilience measures) given, with a power level set at .8, probability level at .05 and an anticipated medium effect size ($f^2 = .15$). This suggested that it will need at least 91 participants.

9.3.2. Measures

9.3.2.1. EEA Resilience

The EEA resilience scale consists of 12 items across three domains; adaptive resilience (e.g., “dealing with new and unusual situations”), ecological resilience (e.g., “You can achieve your goals, even with obstacles”) and engineering resilience (e.g., “[taking a] long time to get over setbacks”) (Maltby *et al.*, 2015). The scale score includes 4 degrees. 1 means (totally disagree), and 4 means (totally agree); for the negative items, the scores were reversed. The scales was translated into the Arabic language because the research sample was unable to speak English, and the researchers were unable to find an Arabic version of the psychological well-being scale. To determine the reliability the translation the scale sent to a number of experts to review the scale and evaluate the accuracy of the translation from English to Arabic.

9.3.2.2. Quality of life

Respondents were also administered an Arabic version of the World Health Organization’s Quality of Life Scale - Brief (WHOQOL-BREF) (Group, 1998; Skevington *et al.*, 2004), for further detail about the scale look at section 3.3.2 in chapter 3.

9.4. Ethics

The researchers received ethical approval from the school of psychology at the University of Leicester to allow them to study the research sample. The ethical process was approved according to the British Psychological Society’s guidelines (http://www.bps.org.uk/sites/default/files/documents/code_of_human_research_ethics.pdf). Moreover, the General Director of Academic Missions and Cultural Relations of Kurdistan

Ministry of Higher Education and Scientific Research, Public Aid Organizations and Democracy and Human Rights Research Institute gave formal procedures and permission to visit the camps. The participants were aged 18 years and above. Furthermore, to ensure the ability to work in the specified area, official permission was obtained from the director of academic missions of the Kurdistan regional government / Iraq. As well as this, approval from the authorities concerned to access the displaced camps was obtained.

9.5. Results

9.5.1. Descriptive Statistics

Presenting descriptive values includes Cronbach's alpha score, means stander. Deviations, median, skewness and kurtosis scores of the variables. Table 26 shows the score of the three domains of resilience as were analysed with the four components of the quality of life scale.

Table 26 Cronbach's alpha. The score was obtained in relation to the EEA resilience components and quality of life domains.

| Resilience | α | Mean | SD | Median | Skewness | Kurtosis |
|------------------------|----------|-------|------|--------|----------|----------|
| Engineering Resilience | .69 | 9.82 | 1.89 | 10.00 | 0.03 | 0.50 |
| Ecological Resilience | .69 | 9.91 | 1.82 | 10.00 | 0.39 | -0.34 |
| Adaptive Resilience | .72 | 8.53 | 1.99 | 8.00 | 0.44 | 1.68 |
| Quality of life | α | Mean | SD | Median | Skewness | Kurtosis |
| Physical Health | .63 | 21.15 | 3.25 | 21.00 | -0.17 | 0.59 |
| Psychological Health | .74 | 19.75 | 3.68 | 20.00 | -0.55 | 0.37 |
| Social Relationships | .68 | 6.74 | 1.41 | 7.00 | -0.31 | -0.34 |
| Environment | .72 | 22.64 | 4.29 | 23.50 | -0.71 | 0.40 |

9.5.2. One sample T.test

As shown in the table 27 the means score and the comparisons value of both resilience and quality of life are considerably different. To address these differences are statistically significant one sample, t.test is conducted from 120 participants of Syrian

refugees and the general population. The result shows that the participants show a statistically significant low level of resilience, at the .00 level of significance, from the normed value of 30. ($M = 28.25$, $SD=4.27$) compared with general population, $t(119) = 4.49$, $p < .00$. As well, the research sample show a statistically significant low level of quality of life, at the .00 level of significance, from the normed value of 75. ($M = 70.28$, $SD=9.69$) compared with general population, $t(119) = 5.33$, $p < .00$.

Table 27 One sample T-Test of resilience and quality of life

| | Mean | SD | Comparison Value | <i>t</i> | df | Sig. (2-tailed) | Mean Difference |
|-----------------|-------|------|------------------|----------|-----|-----------------|-----------------|
| Resilience | 28.25 | 4.27 | 30 | 4.49 | 119 | .00 | -1.75 |
| Quality of life | 70.28 | 9.69 | 75 | 5.33 | 119 | .00 | -4.72 |

9.5.3. Bivariate Correlation

To identify the correlation between the three domains of resilience (engineering, recovery and adaptive) a bivariate correlation was used. The results demonstrate that the engineering domain has a significant positive relationship with all quality of life domains. Furthermore, the ecological domain recorded a significant positive relationship with all quality of life domains. However, the adaptive domain had a positive significance with only one quality of life domain; the psychological health domain, with non-significant relationships being recorded with all other quality of life domains. To interpret the correlation coefficient to represent the effect size between EEA resilience and quality of life components, engineering and ecological resilience shows medium and large effect size with the quality of life components. However, Adaptive resilience shows a small effect size with psychological health see Table 28.

Table 28 Pearson's product-moment correlation coefficient for Quality of Life and EEA Resilience domains.

| Component | Pearson Correlation | Strength of Correlation | Significance |
|-------------------------------|---------------------|-------------------------|--------------|
| Engineering resilience | | | |
| Physical health | .32** | Medium | P<0.00 |
| Psychological health | .39** | Large | P<0.00 |
| Social relationship | .37** | Medium | P<0.00 |
| Environment | .30** | Medium | P<0.00 |
| Ecological resilience | | | |
| Physical health | .27** | Medium | P<0.00 |
| Psychological health | .36** | Medium | P<0.00 |
| Social relationship | .37** | Large | P<0.00 |
| Environment | .47** | Large | P<0.00 |
| Adaptive resilience | | | |
| Physical health | .12 | None | P=0.18 |
| Psychological health | .19* | Small | P=0.03 |
| Social relationship | .04 | None | P=0.69 |
| Environment | .10 | None | P=0.29 |

* Significant at $p<0.05$ (2-tailed). ** Significant at $p<0.01$ (2-tailed)
Strength of the correlation based on guidelines by (McGrath & Meyer, 2006).

The Z-Score examined to classify does gender moderate the relationship between quality of life and resilience and, as such, is resilience a more important predictor of quality of life for females or males? Table 29, show the results of the differences in correlation of physical health quality of life component, engineering resilience between male ($r = .81$) and female ($.61$) ($Z = 2.16$; $P. \text{ value} = 0.031 < p0.05$) suggesting that the association is larger for males than females. Ecological resilience male ($r = .51$) and female ($r = .08$) ($Z = 2.57$; $P. \text{ value} = 0.010 < p0.05$) suggesting it is larger for females than males. As well, the differences in correlation of psychological health quality of life component and ecological resilience male ($r = .65$) and female ($r = .116$) ($Z = 3.5$; $P. \text{ value} = .00 < p.05$), suggesting that the association is larger for males than females. Also, in correlation of social relationships and adaptive resilience male ($r = .51$) and female ($r = -.205$) ($Z = -2.05$; $P. \text{ value} = 0.03 < p.05$), suggesting that the association is larger for males than females. However, the gender does not show any significant difference of the correlations with the other components.

Table 29 Male and female correlation and Z-Score of significance of the difference between the Correlations of quality of life components and EEA resilience components according to Gender

| | Engineering Resilience | | | | Ecological Resilience | | | | Adaptive Resilience | | | |
|----------------------|------------------------|--------|---------|----------|-----------------------|--------|---------|----------|---------------------|--------|---------|----------|
| | <i>r</i> | | Z-Score | P. value | <i>r</i> | | Z-Score | P. value | <i>r</i> | | Z-Score | P. value |
| | Male | Female | | | Male | Female | | | Male | Female | | |
| Physical Health | .81** | .61** | 2.16 | 0.03 | .51** | .078 | 2.57 | 0.01 | .36** | .20 | 0.92 | 0.36 |
| Psychological Health | .89** | .78** | 1.82 | 0.07 | .65** | .12 | 3.5 | 0.00 | .46** | .27* | 1.18 | 0.24 |
| Social Relationships | .52** | .37** | 0.96 | 0.34 | .37** | .41** | -0.21 | 0.83 | .17 | .51** | -2.05 | 0.03 |
| Environment | .89** | .87** | 0.44 | 0.66 | .45** | .19 | 1.56 | 0.12 | .50** | .45** | 0.39 | 0.69 |

**. Correlation is significant at the .01 level

*. Correlation is significant at the .05 level.

9.5.4. Multiple Regressions

A series of standard linear multiple regressions were presented to indicate the quality of life aspects across four domains; physical health, psychological health, social relationships and environment, noting these as having a unique prediction with resilience across three domains; engineering, ecological and adaptive. At the first stage, the demographic variables were controlled (such as sex, age, education level, marital status, health status and illness). Table 30 presents four domains of quality of life as the dependent variables and all the resilience components as predictor variables. Here, multiple linear regressions were performed. At the first stage (Model 1), demographic variables (such as gender, age, education level, marital status, health status and illness) were recorded. At the second level (Model 2), the resilience domains were added (engineering, ecological and adaptive).

Table 30 Regression analysis of the dependent variables (the physical health, psychological health, social relationships and environment components of quality of life) and the predictor variables (nationality, gender, age, education, marital status and the three dimensions of resilience).

| | Physical Health | | | | Psychological Health | | | | Social Relationships | | | | Environment | | | |
|----------------|-----------------|---------|-------|------|----------------------|---------|-------|------|----------------------|---------|-------|------|-------------|---------|-------|------|
| Model-1 | B | β | t | Sig. | B | β | t | Sig. | B | β | t | Sig. | B | β | t | Sig. |
| Gender | .43 | .07 | .72 | .47 | -.43 | -.06 | -.64 | .52 | -.43 | -.16 | -1.68 | .10 | -.94 | -.11 | -1.18 | .24 |
| Age | -.52 | -.21 | -2.05 | .04 | -.69 | -.26 | -2.48 | .02 | -.07 | -.06 | -.60 | .55 | -.40 | -.13 | -1.18 | .24 |
| Education | .23 | .07 | .67 | .51 | .38 | .10 | 1.01 | .31 | -.18 | -.12 | -1.23 | .22 | -.44 | -.10 | -.97 | .34 |
| Marital Status | .37 | .07 | .68 | .50 | .10 | .02 | .17 | .87 | .21 | .09 | .86 | .39 | .03 | .01 | .04 | .97 |
| Model-2 | B | β | t | Sig. | B | β | t | Sig. | B | β | t | Sig. | B | β | t | Sig. |
| Gender | .43 | .07 | .75 | .46 | -.40 | -.05 | -.65 | .52 | -.51 | -.18 | -2.13 | .04 | -.94 | -.11 | -1.30 | .20 |
| Age | -.40 | -.17 | -1.64 | .10 | -.52 | -.19 | -2.02 | .05 | -.02 | -.020 | -.17 | .86 | -.22 | -.07 | -.71 | .48 |
| Education | .34 | .10 | 1.04 | .30 | .56 | .15 | 1.62 | .11 | -.11 | -.08 | -.84 | .41 | -.08 | -.02 | -.20 | .84 |
| Marital Status | .23 | .05 | .45 | .66 | -.10 | -.02 | -.18 | .86 | .13 | .06 | .60 | .55 | -.21 | -.03 | -.31 | .75 |
| Engineering | .37 | .22 | 2.14 | .03 | .49 | .25 | 2.73 | .01 | .23 | .31 | 3.25 | .00 | .31 | .14 | 1.46 | .15 |
| Ecological | .34 | .19 | 1.89 | .06 | .53 | .26 | 2.81 | .01 | .20 | .25 | 2.62 | .01 | 1.01 | .43 | 4.49 | .00 |
| Adaptive | -.01 | -.00 | -.03 | .98 | .0 | .01 | .06 | .95 | -.11 | -.15 | -1.70 | .09 | -.20 | -.09 | -1.05 | .30 |

The table above displays the results of the multiple regression for quality of life components as showed in the first stage (Model 1) of the regression analysis. The control variables include sex, age, education level, marital status, health status and illness. These did not show a significant prediction change for each quality of life component – Physical health, $F [4,115] = 1.64$, $r = .23$, $r^2 = .054$, $\text{adj } r^2 = .02$, $p > .05$; Psychological health, $F [4,115] = 2.76$, $r = .29$, $r^2 = .09$, $\text{adj } r^2 = .05$, $p < .05$; Social relationships, $F [4,115] = 1.56$, $r = .28$, $r^2 = .05$, $\text{adj } r^2 = .02$, $p > .05$; Environment, $F [4,115] = 0.88$, $r = .17$, $r^2 = .03$, $\text{adj } r^2 = -.004$, $p > .05$). Age accounted for the unique variance in physical health and psychological health components. However, with the other variables, non-significant predicting was shown. Furthermore, the social relationships and environment components did not record any significant prediction with any demographic variables.

At the second stage (Model 2), after inserting the EEA resilience components, a statistically significant change in R^2 for quality of life aspects was indicated –physical health, $\Delta R^2 = .11$, $p < .01$; psychological health, $\Delta R^2 = .19$, $p < .001$; social relationships, $\Delta R^2 = .20$, $p < .001$; environment, $\Delta R^2 = .22$, $p < .001$. The engineering component accounts for unique variance in physical health, psychological health, and social relations. The ecological component also accounts for unique variance in psychological health, social relations, and environment. However, surprisingly, adaptive components showed a non-significant association with the quality of life domains.

9.6. Discussion

The present study has sought to examine the relationships of the quality of life components across four domains (physical health, psychological health, social relationships and environment) with resilience across three components (engineering, ecological and adaptive) among Syrian refugees in the Kurdistan region of Iraq. The results show a significant positive relationship between engineering and ecological resilience within all quality of life domains. Nevertheless, the adaptive dimension of resilience shows a significant positive relationship with only the psychological health component of quality of life, with non-significant relationships being recorded with the other quality of life components. The findings were expected at some level and are similar to earlier studies, this suggesting that resilience can lead to improved mental health as it helps people recover from undesirable experiences and assists them in opposing negative feelings (Li et al., 2012; Tugade & Fredrickson, 2004; Xu & Ou, 2014).

To examine the gender perspective, positive variances between males and females in relating to resilience and quality of life were indicated, to determine whether gender moderates the relationship between psychological well-being and resilience and, as such, whether resilience components offer a more important predictor of quality of life for females or males. The results show that males are higher in relation to engineering resilience with physical health, also in the relationship of ecological resilience with physical and psychological health. The results suggested that men are more able to be robust, healthy and able to recover from stressful conditions than women, while women can adapt to the stressful conditions by building stronger relationships with others than men. The possible explanation for these results could be that social and institutional structures are helping men to be stronger and manage the stress which helps women to be more flexible and able to adapt to the stressful conditions through the social communications.

In further investigation as to the associations between the research variables, a multiple linear regression has been applied to examine the prediction between the quality of life domains and resilience domains. This has the benefit of identifying how changes in one variable might alter another. Moreover, an illustration as to the association between quality of life domains and resilience might provide a better understanding as to the quality of life in the context of resilience. The results also show that in regards to demographic variables,

age was a unique variance in the physical health and psychological health components. This result was expected, and it might be explained by the fact that age is considered as a factor that has a negative impact on the overall health of people (Conn, Taylor, & Abele, 1991; Shrestha et al., 2015). Age and quality of life also have a curvilinear relationship with well-being, this meaning that life quality increases with age, but, at some point, it will start to decline (Mroczek & Spiro III, 2005).

With regard to finding any unique prediction with each domain of resilience, in contrast with earlier findings that suggested resilience might not be a predictor of quality of life (Tian & Hong, 2014), the current results demonstrated that engineering components have a unique prediction of the physical health and social relationship domains of quality of life. In addition, the ecological component shows a prediction with the physical health, social relationships and environment domains of quality of life. Unexpectedly, the results did not show any prediction of the adaptive component with any domains of quality of life.

The proposition that EEA resilience reflects three components as traits are evident in the fact that EEA resilience has a positive relationship with quality of life, as well as moderate and large relationships with quality of life across different dimensions and situations. The current study shows that those living in relatively adverse conditions that could report high levels of ecological resilience also reported having a higher environmental quality of life. This result may be explained by the fact that the ability to recover from the difficulty of life in refugee camps by being robust may be helpful for the individuals to be well. This view is supported by King *et al.* (1998) that suggested recovery help individuals survived from traumatic events and disaster.

Although, there can be no causation inferred here between the two variables – such as resilience may lead to better health, or better health may lead to higher levels of resilience – these current findings suggest the relevance of adaptive resilience as either a mechanism or outcome among individuals living in relatively adverse situations. Some of the relationships that arise between EEA resilience and quality of life point to possible hypotheses that future research might want to consider. For example, the result identified a predictive and close association between the engineering and ecological domains of resilience and quality of life.

9.7. Conclusion

From the current results, it could be concluded that EEA-trait resilience has various relationships with the components of quality of life. Each facet of EEA-trait resilience demonstrates a different and substantial relationship with at least one of the key domains of the quality of life scale. Additionally, the engineering and ecological resilience traits are significantly related to higher quality of life components. The adaptive resilience trait, however, has not been found to have any relationship with the physical health, social relations, and environment components, but a relationship was identified with the psychological health component. It could, therefore, be said that engineering and ecological resilience are more promising factors in relation to the quality of life possessed by refugees. However, adaptive resilience may not rate as the most appropriate factor for improving the quality of life.

Chapter Ten

An investigation of the association between the EEA Resilience model and Psychological well-being among Iraqi internationally displaced persons in the Kurdistan region of Iraq³

10.1. Abstract

This study aimed to identify the association between EEA resilience and psychological well-being among the Iraqi internationally displaced persons. To measure resilience, the EEA model of resilience Maltby *et al.* (2015) scale was used across three dimensions, engineering, ecological, and adaptive resilience. To measure psychological well-being, Ryff (1989) scale was used across six dimensions, Autonomy, Environmental Mastery, Personal Growth, Positive Relations, Purpose in Life, and Self-Acceptance. One hundred and thirty-two Iraqi displaced now residing in refugee camps located in Kurdistan (66 males, 66 females), aged from 18 to 63 years ($M = 32.24$ years, $SD = 9.84$) took part in the study. The findings show that the engineering domain recorded a positive relation with the Self-Acceptance domain of psychological well-being. Moreover, ecological and adaptive domains show a positive correlation with the positive relation component of psychological well-being. Additionally, the Autonomy domain of psychological well-being found a valid predictor of the engineering component of resilience and the Positive Relations component of psychological well-being found a valid predictor of engineering and the ecological components of resilience. Moreover, the Self-Acceptance domain of psychological well-being found a valid predictor of the engineering component of resilience. To conclude, engineering and ecological components could be considered as promising factors to indicate the psychological well-being in long-time life engagement.

³ This paper presented in the 8th World congress of behavioural and cognitive therapies held on 22-25 June by Australian association for cognitive and behaviour therapy in Melbourne/Australia.
<https://www.aacbt.org.au/product/8th-world-congress-behavioural-cognitive-therapies/>

10.2. Introduction

The concept of resilience does not only refer to overcoming adversity (Buikstra *et al.*, 2010), but it also includes individual susceptibility to grow positively within stressful conditions with the ability to learn from adversity and associate the experience with the structure of life (Bonanno, 2004; Connor & Davidson, 2003; F. Walsh, 2003). Newman (2005) furthermore, highlighted that resilience refers to an individual's ability to adapt in the face of tragedy, adversity, trauma, and life stress. Earlier evidence proposed that resilience might help to reduce risk impact, decrease adverse reactions and improve the self-esteem of the individual (Rutter, 1990). The evidence from Samuels and Pryce (2008) suggested that resilience could be helpful in finding a new way to move forward through obtaining social support and acting positively in a situation. Additionally, Li, Xu, He, and Wu (2012) pointed out that resilience has a positive influence on improving well-being and promoting personal growth in a harmful situation.

Moreover, resilience is conceded as being an essential element of positive psychology that refers to positive adaptations and the active coping of individuals when facing an adverse situation (Carr, 2011; Sheldon & King, 2001) that perhaps helps to promote well-being (Zautra, Arewasikporn, & Davis, 2010). The researchers hypothesized that positive outcomes in the context of a potentially unpleasant environment would perhaps be considered indicators of an individual's resilience (Masten, 2007; Yates & Masten, 2004). Within the studies context there is continued research interest in the effects of stress on well-being, the emphasis in the literature on resilience and the relative importance of well-being (Brunwasser, Gillham, & Kim, 2009). The earlier findings show that reacting positively to a situation is necessary to achieve well-being because it gives the individuals the psychological support to continue and to move forward in their lives.

Nevertheless, previous findings have emphasized that resilience could play a major role in addressing the issue of well-being (Goldstein & Brooks, 2012; Tomás, Sancho, Melendez, & Mayordomo, 2012). Therefore, studying resilience among the individuals is a requirement for recognizing how individuals deal with stress that is associated with strained events. For instance, Bonanno (2004) stated that resilience has an importance role in helping individuals resist the stress that is associated with violence. They also indicated the psychological mechanisms that individuals use to reduce tension and instability that

contribute to achieving and maintain well-being (Fredrickson, Tugade, Waugh, & Larkin, 2003; Newman, 2005). In a more recent study of Maltby *et al.* (2015) that aimed to conceptualize the EEA model with well-being, the results showed that resilience correlated positively with subjective well-being and psychological well-being. EEA resilience may also contribute to promoting individuals' well-being.

Reviewing the previous literature shows that psychological resilience might be an important factor in helping displaced individuals adapt to a new situation and continue to resist pressure resulting from displacement conditions. Considering the huge number of displaced people who have moved due to conflicts or natural disaster worldwide, there are limited studies examining the displaced experience from a positive psychological perspective. Exploring the factors that help individuals to move forwards and grow positively in adversity are the aims of applying this study. The current paper focused on the Iraqi internally displaced who have escaped from conflict area to safe shelters.

Despite the financial and physical destruction and loss of human life, the violence in Iraq has generated considerable emotional turmoil and made millions of people homeless. According to the International Organization for Migration report in July 2015, since the war started in Iraq, over 3 million individuals been displaced from the north, centre, and west of Iraq in their quest to find a safe place. Moreover, the International Organization for Migration (May 2016) reported that the Kurdistan Region of Iraq has hosted over 933,000 individuals which is estimated to be 28% of the overall number of the displaced people in Iraq.

The previous studies indicated that displaced people are more likely to face depression (Carlsson *et al.*, 2006; Gerritsen *et al.*, 2006), and show poor physical and psychological health (e.g. Akinyemi *et al.*, 2012; Aziz *et al.*, 2014; Eljedi *et al.*, 2006) as a result of stressful life conditions. In addition, the literature has emphasized that a stressful life condition might have an adverse effect on well-being (Ang & Huan, 2006). Therefore, they need to pay more attention to the psychological aspect because they might experience serious risks during the conflict (Davies, 2012; Global Protection Cluster Working Group, 2010). So, it could be concluded that the displaced people are receiving basic aid that offers a minimum level of living, but this might not be enough to offer them protection from humanitarian crises.

In fact, Tugade and Fredrickson (2004) suggested that the main advantage of resilience is that it might be helpful to adapt to the demands of life difficulties and adverse conditions. Therefore, it is important to study resilience in the context of displaced people. This study attempts to understand why some individuals have the ability to do better in a difficult situation while others give up when facing frustrated conditions and how the individual differences could present a better perception of well-being. Another key question that has been highlighted is the gender differences in the relationship between psychological well-being and EEA resilience. As such, another aim of this study examines the gender differences between psychological well-being and EEA resilience in order to understand to what extent gender has a role in this relationship, and primarily, whether resilience is the more significant predictor of quality of life for women or men.

10.3. Method

10.3.1. The research sample

One hundred and thirty-Two Iraqi internationally displaced persons who are residing in refugee camps located in Kurdistan (66 males, 66 females), aged from 18 to 63 years ($M = 32.24$ years, $SD = 9.84$) took part in the study. The sample obtained settled in the Erbil Governorate located on four sites; Bahrka, Kawrgosk, Zaiton, and Andzyaran. Sixty-four forms were distributed in Bahrka and Kawrgosk, and sixty-six forms were given in Zaiton and Andzyaran. As well as, the gender issue was considered during the questionnaires that were given equally to both males and females.

The most frequent demographic statistics were; 34% of respondents reported completing a secondary education level, and 40.9% of them reported achieving a tertiary level. Also, 45.5% respondents reported being single, and 47.7 % said they were married. In addition, 43.9% of responders reported a good health status and 75.8 % of them reported that they did not have any illness problems.

10.3.2. Measures

10.3.2.1.EEA Resilience

The EEA Resilience scale consists of 12 items across three domains was used, for further detail about the scale look at section 9.3.2.1. in chapter 9.

10.3.2.2. Psychological Well-being

To measure psychological well-being Ryff (1989b) scale was used, for further detail about the scale look at section 6.3.2.2. in chapter 6.

10.4. Ethics

From the University of Leicester, the researcher received the ethical approval for the study. The ethical process was confirmed according to the British Psychological Society's guidelines (http://www.bps.org.uk/sites/default/files/documents/code_of_human_research_ethics.pdf). All participants were 18 years old or above, which gave the participant the ability to have the choice to take part of the study. Furthermore, the researchers got an official permission letter to visit the shelters, and this was obtained from the general director of academic missions of Kurdistan regional government / Iraq.

10.5. Results

10.5.1. Descriptive statistic

Presenting descriptive values includes Cronbach's alpha score, means, standard deviations, median as well as the skewness and kurtosis score of the variables. Table 31 shows a score of the resilience across three domains measures engineering, ecological, and adaptive. The scales were analyzed with psychological well-being across six dimensions, autonomy, environmental mastery, personal growth, positive relations, purpose in life, and Self-acceptance.

Table 31 Cronbach's alpha, Score obtained of the domains of EEA resilience and psychological well-being domains

| Resilience | α | Mean | SD | Median | Skewness | Kurtosis |
|-------------|----------|-------|------|--------|----------|----------|
| Engineering | .64 | 9.41 | 2.03 | 9.00 | -0.31 | 0.30 |
| Ecological | .71 | 9.55 | 2.05 | 10.00 | 0.40 | -0.28 |
| Adaptive | .66 | 10.17 | 2.13 | 10.00 | 0.45 | 0.34 |

| PWB | α | Mean | SD | Median | Skewness | Kurtosis |
|-----------------------|----------|-------|------|--------|----------|----------|
| Autonomy | .61 | 23.15 | 5.35 | 24.00 | -0.31 | -0.59 |
| Environmental Mastery | .66 | 24.32 | 6.13 | 24.00 | 0.21 | -0.53 |
| Personal Growth | .62 | 23.55 | 5.45 | 24.00 | -0.23 | -0.39 |
| Positive Relations | .71 | 23.23 | 7.00 | 24.00 | -0.14 | -0.88 |
| Purpose in Life | .60 | 21.51 | 4.68 | 22.00 | 0.18 | -0.21 |
| Self-acceptance | .62 | 23.50 | 5.65 | 24.00 | -0.07 | -0.29 |

10.5.2. One sample T.test

As shown in the table 32 the means score and the comparisons value of both resilience and psychological well-being are considerably different. To address these differences are statistically significant one sample, t.test is conducted from 130 participants of internalt dispalced people and the general population. The result shows that the participants show a statistically significant low level of resilience, at the .01 level of significance, from the normed value of 30. (M = 29.12, SD=3.77) compared with general population, $t(129) = 2.68$, $p < .01$. As well, the research sample show a statistically significant low level of psychological well-being, at the .00 level of significance, from the normed value of 147. (M = 139.26, SD=22.84) compared with general population, $t(129) = 3.90$, $p < .00$.

Table 32 One sample T-Test of resilience and psychological well-being

| | Mean | SD | Comparison Value | t | df | Sig. (2- tailed) | Mean Difference |
|--------------------------|--------|-------|---------------------|------|-----|---------------------|--------------------|
| Resilience | 29.12 | 3.77 | 30 | 2.68 | 129 | .01 | -.88 |
| Psychological well-being | 139.26 | 22.84 | 147 | 3.90 | 129 | .00 | -7.74 |

10.5.3. Bivariate correlations

To identify the correlation between the three domains of Resilience of ecological, engineering, and Engineering bivariate correlation was used. In Table 33, the results show the ecological domain has a significant positive relation with the positive relations domain of psychological well-being. Non-significant correlations were also recorded with other domains of psychological well-being. The Engineering domain recorded a significant

positive association with the Self-acceptance domain of psychological well-being, and non-significant correlations were recorded with other domains of psychological well-being. The Engineering domain has a significant positive relation with positive relations domain of psychological well-being, and non-significant correlations were recorded with other domain of psychological well-being. To interpret the correlation coefficient to represent the effect size between EEA resilience and Psychological well-being components, self – acceptance components shows medium effect size with engineering resilience. As well, positive relation components shows medium effect size with ecological resilience components and small effect size with adaptive resilience.

Table 33 Pearson’s product-moment correlation coefficient for EEA Resilience and psychological well-being domains.

| Component | Pearson Correlation | Strength of Correlation | Significance |
|-------------------------------|---------------------|-------------------------|--------------|
| Engineering resilience | | | |
| Autonomy | 0.15 | None | P=0.08 |
| Environmental mastery | 0.04 | None | P=0.63 |
| Personal Growth | 0.07 | None | P=0.44 |
| Positive Relation with others | 0.16 | None | P=0.06 |
| Purpose in life | 0.06 | None | P=0.48 |
| Self –acceptance | 0.26** | Medium | P<0.00 |
| Ecological resilience | | | |
| Autonomy | 0.12 | None | P=0.17 |
| Environmental mastery | 0.02 | None | P=0.89 |
| Personal Growth | 0.13 | None | P=0.15 |
| Positive Relation with others | 0.30** | Medium | P<0.00 |
| Purpose in life | -0.02 | None | P=0.84 |
| Self –acceptance | 0.16 | None | P=0.07 |
| Adaptive resilience | | | |
| Autonomy | -0.02 | None | P=0.80 |
| Environmental mastery | -0.05 | None | P=0.59 |
| Personal Growth | 0.07 | None | P=0.43 |
| Positive Relation with others | 0.18* | Small | P=0.04 |
| Purpose in life | -0.06 | None | P=0.54 |
| Self –acceptance | 0.15 | None | P=0.08 |

* Significant at $p<0.05$ (2-tailed). ** Significant at $p<0.01$ (2-tailed)

Strength of the correlation based on guidelines by (McGrath & Meyer, 2006).

The Z-Score were used to investigate does gender moderate the relationship between psychological well-being components and resilience components and, as such, is resilience a more important predictor of psychological well-being for females or males? Table 34 show the differences between male ($r=.55$) and female ($r=-.02$) in the relation between ecological domain and positive relation component ($Z= 3.52$; $P= .00$), suggesting that the association is larger for males than females.

Table 34 Male and female correlation and z-Score of significance of the difference between the correlations of psychological well-being components and EEA resilience components according to Gender

| | Engineering Resilience | | | | Ecological Resilience | | | | Adaptive Resilience | | | |
|--------------------------|------------------------|--------|---------|-------------|-----------------------|--------|---------|-------------|---------------------|--------|---------|-------------|
| | <i>r</i> | | Z-Score | P. value | <i>r</i> | | Z-Score | P. value | <i>r</i> | | Z-Score | P. value |
| | Male | Female | | | Male | Female | | | Male | Female | | |
| Autonomy | .15 | .31* | -0.9 | 0.35 | .26* | -.06 | 1.82 | 0.06 | 0.09 | -0.15 | 1.33 | 0.18 |
| Environmental Mastery | .06 | .14 | -0.5 | 0.65 | .13 | -.13 | 1.43 | 0.15 | -0.12 | -0.01 | -0.63 | 0.53 |
| Personal Growth | .07 | .13 | -0.3 | 0.74 | .21 | .02 | 1.12 | 0.26 | 0.17 | 0.03 | 0.82 | 0.41 |
| Positive Relations | .39** | .08 | 1.8 | 0.07 | .55** | -.02 | 3.52 | 0.00 | .30* | 0.12 | 1.10 | 0.29 |
| Purpose in Life | .23 | .03 | 1.2 | 0.25 | .12 | -.17 | 1.63 | 0.10 | 0.18 | -0.17 | 1.99 | 0.05 |
| Self-acceptance | .21 | .29* | -0.5 | 0.61 | .28* | .03 | 1.46 | 1.15 | 0.16 | 0.17 | -0.08 | 0.94 |

**. Correlation is significant at the .01 level

*. Correlation is significant at the .05 level.

10.5.4. Multiple regression

The multiple linear regressions have conducted to assess the association between the engineering, ecological, and adaptive components of resilience and the six components of Psychological well-being. A series of standard linear multiple regressions ran to indicate which aspects of the three domains of resilience have a unique prediction with each component of psychological well-being. At the first stage (Model 1), demographic variables including sex, age, education level, marital status, health status, and illness status were controlled. At the second level (Model 2), psychological well-being domains were added that are, Environmental Mastery, Autonomy, Positive Relations with Others, Self-acceptance, Personal Growth and Purpose in Life, see Table 35.

Table 35 Shows Regression analysis with six dimensions of psychological well-being measure as the dependent variable, and nationality, gender, age, education, marital status, with three components of Resilience used as predictor variables.

| | Autonomy | | | | Environmental Mastery | | | | Personal Growth | | | |
|----------------|----------|---------|------|------|-----------------------|---------|-------|------|-----------------|---------|------|------|
| Model-1 | B | β | t | Sig. | B | β | t | Sig. | B | β | t | Sig. |
| Gender | 4.28 | .40 | 4.84 | .00 | 4.38 | .36 | 4.25 | .00 | 2.44 | .23 | 2.52 | .01 |
| Age | .03 | .05 | .51 | .61 | .03 | .05 | .55 | .58 | .04 | .07 | .71 | .48 |
| Education | -.22 | -.03 | -.41 | .69 | .21 | .03 | .34 | .74 | .05 | .01 | .09 | .93 |
| Marital Status | .38 | .07 | .75 | .46 | .07 | .01 | .12 | .90 | .13 | .02 | .23 | .82 |
| Health Status | -.18 | -.03 | -.34 | .73 | -.71 | -.11 | -1.17 | .25 | .67 | .12 | 1.17 | .24 |
| Illness Status | 2.65 | .21 | 2.33 | .02 | .27 | .02 | .20 | .84 | -.30 | -.02 | -.24 | .81 |
| Model-2 | B | β | t | Sig. | B | β | t | Sig. | B | β | t | Sig. |
| Gender | 4.61 | .43 | 5.29 | .00 | 4.59 | .38 | 4.38 | .00 | 2.49 | .23 | 2.54 | .01 |
| Age | .01 | .02 | .24 | .81 | .03 | .04 | .44 | .66 | .03 | .05 | .51 | .61 |
| Education | -.17 | -.03 | -.33 | .74 | .21 | .03 | .33 | .74 | .14 | .02 | .24 | .81 |
| Marital Status | .38 | .07 | .78 | .44 | .09 | .01 | .15 | .88 | .10 | .02 | .19 | .85 |
| Health Status | -.28 | -.05 | -.54 | .59 | -.75 | -.12 | -1.21 | .23 | .57 | .10 | .99 | .32 |
| Illness Status | 2.63 | .21 | 2.34 | .02 | .34 | .02 | .25 | .80 | -.53 | -.04 | -.42 | .68 |
| Engineering | .57 | .22 | 2.72 | .01 | .32 | .11 | 1.25 | .21 | .23 | .09 | .97 | .33 |
| Ecological | .25 | .09 | 1.16 | .25 | .03 | .01 | .13 | .90 | .32 | .12 | 1.33 | .19 |
| Adaptive | -.19 | -.08 | -.95 | .34 | -.15 | -.05 | -.62 | .54 | .09 | .03 | .38 | .71 |

| | Positive Relations | | | | Purpose in Life | | | | Self-acceptance | | | |
|----------------|--------------------|---------|------|------|-----------------|---------|-------|------|-----------------|---------|------|------|
| Model-1 | B | β | t | Sig. | B | β | t | Sig. | B | β | t | Sig. |
| Gender | 4.82 | .35 | 4.10 | .00 | 2.50 | .27 | 3.09 | .00 | -.32 | -.03 | -.32 | .75 |
| Age | .13 | .18 | 1.98 | .05 | .05 | .11 | 1.15 | .25 | .13 | .22 | 2.31 | .02 |
| Education | .77 | .09 | 1.08 | .28 | .08 | .01 | .15 | .88 | .06 | .09 | .09 | .93 |
| Marital Status | -.26 | -.04 | -.38 | .70 | .01 | .00 | .02 | .98 | -.12 | -.02 | -.22 | .83 |
| Health Status | .16 | .02 | .24 | .81 | .73 | .15 | 1.54 | .13 | 1.08 | .18 | 1.84 | .07 |
| Illness Status | .32 | .02 | .21 | .83 | -1.67 | -.15 | -1.60 | .11 | .66 | .05 | .52 | .61 |
| Model-2 | B | β | t | Sig. | B | β | t | Sig. | B | β | t | Sig. |
| Gender | 4.90 | .35 | 4.47 | .00 | 2.66 | .29 | 3.23 | .00 | -.13 | -.01 | -.13 | .90 |
| Age | .10 | .13 | 1.56 | .12 | .05 | .10 | 1.09 | .28 | .10 | .180 | 1.90 | .06 |
| Education | 1.08 | .13 | 1.65 | .10 | .06 | .01 | .11 | .91 | .20 | .03 | .34 | .74 |
| Marital Status | -.32 | -.04 | -.52 | .60 | .02 | .01 | .05 | .96 | -.10 | -.02 | -.18 | .86 |
| Health Status | -.17 | -.02 | -.26 | .80 | .73 | .15 | 1.50 | .14 | .84 | .14 | 1.46 | .15 |
| Illness Status | -.49 | -.03 | -.35 | .73 | -1.57 | -.14 | -1.48 | .14 | .30 | .02 | .24 | .81 |
| Engineering | .68 | .20 | 2.59 | .01 | .20 | .09 | .99 | .32 | .61 | .22 | 2.59 | .01 |
| Ecological | 1.01 | .29 | 3.79 | .00 | -.02 | -.01 | -.07 | .94 | .39 | .14 | 1.63 | .11 |
| Adaptive | .42 | .13 | 1.63 | .11 | -.16 | -.07 | -.81 | .42 | .25 | .10 | 1.12 | .26 |

Form table 35 the results of the multiple regressions for psychological well-being components at the first stage (Model 1) of the regression analysis using control variables that included sex, age, education level, marital status, health status, and illness status showed different connotations of psychological well-being components as follow;

(Autonomy, $F [6,125] = 4.83$, $r = .43$, $r^2 = .19$, $\text{adj } r^2 = .15$, $p < .001$. Environmental Mastery, $F [6,125] = 3.93$, $r = .39$, $r^2 = .16$, $\text{adj } r^2 = .19$, $p \leq .001$. Personal Growth, $F [6,125] = 1.38$, $r = .25$, $r^2 = .06$, $\text{adj } r^2 = .02$, $p > .05$. Positive Relations, $F [6,125] = 5.97$, $r = .40$, $r^2 = .16$, $\text{adj } r^2 = .12$, $p \leq .001$. Purpose in Life, $F [6,125] = 2.64$, $r = .37$, $r^2 = .11$, $\text{adj } r^2 = .07$, $p < .05$. Self-acceptance, $F [6,125] = 1.9$, $r = .29$, $r^2 = .08$, $\text{adj } r^2 = .04$, $p \leq .001$).

Gender accounted for unique variances in Autonomy, Environmental Mastery, Positive Relations, Purpose in Life, and Self-acceptance components. However, non-significant predictions were recorded with the Personal Growth component. Regarding the Age

variable, it accounted for unique variance in only the Self-acceptance component of psychological well-being and a non-significant prediction was recorded with other psychological well-being components.

At the second stage (Model 2), after inserting the EEA resilience components statistically significant changes were indicated in R^2 for psychological well-being aspects (Autonomy, $\Delta R^2 = .06, p < .05$; Environmental Mastery, $\Delta R^2 = .01, p > .05$; Personal Growth, $\Delta R^2 = .02, p > .05$; Positive Relations, $\Delta R^2 = .14, p < .001$); Purpose in Life, $\Delta R^2 = .01, p > .05$; Self-acceptance, $\Delta R^2 = .08, p < .05$). The engineering component account show unique variance in Autonomy, Positive Relations, and Self-acceptance. As well as this, the ecological component accounted for unique variance in Autonomy, and Positive Relations. However, surprisingly, the adaptive component did not record any unique variance with psychological well-being domains.

10.6. Discussion

This study assesses whether adversity might negatively affect the life experience of internally displaced people. It also examines the role of resilience as a factor in supporting the ability to live within stressful conditions. Our findings may provide a better view of multiple pathways underlying the association of resilience with psychological well-being. The current investigation aimed to find a relationship between the resilience components of Engineering, Ecological, and Recovery with the psychological well-being components of Autonomy, Environmental Mastery, Personal Growth, Positive Relations, Purpose in Life, and Self-Acceptance. Some of our results were predictable — for example, the research sample recorded a low level of psychological well-being and resilience.

Another aim of the study was to examine the association between psychological well-being dimensions and EEA resilience, and to achieve this aim, a bivariate correlation was used. The proposition that EEA Resilience reflects three traits is evident in that the associations between EEA Resilience and psychological well-being might be small, moderate or large across different dimensions and situations. Our findings show that the individuals who reported a high level of resilience also reported a high level of psychological well-being. However, it is necessary to say that there is no causation inferred here between both variables, which means that resilience components might lead to better

psychological well-being or better psychological well-being may lead to making a person more resilient. These results suggest the relevance of engineering and biological components of resilience as either mechanisms or outcomes to individuals living in relatively adverse situations to promote some aspects of psychological well-being.

This result seems to provide a relevant contribution to the literature, to the extent that the resilience of people who survive difficult life experiences could improve their psychological well-being. The ability to manage the stress and figure out a new way to move forwards through an adverse situation might help to develop an internal mechanism, making people more positive toward themselves and others. For instance, the displaced people's ability to manage stress through recovery from traumatic experiences or resist pressure might be an effective method to promote mental health which could lead to making them feel more positive toward themselves and others. Moreover, some of the links between EEA Resilience and psychological well-being point to possible hypotheses which future research might consider with other variables such as personality traits. For example, the current study identified a predictive and close association between engineering domains of resilience and Psychological well-being. This suggests engineering resilience could be considered within a 'growth' hypothesis with ecological resilience closely aligned to eudemonic elements of existence reflecting a Purpose in Life and longer-term engagement within life. Another possible hypothesis might be drawn from the findings. Adaptive resilience is unable to predict psychological well-being over time, and engineering resilience is found to predict psychological well-being among those currently living in an adverse situation.

The current study suggests EEA resilience is related to some aspects of well-being and can predict well-being over time. Also, further research is needed to examine whether EEA resilience can be translated into intervention type studies considering how EEA resiliency facets might be used to promote positive outcomes. In agreement with Maltby *et al.* (2015) findings showed the strong positive relation between EEA resilience and Psychological well-being. In addition, the aim was to determine gender differences in the relationship between psychological well-being and resilience. The results show that the males are shown highest score in the relation of ecological resilience with positive relationships with others component of psychological well-being. The pre-season for this

result might be because, the social construction and the life condition in the refugees camp forces the men more than women to resist the difficult situations in the refugees camp. Nevertheless, from the current finding, it could conclude that in general, there are no significant differences in the relationship between psychological well-being and resilience of male and female.

As mentioned in the literature review, the concept and measurement of resilience may be useful to a number of psychological areas in which resilience is often applied; for example, quality of life (Wu, 2011; Xu & Ou, 2014), mental health (Migliorini, Callaway, & New, 2013; Nurius, Green, Logan-Greene, & Borja, 2015) and well-being (Ager, 2013; Zautra *et al.*, 2010). From the findings, it might also suggest that the EEA resilience measurement might be considered as a promising factor with psychological well-being in terms of stressful life conditions. The current findings suggested that the construct of EEA resilience has an important contribution to make in the understanding of psychological well-being of displaced people. As displaced people are more likely to experience a higher level of stress compared to non-displaced people, being resilient is pivotal for them to reduce their levels of stress which in turn results in the higher level of well-being because resilience has a major role in helping individuals face stress by reducing pressure to some extent (Newman, 2005). In supporting the current findings, previous research with regard to the theoretical and empirical underpinning of resilience showed that it has important contributions in promoting well-being (Klohn, 1996; Maltby *et al.*, 2015; Mota & Matos, 2015).

Overall, these results could be considered from four different perspectives. First, this study is promising in terms of showing the role of the resilience in supporting the ability of recovery of those who experience stressful life situations. Secondly, resilience has a significant role in developing better mental health and improving the well-being of displaced people. Thirdly, it is important to consider that the ability of some people to adapt to a relatively different live style in the refugees camp is not necessarily related to good life conditions, but rather it is related to individual differences in their level of resilience that helps them to move forward positively. Although there are aforementioned contributions of the current study, further research should conduct prospective studies to understand the predictive role of the resilience in well-being over time. That would provide better insight

of the reliance in terms of understanding to what extent resilience is effective in reducing negative impacts of war and promoting the well-being of displaced people.

10.7. Conclusion

To summarize, considering the literature indicates that positive psychological states such as resilience and psychological well-being are more important than negative psychological states especially during a stressful situation. The results of the present study will perhaps provide partial support for this perspective. It could also be an important factor to consider the displaced individuals' life conditions from a positive psychology perspective. Additionally, promising and consistent results were obtained suggesting that resilience might potentially be efficacious in promoting psychological well-being among individuals who live under stressful conditions.

Chapter Eleven

Overview, Research Summary and Discussion of Findings, Implications and Future Research, Research Limitations and Challenges, and Conclusion

11.1. Overview

Due to the complexity of the living conditions of displaced people, researchers have developed a strong interest in investigating their experience from a positive psychological perspective to gain a better perception and in turn assist displaced people. This research highlights a range of psychological variables from a sample of war survivors living in refugee camps. All the present studies in the thesis focused on conducting the correlation with well-being as the central variable among war victims comprising refugees and internally displaced persons in Syria and Iraq. Here, the research variables pertained to EEA resilience, prejudice, and forgiveness.

This thesis has raised some critical questions relating to the plight of displaced people, including the following:

- To what extent the war and the conflict influence individuals' well-being?
- What are the consequences of a mass exodus to a new area and the probability of conflict between the host community and the displaced people?
- What factors might help individuals move forward through the surrounding conflict?

The aim of the research was to investigate the association between well-being and EEA resilience, prejudice, and forgiveness, the goal being to understand the extent to which these variables were present and the relationships between them. This thesis has comprised six studies, presented in three parts. In each part, a chapter exploring the theoretical background and two chapters examining the applied research were presented. Moreover, each study highlights different levels of statistical analysis, beginning by presenting an overview of the descriptive statistics and concluding by assessing whether there are any predictable associations between the variables (see section 11.2 for more details).

The wider purpose of this research was to identify whether these psychological factors are connected and what can be understood from any such associations. The current results supported the previous findings which suggest that high levels of psychological well-being are related to high levels of EEA resilience and forgiveness, and low levels of prejudice. In addition, the overall findings of this thesis show the importance of positive social relations, lower prejudice and greater resilience in predicting mental health states. In this chapter, the major findings of the current research will be discussed, highlighting the comparative results that are derived from the identified correlations and conducted multiple regressions. Furthermore, the implications, future possibilities and limitations of the thesis will be detailed.

11.2. Summary and discussion of findings

This research has focused on some related variables (quality of life as a subjective well-being measure, psychological well-being, EEA resilience, prejudice, and forgiveness) among refugees and internally displaced persons.

To summarise and structure the discussions in this thesis, the focal point of the main finding that relates to well-being that will be from two central themes. Firstly, this is achieved by investigating the correlations between quality of life components with EEA resilience and psychological well-being, and interpreting such findings by looking at the effect size criteria from the point-biserial correlation coefficient perspective, considering the effect size criteria as small = .1, medium = .24 and large = .37. Here, the Pearson product-moment is read as a mathematical equivalent to point-biserial (McGrath & Meyer, 2006). The range of the correlation between quality of life and the other variables had an effect size of between 1.93 and 4.72. Based on the effect size criteria, it could be said that the results show a correlation from small to strong between the quality of life and the three components of EEA resilience (engineering, ecological and adaptive) see Figure 10.

| | | | |
|---|------------------------|------------|---------------------------|
| Quality of Life (subjective well-being) | Psychological Health → | $r = .296$ | Environmental Mastery/PWB |
| | | $r = .312$ | Positive Relations/PWB |
| | | $r = .390$ | Resilience/Engineering |
| | | $r = .363$ | Resilience/Ecological |
| | | $r = .193$ | Resilience/Adaptive |
| | Physical Health → | $r = .319$ | Resilience/Engineering |
| | | $r = .272$ | Resilience/Ecological |
| | Social Relations → | $r = .360$ | Resilience/Engineering |
| | | $r = .347$ | Resilience/Ecological |
| | Environment → | $r = .301$ | Resilience/Engineering |
| | | $r = .472$ | Resilience/Ecological |

Figure 10 The figure further highlights the association of each component of quality of life with the psychological well-being, and resilience components.

From the figure, we can see the relation between the components through two criteria; considering practical significance and considering the effect size of the data. Additionally, the figure shows that the psychological health component of quality of life recorded a more significant correlation with the components of other variables.

Secondly, examining the relationship between the psychological well-being components and EEA resilience, forgiveness, and prejudicial attitudes. The results show that the positive relationship domain of psychological well-being recorded different levels of correlation with the components of other variables (EEA resilience, forgiveness, and prejudice). The range of the effect size between the psychological well-being components and the other variables was between 1.51 and 3.12. Based on the effect size criteria, the results show a medium correlation between the positive relationship domain of psychological well-being and the ecological component of resilience as well as with psychological health in respect of quality of life, see Figure 11. Therefore by using this summary the interpretations of main findings of the thesis will provide.

| | | | | |
|--------------------------|-----------------------|---|-------------|-------------------------------|
| Psychological well-being | Self-Acceptance | → | $r = .185$ | Forgiveness/Emotional |
| | | | $r = .128$ | Forgiveness/Behavioral |
| | | | $r = .120$ | Forgiveness/Cognition |
| | | | $r = .262$ | Resilience/Engineering |
| | Personal Growth | → | $r = .134$ | Forgiveness/Emotional |
| | Autonomy | → | $r = -.138$ | Prejudice/Explicit |
| | | | $r = .116$ | Forgiveness/Emotional |
| | Positive Relations | → | $r = .312$ | Psychological quality of life |
| | | | $r = -.151$ | Prejudice/Explicit |
| | | | $r = -.166$ | Prejudice/Implicit |
| | | | $r = .161$ | Forgiveness/Emotional |
| | | | $r = .182$ | Forgiveness/Cognition |
| | | | $r = .302$ | Resilience/Ecological |
| | | | $r = .180$ | Resilience/Adaptive |
| | Purpose in Life | → | $r = -.165$ | Prejudice/Implicit |
| | | | $r = .156$ | Forgiveness/Emotional |
| | | | $r = .139$ | Forgiveness/Cognition |
| | Environmental Mastery | → | $r = .296$ | Psychological quality of life |
| | | | $r = .116$ | Forgiveness/Emotional |

Figure 11 presents the association between psychological well-being domains and resilience, prejudice and forgiveness. The relationship between the components can be seen by considering two criteria: practical significance and the effect size of the data. Moreover, the figure highlights that the positive relationship component of psychological well-being recorded a more significant correlation with the components of other variables.

As psychological well-being assumed the central focus of this work and was positioned as one of the main variables in the thesis, the main discussion inevitably relates to how it correlates with the other variables. Here, well-being will be approached from two perspectives:

- The relationship between quality of life in the context of subjective well-being (as measured short-term life engagement), EEA resilience and psychological well-being; and
- The relationship between psychological well-being (as measured long-term life engagement), prejudicial attitudes, forgiveness, quality of life and EEA resilience.

In light of this, the thesis has been designed in three parts:

- Investigating the effect of war on well-being in short and long term of life engagement.
- Examining the negative effects of conflict and the process of forgiveness.
- Addressing how individuals can possess the ability to survive and after, adverse situations.

Therefore, to summarise the consideration of the findings, the discussion focuses on three main areas: the findings in relation to (i) well-being, (ii) conflict and forgiveness, and (iii) resilience.

11.2.1 Well-being

The level of subjective well-being was examined by measuring the quality of life. This was achieved by applying a comparative study to examine whether there were any variances in the quality of life levels among refugees located in different parts of the world. In reviewing our findings, it was found that Syrian refugees recorded significantly lower levels of quality of life across three components (physical health, psychological health, and environment). When compared with refugees on the Gaza Strip, they showed a lower level of physical health and psychological health components (Eljedi *et al.*, 2006). However, the Syrian refugees statistically scored a higher level of quality of life than the refugees from the West of Africa (Akinyemi *et al.*, 2012). The main findings of our study demonstrate that the Syrian refugees recorded high levels in the social relationship components of the quality of life scale.

The findings from the comparison study regarding the quality of life suggest that Syrian refugees are more satisfied with their social relationships. To explain this result, it could be said that when escaping from war and their surrounding conflict zones, and subsequently reaching safety, the Syrian refugees remained in camp with their family and

friends around them, thus maintaining a semblance of their previous daily life. This possibly accounts for them recording the highest score in this regard as they tended to share experiences with others and have the support of their social networks. Another interesting result from the comparison study pertained to the environmental domain of quality of life; the Syrian refugees recorded the highest level in comparison to refugees from the Gaza Strip and the West of Africa. This result may be explained by the fact that the Kurdistan camps have relatively good living conditions, especially in terms of access to healthcare and transport services. Thus, the environment in these camps might be considered to be an acceptable place to live.

What emerges from these findings is that it is essential to pay special attention to conducting further research among Syrian refugees regarding their physical and psychological quality of life domains. Primarily, the research has shown a significantly lower mean to a large effect size than those means reported among the Gaza Strip refugees. It may also be the case that the relatively recent nature of the Syrian conflict and refugee movement has led to heightened levels of health and psychological problems. At the same time, however, lower levels of physical and psychological quality of life can be indicative of stress-related disorders (Carlsson *et al.*, 2006; Fazel *et al.*, 2005). This requires further investigation. Thus, based on the current findings, there may be a need to prioritise aspects of physical and psychological quality of life among Syrian refugees.

To move forward in the investigation of the thesis, and because the research interest involved the psychological health component of quality of life being associated with other psychological variables through long-term life engagement, another aim was to conduct further studies in relation to the psychological quality of life. The review of the earlier literature shows that psychological well-being is an important indicator of both physical health (de Castro *et al.*, 2012; Gómez, Gutiérrez, Castellanos, Vergara, & Pradilla, 2010a) and mental health (Ryff *et al.*, 2006). As such, to strengthen the research and to advance the study, other steps were taken to identify the associations between quality of life and psychological well-being among displaced people. This investigation might also be helpful in providing a better understanding of mental health among refugees from a long-term life engagement perspective. Therefore, psychological well-being was employed as the best candidate to achieve the stated goals of the research.

This study demonstrates a significant positive association between psychological quality of life and psychological well-being across two components: environmental mastery and positive relationships with others. This is one of the key findings of the research. The other components, however, did not show any significant correlation with psychological quality of life. We believe that, in this study, knowing the prediction factors of psychological quality of life provides us with a strong possibility of obtaining a wider perception and understanding as to the well-being of individuals. The most interesting finding was that environmental mastery and positive relationships with others could provide a unique prediction of the psychological quality of life among Syrian refugees.

If the results from the thesis are compared with earlier findings, it is clear that there is some correlation between them. Some studies have suggested that quality of life is significantly associated with well-being (Cotton et al., 1999; Nyklícek & Kuijpers, 2008; Verdugo Alonso et al., 2010). However, this does not appear to be the case in the findings of study two of this thesis, as the results do not show associations with the four components of psychological well-being: autonomy, personal growth, purpose in life and self-acceptance. A possible explanation for this is the privacy of the study sample. In this sense, the present studies in this thesis were conducted on displaced people living under stressful conditions. The sample size might be another reason for the variation in the results, considering that larger samples size might help to increase the chance of significance due to reflecting more reliably the population mean which boosts statistical power (Halsey, Curran-Everett, Vowler, & Drummond, 2015).

Another important finding was from addressing the differences in the relationship between psychological well-being components and the psychological quality of life component. Z-Score examined the gender role of the relationship between both variables, and whether psychological well-being is a more significant predictor of psychological health for males or females. From the results, it has been indicated men score higher in environmental mastery and in having positive relations with others than women. As such the results suggested that men have a stronger ability to have an influence on the events in life by building strong relationships than women. The possible explanation for these results could be attributed to the social and institutional structures that help men resist stress and the social construction of men as the stronger sex. This advantage may give the men more

space to move more freely in the refugee camps compare with the women and provide greater opportunities for men to establish social relations in the camps. In a similar case, Pinquart and Sörensen (2001) pointed out that with stressful conditions the female is more likely show a poor level of well-being compared with the male. The result from a cross-cultural study also shows that compared to men, women have lower rates of well-being and mental health (Maccoby, 1998).

11.2.2 Prejudice, forgiveness, and well-being in the conflict condition

Following the investigations in this thesis, mass exodus is likely to have a harmful impact on displaced people (e.g., through exposure to negative attitudes or conflict with the local community). For this reason, the next research question asked how conflict situations might be associated with prejudicial attitudes and how these attitudes might correlate with well-being. To measure prejudicial attitudes, two approaches were followed the application of self-report questionnaires and the use of subjective measures. Despite displaced individuals and host communities demonstrating low levels of prejudice on the explicit scale, they recorded high levels of implicit prejudice. The results further support the idea that individuals might express their attitudes when they have less control over their behaviour. In this sense, such individuals most likely provide different answers when completing self-report questionnaires (Blair, 2001; Dovidio, 2001; T. Wilson *et al.*, 2000). There are several possible explanations for this result. For instance, it could be connected to the conflicted history between Kurdish and Arab nationalities (Cordesman *et al.*, 2010), competition for basic resources (Esses *et al.*, 2008) or indeed both nationalities perhaps having a perspective that the out-group may constitute a threat (Stephan *et al.*, 2002). Due to social desirability, however, individuals tend to hide their negative feelings and express false sentiments towards the other group (Furnham, 1986; Richman, Kiesler, Weisband, & Drasgow, 1999).

Another interesting finding, as was expected, was the recording of a negative association between prejudicial attitudes and psychological well-being. For instance, prejudicial attitudes show a negative correlation with some components of psychological well-being, including autonomy, personal growth, positive relationships with others and purpose in life. The current results were similar to previous studies that investigated the

association between prejudice and psychological well-being (Dinh *et al.*, 2014; Magallares, 2012; Schaafsma, 2011). However, the negative association does not include all well-being dimensions, which means prejudice may not result in lower levels of well-being in all situations. The possible explanation for this result from the literature could be that individuals who receive support from the social community may have found this helps to reduce the negative impact of the exposing bias (Arroyo & Zigler, 1995; Branscombe *et al.*, 1999).

In examining the gender differences of prejudice and forgiveness in the relationship with psychological well-being, the earlier studies pointed out that women have presented less prejudicial attitudes than men (Akrami *et al.*, 2000; Hoxter & Lester, 1994; Qualls *et al.*, 1992). Additionally, Ekehammar, Akrami, and Araya (2003) established that women are more likely show higher implicit prejudicial attitudes than men while men show higher explicit prejudice than women. Although the present finding shows the differences of the relationship between male and female, the current finding was contrary to Ekehammar *et al.* (2003) results. The present result indicates significant differences between male and female in the relationship between prejudicial attitudes and psychological well-being components. The female shows higher differences in the explicit prejudice and personal growth component while males show higher differences in the relationship between implicit prejudice and purpose in life.

After presenting the results and highlighting how extended prejudicial attitudes are adversely linked with psychological well-being, it could be argued that one of the challenges that individuals might face after being harmed is rebuilding relationships with offenders and instigating overall reconciliation. As such, to detect whether individuals had the ability to re-engage following conflict and to make decisions to forgive. Our hypothesis suggests that forgiveness not only contributes to the building of peace between communities but that it also leads to improvements in the psychological structure of individuals in relation to their well-being.

The results from Study 4, in terms of forgiveness and psychological well-being, underline how the participants recorded significantly low levels of psychological well-being and a low level of forgiveness. These results were expected and were consistent with earlier studies (Cheng & Yim, 2008; McLernon *et al.*, 2004). Following the conflict, the

expectation was that the victims might face difficulty re-engaging with the offenders. A possible explanation for this result may be that displaced people have doubts about their safety and treatment. In other words, they may not trust that there will be a guarantee of protection against being betrayed by the same offenders in the future, for this reason, they may not be optimistic about their future of living with the offenders. Studies have indicated that the victims trust of being safe from the aggressor (Hewstone *et al.*, 2004; McLernon *et al.*, 2004) convey regret of the offender, (Gold & Weiner, 2000) are important factors for the victims of making a decision to forgive.

An additional aim of present research was to examine the relationships between pain, forgiveness, and well-being through two perspectives: measuring the depth of pain and measuring the period of the painful experience. Contrary to expectations, this study did not find a significant association between painful experiences, forgiveness and psychological well-being. However, McLernon *et al.* (2004) highlighted how forgiveness has a negative relationship with the severity of an injury. The results, furthermore, lead us to consider alternatives that might be associated with psychological well-being among displaced people, such as personality, resilience and respective experiences which may cause individuals to understand and view their pain from different perspectives. Addressing the differences between male and female in the areas of forgiveness and psychological well-being showed non-significant differences between men and women. Likewise, previous finding show non-significant differences between men and women in forgiveness (Macaskill *et al.*, 2002; Toussaint & Webb, 2005).

So, to what extent is forgiveness associated with psychological well-being? The current findings show that there is a significant positive relationship between the emotional and cognitive components of forgiveness and all the components of psychological well-being. These results seem to be consistent with previous research where similar links were found between forgiveness and psychological well-being (Freedman & Enright, 1996; Karremans, Van Lange, Ouwerkerk, & Kluwer, 2003). This study has been unable to demonstrate a relationship between the behavioural components of forgiveness and the psychological well-being domains. The results do reveal however that the emotional component is a predictor of the self-acceptance domain of psychological well-being. The cognition component was also a predictor of the positive relationship domain of

psychological well-being. This result may be explained by the fact that forgiveness is related to the individual's welfare because forgiveness helps individuals overcome the negative effects that conflict with maintaining and restoring close relationships (Bono et al., 2008). On the other hand, the results did not detect any evidence for the behavioural components of forgiveness being a predictor of any components of psychological well-being.

11.2.3 Resilience and well-being

If displaced people believe that life in a refugee camp is temporary and that they should be able to return to their normal lives, they might be able to cope with the conditions in the camp. As a consequence, the assumption was that surviving adversity and then being able to progress were important issues to be considered. The ability of some individuals to survive in adverse situations may point to resilience playing a positive role in them recovering from adversity (J. Block & Kremen, 1996; Lazarus, 1993), and two studies have investigated this issue from this perspective.

The first sought to determine how resilience is associated with well-being in the context of short-term engagement. As expected, the findings show a significant positive relationship between two components of EEA resilience – engineering and ecological resilience – with all components of quality of life. Surprisingly, however, the adaptive component of EEA resilience only recorded a significant relationship with the psychological health component of quality of life. In reviewing the literature, data was found surrounding the association between resilience and quality of life (Li et al., 2012; Tugade & Fredrickson, 2004; Xu & Ou, 2014).

Another step was investigate the predictable association between quality of life components and the EEA resilience components. This would perhaps identify how the trait of resilience can play a significant role in helping individuals bounce back from adversity and improve their quality of life. The results show that the engineering domains of EEA resilience have a unique prediction regarding three domains of quality of life: physical health, psychological health, and social relationships. The ecological domain also presents a unique prediction with the physical health, environmental and social relationship domains of quality of life. Unexpectedly, however, the adaptive component of EEA resilience did

not indicate any prediction with the quality of life domains.

A possible explanation for this result might relate to resilience being an individual factor in helping people figure out different ways of adapting to their new life conditions and developing the ability to move forwards. The current results were dissimilar to some published studies that suggested that resilience may not be a predictor of quality of life; for example, the research conducted by Tian and Hong (2014). However, this study was consistent with other research that found a significant positive correlation between resilience and quality of life (Xu & Ou, 2014). In addition, Davydov *et al.* (2010) believe that to develop a high level of quality of life, building individual resilience is probably required; this potentially allows people to improve the balance between themselves and the given surrounding group.

Concerning the role of gender in relation to resilience and quality of life, the results show that men score significantly higher in relation to engineering resilience and physical health. Also, men score significantly higher in the relationship between ecological resilience and physical and psychological health. These results demonstrated that men are more robust, more able to recover from stressful conditions and are healthier than women, while women can adapt to the stressful situation by building successful relationships with others better than men. There are several possible explanations for this result such as the effect of the social and institutional structures that help men to be stronger and resist stress but which help women to be more flexible to adapt to the stressful condition through social communication.

To develop a full picture of the influence of resilience on well-being, additional studies will need to assess the extent of the life adversity effect on displaced people's well-being with regard to long-term life engagement. Furthermore, an evaluation should be given of how resilience can help individuals cope with stressful conditions. Through the current investigation, the relationship between psychological well-being across six components (autonomy, environmental mastery, personal growth, positive relationships with others, purpose in life and self-acceptance) and EEA resilience across three components (engineering, ecological and adaptive resilience) is studied.

The results show that those displaced people who reported high levels of engineering, ecological and adaptive resilience also reported a high level of psychological

well-being. The data analysing show that engineering and ecological resilience might be considered to be a coping mechanism among individuals living in adverse life conditions. This provides a strong contribution to the literature in this area as it demonstrates how resilient individuals, are able to improve their psychological well-being when they encounters adverse situations. Therefore, it could be said that the ability to manage stress and identify new ways to progress in adverse situations helps to promote the development of the internal organisation and allows people to become more positive about themselves and others. The interesting result to emerge from the analysis determining the gender differences in the relationship between psychological well-being and resilience is that the males are shown highest score only in the relation of ecological resilience with positive relationships with others component of psychological well-being. These differences can be explained in part by the life condition in the refugees' camp, considering that the social structure forces the males more than women can resist the difficult situations in the camp. However, from this results, it could conclude that in the overall there are no significant differences in the relationship between psychological well-being and resilience based on gender.

It is interesting to note that in this study, EEA resilience was found to be related to a number of well-being aspects. Moreover, this can predict well-being over time. Therefore, further research was suggested to investigate whether EEA resilience can be translated into intervention; a consideration of how EEA resilience facets may be used to promote positive outcomes would be extremely useful. Similarly, in reviewing the literature, data was found concerning the association between EEA resilience and psychological well-being (Maltby *et al.*, 2015). Our findings can be seen to suggest that measuring resilience may be useful and that the EEA resilience scale is an appropriate application for psychological well-being in relation to stressful life conditions.

Through a review of the literature, dissimilarities between previous findings were identified. For instance, some studies have recorded that resilience factors contribute to psychological well-being (Klohn, 1996; Maltby *et al.*, 2015; Mota & Matos, 2015). However, other findings have suggested that resilience is unable to predict psychological well-being (Pretsch, Flunger, & Schmitt, 2012). A possible explanation for this disparity of the results might be related to the different measurement instruments employed. These

different approaches have arisen due to the number of components included in the measurement of resilience and psychological well-being.

It is likely that connections do exist between psychological well-being components and quality of life, EEA resilience, prejudice and forgiveness domains. The fact that some domains have a higher degree of association points to the nature of the relationships that arise between these variables. By reviewing the data collected across the various studies in this thesis, and by considering the practical significance between the components of all the variables, it was found that the psychological health domain of quality of life recorded the highest levels of association with components of other variables, namely, psychological well-being and EEA resilience. The social relationship with other components of psychological well-being recorded the highest levels of association with EEA resilience, prejudice and forgiveness components.

In summary, four substantial findings can be outlined. Firstly, displacement could be considered to be a significant factor in damaging the mental health of displaced people, while in contrast, social relations could have a positive role to play in decreasing those stressors that result from displacement. Secondly, in all likelihood, prejudicial attitudes can be considered to be a negative factor in the psychological well-being of displaced people, while in contrast, the beliefs of an individual and their respective sense of forgiveness might help them improve their well-being. Thirdly, with regard to the ability of individuals to survive in adverse life conditions, EEA resilience may play an important role in increasing well-being. Finally, the overall findings of this thesis show the importance of positive social relations, lower prejudice and greater resilience in predicting mental health states. Through a consideration of the practical significance between the variables, it can be seen that the psychological health domain of quality of life recorded the highest levels of association with the components of the other variables (psychological well-being and EEA resilience). In considering the effects of the size of the correlation between the variables, the correlation range between all the components of quality of life and EEA resilience was found to span between weak and strong. In addition, by examining the practical significance and the size effect, it was found that the positive relationships and self-acceptance domains of psychological well-being recorded the highest levels of association with the components of other variables (resilience, forgiveness, and prejudice), with the

range of the correlation estimated as being between small and medium.

11.3. Implications and future research

Displaced individuals are usually isolated from their normal social life and emotional support systems. This isolation may cause them to be more fragile and likely to react adversely to social distress and environmental adversity. According to Pedersen (2002), the disintegration of social networks, family relations, and leave the workplace, have negative impacts on the health and well-being of displaced people. Also, our findings suggest that there are new avenues of psychological intervention to be implemented when attempting to improve the life conditions of displaced individuals. Such interventionist approaches will perhaps help to reduce the levels of prejudice and increase the levels of forgiveness. Psychological interferences may also help to invest individuals with increased flexibility in terms of dealing with the harmful conditions they are confronted by when living in refugee camps.

From the current findings, the following recommendations are made in relation to the implementation of effective interventions designed to improve the well-being of displaced people:

- 1- The refugees studied recorded a low level of physical quality of life. As such, it might be necessary to provide an effective healthcare system and local support networks to help displaced people meet their basic health needs. International organisations have to ensure that financial and human resource support is available. Such responsibilities should be shared between governments, international organisations and local charities, with cooperation enabling the emergence of a clear direction in achieving the respective tasks of this goal.
- 2- The study group also recorded a low level of psychological quality of life. As such, it might be necessary to provide a system which is designed to look after the psychological health of displaced people, with this being supervised by the respective government's health sector. This could promote an improvement in the mental health of displaced individuals.
- 3- As the ability to recover from adversity might be an important factor in raising the level of an individual's well-being in adverse life conditions, a healthy environment

should be provided to help displaced people move forward. This could be achieved through the provision of mental health development programmes specifically designed to help displaced people.

- 4- In light of how displaced people are often part of a mass exodus, prejudicial attitudes may arise. As such, local governments and NGOs must encourage local communities to understand the given displacement crisis, thus reducing prejudice and supporting displaced people in the process.
- 5- As the social relationship component of psychological well-being has the strongest relationship with the other studied variables, it is important for those working with refugees (or their associated affairs) to pay closer attention to the social relations between individuals and displaced people.
- 6- As displaced individuals face demographic, geographic and economic restrictions, health workers who live near refugee camps may need to be incentivised to provide their services, subsequently improving the mental health of displaced people through the provision of additional support.

With regard to future research, given that the current study has examined displaced people in a specific period, and within a specific situation, it might be necessary to further investigate the influence of the time factor on the research variables. For instance, the application of longitudinal research can relate to the well-being and other variables (such as forgiveness and resilience) of displaced people. By explaining how these aspects change over time, future research may be able to indicate how well-being is influenced by different levels of stress over time and, furthermore, how resilience and forgiveness can contribute to well-being over time. In addition, future studies may also examine the influence of conflict on the concepts of prejudice and forgiveness among young displaced people (such as teenagers).

This research has provided insights that can be expanded upon in future studies. In this way, it has contributed the first major study on displaced people in relation to their psychological well-being and personality traits. The results of this research suggest that further empirical studies should be undertaken in order to measure psychological well-being under stressful life conditions, thus enhancing this concept further. If this approach is

to furnish a full understanding as to the psychological well-being among displaced people, additional studies will need to be conducted. Moreover, the reviewed literature has indicated that social identity and social support may help individuals resist prejudicial attitudes (Knifsend & Juvonen, 2013; Verkuyten & Martinovic, 2012) and in turn improve their mental health (Muldoon & Lowe, 2012; R. J. Turner, 1981). From this perspective, it could be said that further studies investigating the interaction among social identity, social support, prejudicial attitudes and well-being will most likely provide a wider view of the factors that interrelate with well-being.

11.4. Research limitations and challenges

In this section, the discussion is given to the methodological limitations and challenges of the research. As this research applied to displaced people, who survived from the conflict. It could be said that studying refugees who suffer from stressful life conditions could present a challenge, especially when compared with other research samples. When working with refugees, more effort may be required from researchers to convince the chosen sample to participate in the study. Here, consideration must be given to the external factors (which may not relate to the study's direct conditions) which may cause the sample to feel uncomfortable and hesitant to participate in the research – for example, their new life experiences or their displacement status. To address this issue, researchers must choose a suitable time to run the study and take care to explain the purpose and importance of the research to the participants.

Another challenge of the overall study was the creation of its research framework. It is well known that internally displaced persons and refugees are spread out over several regions of Iraq. However, the study area of this research was limited to northern Iraq/the Kurdistan Region. For reasons of safety, it was difficult to conduct the survey outside the boundaries of this province. Similarly, another challenge was the difficulty in obtaining official approval because of the security procedures that pertained to accessing the camps. In addition, this difficulty in accessing the research group makes the current study limited, especially in respect of time considerations. Another limitation of the research involved the inability to conduct any longitudinal research, so the researcher was unable to investigate whether any of the research variables were liable to change over time (e.g., noting how

resilience contributes to well-being over time). Furthermore, additional difficulties concerned the way of applying these studies because different scales were used in respect of the length of the measure and the use of interviews. Therefore, it could be said that given out many measures in a study probably it may be the practically improper way to collect accurate data and might lead to overburdening the respondents. As such, the best way to run studies is through the application of particular measures each time and restricting the most central measures to prevent collecting needless data from vulnerable groups.

11.5. Conclusions

In conclusion, this research has further highlighted how psychological well-being is linked with quality of life, EEA resilience, forgiveness, and prejudice. These frameworks may help us in different areas, such as gaining a better understanding of how these variables express well-being, in which areas these variables are linked and the nature of the connections between such variables. Our results suggest that the identified variables in the study (EEA resilience, forgiveness, and prejudice) can be used as indicators to demonstrate key aspects of well-being. These findings might be useful in providing a better perception of the psychological issues faced by displaced people, thus opening the door for further studies and better intervention.

Assuming that positive psychological states – such as resilience, forgiveness, quality of life and psychological well-being – may be more important than negative psychological states, especially during stressful situations, the results of the current studies provide partial support for this perspective. The research has also drawn attention to the important factors that need to be considered when approaching the life conditions of displaced individuals from a positive psychology perspective. In addition, promising and consistent results were obtained, suggesting that resilience and forgiveness might potentially be efficacious in promoting psychological well-being among individuals who live under stressful conditions.

The findings show that social relationships are probably an important factor in improving levels of forgiveness and reducing prejudicial attitudes. Similarly, some characteristic traits (such as the ability to resist and recover from stressful life conditions) can perhaps lead to an increase in an individual's well-being. Accordingly, when assisting

displaced people to improve their psychological condition, key organisations and governments should focus on supporting the social relationships among displaced individuals. For instance, there should be organised socialising and collective engagement in the refugee camps. On the other hand, it is also possible that there are other subjective and objective factors that may interact with well-being. As such, further studies should be undertaken in this area in order to identify these elements.

References

- Abebe, D. S., Lien, L., & Hjelde, K. H. (2014). What we know and don't know about mental health problems among immigrants in Norway. *Journal of Immigrant and Minority Health, 16*(1), 60-67. doi:10.1007/s10903-012-9745-9
- Ablett, J. R., & Jones, R. (2007). Resilience and well-being in palliative care staff: A qualitative study of hospice nurses' experience of work. *Psycho-Oncology, 16*(8), 733-740. doi:10.1002/pon.1130
- Affleck, G. (1999). Finding benefits in adversity. In C. R. Snyder (Ed.), *Coping: The psychology of what works* (pp. 279-304) Oxford University Press.
- Ager, A. (2013). Annual research review: Resilience and child well-being—public policy implications. *Journal of Child Psychology and Psychiatry, 54*(4), 488-500. doi:10.1111/jcpp.12030
- Ager, A. (1993). Mental health issues in refugee populations: A review. *CambridgeMA: Harvard Medical School, Department of Social Medicine,*
- Agrawal, A., & Redford, K. (2009). Conservation and displacement: An overview. *Conservation and Society, 7*(1), 1. doi:10.4103/0972-4923.54790
- Akinyemi, O. O., Owoaje, E. T., Ige, O. K., & Popoola, O. A. (2012). Comparative study of mental health and quality of life in long-term refugees and host populations in Oru-Ijebu, southwest Nigeria. *BMC Research Notes, 5*, 394-0500-5-394. doi:doi:10.1186/1756-0500-5-394
- Akrami, N., Ekehammar, B., & Araya, T. (2000). Classical and modern racial prejudice: A study of attitudes toward immigrants in Sweden. *European Journal of Social Psychology, 30*(4), 521-532.

Alexandra, B., Martina, C., Guillaume, C., Sophie, C., Laura, R. D., Florence, F., . . .

Michelle, Y. (May 2015). *Global overview 2015 people internally displaced by conflict and violence*. (). Norwegian Refugee Council: Internal Displacement Monitoring Centre.

Allers, C. R., & Smit, M. (2010). *Forgiveness in perspective*. New York: Rodopi.

Alriksson-Schmidt, A. I., Wallander, J., & Biasini, F. (2007). Quality of life and resilience in adolescents with a mobility disability. *Journal of Pediatric Psychology*, 32(3), 370-379. doi:jsl002 [pii]

American Psychological Association. (2008). *Task force on resilience and strength in black children and adolescents*. (). Washington, DC: Author.: Resilience in African American children and adolescents: A vision for optimal development.

American Psychological Association. (2015). The road to resilience. Retrieved from <http://www.apa.org/helpcenter/road-resilience.aspx>

Anda, R. F., Butchart, A., Felitti, V. J., & Brown, D. W. (2010). Building a framework for global surveillance of the public health implications of adverse childhood experiences. *American Journal of Preventive Medicine*, 39(1), 93-98. doi:10.1016/j.amepre.2010.03.015

Andrews, F. M., Robinson, J. P., & Wrightsman, L. S. (1991). *Measures of personality and social psychological attitudes* Gulf Professional Publishing.

Ang, R. P., & Huan, V. S. (2006). Academic expectations stress inventory development, factor analysis, reliability, and validity. *Educational and Psychological Measurement*, 66(3), 522-539. doi:10.1177/0013164405282461

- Araya, M., Chotai, J., Komproe, I. H., & de Jong, J. T. (2007). Gender differences in traumatic life events, coping strategies, perceived social support and sociodemographics among postconflict displaced persons in ethiopia. *Social Psychiatry and Psychiatric Epidemiology*, 42(4), 307-315. doi:10.1007/s00127-007-0166-3
- Arroyo, C. G., & Zigler, E. (1995). Racial identity, academic achievement, and the psychological well-being of economically disadvantaged adolescents. *Journal of Personality and Social Psychology*, 69(5), 903-914. doi:10.1037/0022-3514.69.5.903
- Ashforth, B. E., & Mael, F. (1989). Social identity theory and the organization. *The Academy of Management Review*, 14(1), 20-39. doi:10.5465/AMR.1989.4278999
- Augoustinos, M., & Reynolds, K. J. (2001). *Understanding prejudice, racism and social conflict*. London: Sage.
- Avery, J., Braunack Mayer, A., Duggan, P., Taylor, A., & Stocks, N. (2015). 'It's our lot': How resilience influences the experience of depression in women with urinary incontinence. *Health Sociology Review*, 24(1), 94-108. doi:10.1080/14461242.2015.1007512
- Aziz, I. A., Hutchinson, C. V., & Maltby, J. (2014). Quality of life of syrian refugees living in camps in the kurdistan region of iraq. *PeerJ*, 2, e670. doi:10.7717/peerj.670
- Bajaj, B., & Pande, N. (2016). Mediating role of resilience in the impact of mindfulness on life satisfaction and affect as indices of subjective well-being. *Personality and Individual Differences*, 93, 63-67.
- Balkin, R. S., Harris, N. A., Freeman, S. J., & Huntington, S. (2014). The forgiveness reconciliation inventory: An instrument to process through issues of forgiveness and

- conflict. *Measurement and Evaluation in Counseling and Development*, 47(1), 3-13.
doi:10.1177/0748175613497037
- Beasley, M., Thompson, T., & Davidson, J. (2003). Resilience in response to life stress: The effects of coping style and cognitive hardiness. *Personality and Individual Differences*, 34(1), 77-95. doi:10.1016/S0191-8869(02)00027-2
- Biernat, M., Vescio, T. K., & Theno, S. A. (1996). Violating american values: A "value congruence" approach to understanding outgroup attitudes. *Journal of Experimental Social Psychology [H.W.Wilson - SSA]*, 32, 387. doi:10.1006/jesp.1996.0018
- Blair, I. V. (2001). Implicit stereotypes and prejudice. In M. Gordon B (Ed.), *Cognitive social psychology: The princeton symposium on the legacy and future of social cognition* (pp. 359-374)
- Block, J. H., & Block, J. (1980). The role of ego-control and ego-resiliency in the organization of behavior. In C. W. A (Ed.), *Development of cognition, affect, and social relations: The minnesota symposia on child psychology* (pp. 39-101)
- Block, J., & Kremen, A. M. (1996). IQ and ego-resiliency: Conceptual and empirical connections and separateness. *Journal of Personality and Social Psychology*, 70(2), 349-361. doi:10.1037/0022-3514.70.2.349
- Bonanno, G. A. (2004). Loss, trauma, and human resilience: Have we underestimated the human capacity to thrive after extremely aversive events? *American Psychologist*, 59(1), 20. doi:10.1037/0003-066X.59.1.20
- Bonanno, G. A., & Mancini, A. D. (2008). The human capacity to thrive in the face of potential trauma. *Pediatrics*, 121(2), 369-375. doi:10.1542/peds.2007-1648 [doi]

- Bono, G., McCullough, M. E., & Root, L. M. (2008). Forgiveness, feeling connected to others, and well-being: Two longitudinal studies. *Personality & Social Psychology Bulletin*, 34(2), 182-195. doi:0146167207310025 [pii]
- Branscombe, N. R., Ellemers, N., Spears, R., & Doosje, B. (1999). The context and content of social identity threat.
- Branscombe, N. R., Schmitt, M. T., & Harvey, R. D. (1999). Perceiving pervasive discrimination among african americans: Implications for group identification and well-being. *Journal of Personality and Social Psychology*, 77(1), 135. doi:10.1037/0022-3514.77.1.135
- Bruneau, M., Chang, S. E., Eguchi, R. T., Lee, G. C., O'Rourke, T. D., Reinhorn, A. M., . . . von Winterfeldt, D. (2003). A framework to quantitatively assess and enhance the seismic resilience of communities. *Earthquake Spectra*, 19(4), 733-752. doi:10.1193/1.1623497
- Brunwasser, S. M., Gillham, J. E., & Kim, E. S. (2009). A meta-analytic review of the penn resiliency program's effect on depressive symptoms. *Journal of Consulting and Clinical Psychology*, 77(6), 1042. doi:10.1037/a0017671
- Buikstra, E., Ross, H., King, C. A., Baker, P. G., Hegney, D., McLachlan, K., & Rogers-Clark, C. (2010). The components of resilience-perceptions of an australian rural community. *Journal of Community Psychology*, 38(8), 975-991. doi:10.1002/jcop.20409
- Burns, R. A., & Machin, M. A. (2009). Investigating the structural validity of ryff's psychological well-being scales across two samples. *Social Indicators Research*, 93(2), 359-375. doi:10.1007/s11205-008-9329-1

- Cameron, C. A., Ungar, M., & Liebenberg, L. (2007). Cultural understandings of resilience: Roots for wings in the development of affective resources for resilience. *Child and Adolescent Psychiatric Clinics of North America*, 16(2), 285-301. doi:10.1016/j.chc.2006.11.001
- Camfield, L., & Skevington, S. M. (2008). On subjective well-being and quality of life. *Journal of Health Psychology*, 13(6), 764-775. doi:10.1177/1359105308093860 [doi]
- Campbell, A. (1981). *The sense of well-being in america: Recent patterns and trends*. New York; London: McGraw-Hill.
- Carlsson, J. M., Mortensen, E. L., & Kastrup, M. (2006). Predictors of mental health and quality of life in male tortured refugees. *Nordic Journal of Psychiatry*, 60(1), 51-57. doi:10.1080/08039480500504982
- Carlsson, J. M., Olsen, D. R., Mortensen, E. L., & Kastrup, M. (2006). Mental health and health-related quality of life: A 10-year follow-up of tortured refugees. *The Journal of Nervous and Mental Disease*, 194(10), 725-731. doi:10.1097/01.nmd.0000243079.52138.b7 [doi]
- Carr, A. (2011). *Positive psychology: The science of happiness and human strengths* Routledge.
- Carr, A., Higginson, I., & Robinson, P. G. (2003). *Quality of life*. London: BMJ Books.
- Cehajic, S., Brown, R., & Castano, E. (2008). Forgive and forget? antecedents and consequences of intergroup forgiveness in bosnia and herzegovina. *Political Psychology*, 29(3), 351-367. doi:10.1111/j.1467-9221.2008.00634.x

- Chen, F. F., Jing, Y., Hayes, A., & Lee, J. M. (2013). Two concepts or two approaches? A bifactor analysis of psychological and subjective well-being. *Journal of Happiness Studies*, 14(3), 1033-1068. doi:10.1007/s10902-012-9367-x
- Cheng, S., & Yim, Y. (2008). Age differences in forgiveness: The role of future time perspective. *Psychology and Aging*, 23(3), 676. doi:10.1037/0882-7974.23.3.676
- Christopher, K. A. (2000). Determinants of psychological well-being in irish immigrants. *Western Journal of Nursing Research*, 22(2), 123-143.
doi:10.1177/019394590002200203
- Church, A. T., Katigbak, M. S., Locke, K. D., Zhang, H., Shen, J., de Jesús Vargas-Flores, J., . . . Cabrera, H. F. (2013). Need satisfaction and well-being testing self-determination theory in eight cultures. *Journal of Cross-Cultural Psychology*, 44(4), 507-534. doi:10.1177/0022022112466590
- Cicchetti, D., & Curtis, W. J. (2006). The developing brain and neural plasticity: Implications for normality, psychopathology and resilience. In D. Cicchetti., & D. J. Cohen. (Eds.), *Developmental psychopathology: Developmental neuroscience (vol 2.)* (pp. 1-51). New Jersey: John Wiley & Sons.
- Coe, R. (2002). It's the effect size, stupid: What effect size is and why it is important.
- Cofini, V., Carbonelli, A., Cecilia, M. R., & di Orio, F. (2014). Quality of life, psychological wellbeing and resilience: A survey on the italian population living in a new lodging after the earthquake of april 2009. *Annali Di Igiene : Medicina Preventiva E Di Comunita*, 26(1), 46-51. doi:10.7416/ai.2014.1957 [doi]
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.) Hillsdale, NJ: Erlbaum.

- Cohen, R., & Deng, F. M. (1998). *Masses in flight: The global crisis of internal displacement* Brookings Institution Press.
- Conn, V., Taylor, S. G., & Abele, P. B. (1991). Myocardial infarction survivors: Age and gender differences in physical health, psychosocial state and regimen adherence. *Journal of Advanced Nursing*, 16(9), 1026-1034. doi:10.1111/j.1365-2648.1991.tb03362.x
- Connor, K. M., & Davidson, J. R. (2003). Development of a new resilience scale: The Connor- Davidson resilience scale (CD- RISC). *Depression and Anxiety*, 18(2), 76-82. doi:10.1002/da.10113
- Cordesman, A. H., Mausner, A., & Derby, E. (2010). *Barriers to reconciliation in iraq: Tensions between sunnis, shi'ites, and kurds, and the role of external powers* Center for Strategic and International Studies.
- Cotton, S. P., Levine, E. G., Fitzpatrick, C. M., Dold, K. H., & Targ, E. (1999). Exploring the relationships among spiritual well- being, quality of life, and psychological adjustment in women with breast cancer. *Psycho- Oncology*, 8(5), 429-438. doi:10.1002/(SICI)1099-1611
- Cox, S. S., Bennett, R. J., Tripp, T. M., & Aquino, K. (2012). An empirical test of forgiveness motives' effects on employees' health and well-being. *Journal of Occupational Health Psychology*, 17(3), 330. doi:10.1037/a0028314
- Crocker, J., & Luhtanen, R. (1990). Collective self-esteem and ingroup bias. *Journal of Personality and Social Psychology*, 58(1), 60. doi:10.1037/0022-3514.58.1.60

- Crocker, J., & Major, B. (1989). Social stigma and self-esteem: The self-protective properties of stigma. *Psychological Review*, 96(4), 608. doi:10.1037/0033-295X.96.4.608
- Cutts, M. (2000). *The state of the world's refugees, 2000: Fifty years of humanitarian action* Oxford University Press.
- Damasio, B. F., Melo, Romulo Lustosa Pimenteira de, & Silva, J. P. d. (2013). Meaning in life, psychological well-being and quality of life in teachers. *Paidéia (Ribeirão Preto)*, 23(54), 73-82.
- Davies, A. (2012). IDPs in host families and host communities: Assistance for hosting arrangements. *Online*:
Http://Sheltercentre.Org/Sites/Default/Files/Unhcrdavies_host_families.Pdf [Accessed 28/01/13],
- Davydov, D. M., Stewart, R., Ritchie, K., & Chaudieu, I. (2010). Resilience and mental health. *Clinical Psychology Review*, 30(5), 479-495. doi:10.1016/j.cpr.2010.03.003
- de Castro, E. K., Ponciano, C., Meneghetti, B., & Kreling, M. (2012). Quality of life, self-efficacy and psychological well-being in brazilian adults with cancer: A longitudinal study. *Psychology*, 3(04), 304. doi:10.4236/psych.2012.34043
- De Vries, J., & Van Heck, G. L. (1994). Quality of life and refugees. *International Journal of Mental Health*, , 57-75. doi:10.1080/00207411.1994.11449287
- DiBlasio, F. A. (1998). The use of decision-based forgiveness intervention within intergenerational family therapy. *Journal of Family Therapy*,
- Diener, E. (1984). Subjective well-being. *Psychological Bulletin*, 95(3), 542-575. doi:10.1037/0033-2909.95.3.542

- Diener, E. (2006). Guidelines for national indicators of subjective well-being and ill-being. *Applied Research in Quality of Life*, 1(2), 151-157. doi:10.1007/s11482-006-9007-x
- Diener, E., Larsen, R. J., Levine, S., & Emmons, R. A. (1985). Intensity and frequency: Dimensions underlying positive and negative affect. *Journal of Personality and Social Psychology*, 48(5), 1253. doi:10.1037/0022-3514.48.5.1253
- Diener, E., Oishi, S., & Lucas, R. E. (2003). Personality, culture, and subjective well-being: Emotional and cognitive evaluations of life. *Annual Review of Psychology*, 54(1), 403-425. doi:10.1146/annurev.psych.54.101601.145056
- Diener, E., & Suh, E. (1997). Measuring quality of life: Economic, social, and subjective indicators. *Social Indicators Research*, 40(1/2), 189-216. doi:10.1023/A:1006859511756
- Dinh, K. T., Holmberg, M. D., Ho, I. K., & Haynes, M. C. (2014). The relationship of prejudicial attitudes to psychological, social, and physical well-being within a sample of college students in the united states. *Journal of Cultural Diversity*, 21(2), 56.
- Dolan, P., Loomes, G., Peasgood, T., & Tsuchiya, A. (2005). Estimating the intangible victim costs of violent crime. *British Journal of Criminology*, 45(6), 958-976.
- Dovidio, J. F. (2001). On the nature of contemporary prejudice: The third wave. *Journal of Social Issues*, 57(4), 829-849.
- Dovidio, J. F., & Fazio, R. H. (1992). New technologies for the direct and indirect assessment of attitudes. In M. T. Judith (Ed.), *Questions about questions inquiries into the cognitive basis of surveys* (pp. 204-237)

- Dovidio, J. F., Kawakami, K., & Gaertner, S. L. (2002). Implicit and explicit prejudice and interracial interaction. *Journal of Personality and Social Psychology*, 82(1), 62-68.
doi:10.1037/0022-3514.82.1.62
- Duckitt, J. H. (1992). Psychology and prejudice: A historical analysis and integrative framework. *American Psychologist*, 47(10), 1182.
- Duckitt, J. H., & Mphuthing, T. (2002). Relative deprivation and intergroup attitudes: South africa before and after the transition. In I. Walker, & H. J. Smith (Eds.), *Relative deprivation: Specification, development, and integration* (pp. 69-90). New York: Cambridge University Press: Cambridge University Press.
- Dyrbye, L. N., Power, D. V., Massie, F., Eacker, A., Harper, W., Thomas, M. R., . . . Shanafelt, T. D. (2010). Factors associated with resilience to and recovery from burnout: A prospective, multi- institutional study of US medical students. *Medical Education*, 44(10), 1016-1026. doi:10.1111/j.1365-2923.2010.03754.x
- Eisenbruch, M. (1990). The cultural bereavement interview: A new clinical research approach for refugees. *Psychiatric Clinics of North America*,
- Ekblad, S., & ROTH, G. (1997). Diagnosing posttraumatic stress disorder in multicultural patients in a stockholm psychiatric clinic. *The Journal of Nervous and Mental Disease*, 185(2), 102-107. doi:10.1097/00005053-199702000-00006
- Ekehammar, B., Akrami, N., & Araya, T. (2003). Gender differences in implicit prejudice. *Personality and Individual Differences*, 34(8), 1509-1523.
- Eljedi, A., Mikolajczyk, R. T., Kraemer, A., & Laaser, U. (2006). Health-related quality of life in diabetic patients and controls without diabetes in refugee camps in the gaza strip: A cross-sectional study. *BMC Public Health*, 6, 268. doi:1471-2458-6-268 [pii]

- Emery, C. F., Frid, D. J., Engebretson, T. O., Alonzo, A. A., Fish, A., Ferketich, A. K., . . . Stern, S. L. (2004). Gender differences in quality of life among cardiac patients. *Psychosomatic Medicine*, 66(2), 190-197.
- Enright, R. D. (1991). The moral development of forgiveness. *Handbook of Moral Behavior and Development*, 1, 123-152.
- Enright, R. D. (2001). *Forgiveness is a choice: A step-by-step process for resolving anger and restoring hope*. American Psychological Association.
- Enright, R. D., & Coyle, C. T. (1998). Researching the process model of forgiveness within psychological interventions. In L. W. Everett (Ed.), *Dimensions of forgiveness: A research approach* (pp. 139-161)
- Enright, R. D., & Fitzgibbons, R. P. (2000). *Helping clients forgive: An empirical guide for resolving anger and restoring hope*. American Psychological Association.
- Enright, R. D., & Human Development Study Group. (1991). The moral development of forgiveness. In W. M. Kurtines, & J. L. Gewirtz (Eds.), *Handbook of moral behavior and development* (pp. 123-152). Inc: Lawrence Erlbaum Associates.
- Enright, R. D., & Human Development Study Group. (1996). Counseling within the forgiveness triad: On forgiving, receiving forgiveness, and self- forgiveness. *Counseling and Values*, 40(2), 107-126. doi:10.1002/j.2161-007X.1996.tb00844.x
- Enright, R. D., Freedman, S., Rique, J., Enright, R., & North, J. (1998). The psychology of interpersonal forgiveness. In R. D. Enright, & N. Joanna (Eds.), *Exploring forgiveness* (pp. 46-62)

- Esses, V. M., Jackson, L. M., & Armstrong, T. L. (1998). Intergroup competition and attitudes toward immigrants and immigration: An instrumental model of group conflict. *Journal of Social Issues*, 54(4), 699-724.
- Esses, V. M., Jackson, L. M., Dovidio, J. F., & Hodson, G. (2008). Instrumental relations among groups: Group competition, conflict, and prejudice. In F. D. John, G. Peter & R. Laurie (Eds.), *On the nature of prejudice* (pp. 227-241) John Wiley & Sons.
- Fava, G. A., & Tomba, E. (2009). Increasing psychological well-being and resilience by psychotherapeutic methods. *Journal of Personality*, 77(6), 1903-1934.
doi:10.1111/j.1467-6494.2009.00604.x
- Fayers, P. M., & Machin, D. (2000). *Quality of life: Assessment, analysis and interpretation*. Chichester: Wiley.
- Fazel, M., & Stein, A. (2002). The mental health of refugee children. *Archives of Disease in Childhood*, 87(5), 366-370. doi:10.1136/adc.87.5.366
- Fazel, M., Wheeler, J., & Danesh, J. (2005). Prevalence of serious mental disorder in 7000 refugees resettled in western countries: A systematic review. *The Lancet*, 365(9467), 1309-1314. doi:10.1016/S0140-6736(05)61027-6
- Fehr, R., Gelfand, M. J., & Nag, M. (2010). The road to forgiveness: A meta-analytic synthesis of its situational and dispositional correlates. *Psychological Bulletin*, 136(5), 894. doi:10.1037/a0023012
- Fergus, S., & Zimmerman, M. A. (2005). Adolescent resilience: A framework for understanding healthy development in the face of risk. *Annu.Rev.Public Health*, 26, 399-419. doi:10.1146/annurev.publhealth.26.021304.144357

- Ferrans, C. E., Zerwic, J. J., Wilbur, J. E., & Larson, J. L. (2005). Conceptual model of health- related quality of life. *Journal of Nursing Scholarship*, 37(4), 336-342.
doi:10.1111/j.1547-5069.2005.00058.x
- Fitzgibbons, R. P. (1986). The cognitive and emotive uses of forgiveness in the treatment of anger. *Psychotherapy: Theory, Research, Practice, Training*, 23(4), 629.
doi:10.1037/h0085667
- Flach, F. F. (1980). Psychobiologic resilience, psychotherapy, and the creative process. *Comprehensive Psychiatry*, 21(6), 510-518. doi:10.1016/0010-440X(80)90054-1
- Flach, F. F. (1988). *Resilience: Discovering a new strength at times of stress* Fawcett Books.
- Folke, C., Carpenter, S., Walker, B., Scheffer, M., Elmqvist, T., Gunderson, L., & Holling, C. (2004). Regime shifts, resilience, and biodiversity in ecosystem management. *Annual Review of Ecology, Evolution, and Systematics*, , 557-581.
doi:10.1146/annurev.ecolsys.35.021103.105711
- Folkman, S. (1997). Positive psychological states and coping with severe stress. *Social Science & Medicine*, 45(8), 1207-1221. doi:10.1016/S0277-9536(97)00040-3
- Fonagy, P., Steele, M., Steele, H., Higgitt, A., & Target, M. (1994). The emanuel miller memorial lecture 1992 the theory and practice of resilience. *Journal of Child Psychology and Psychiatry*, 35(2), 231-257. doi:10.1111/j.1469-7610.1994.tb01160.x
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist*, 56(3), 218.
doi:10.1037/0003-066X.56.3.218

- Fredrickson, B. L., Tugade, M. M., Waugh, C. E., & Larkin, G. R. (2003). What good are positive emotions in crisis? A prospective study of resilience and emotions following the terrorist attacks on the united states on september 11th, 2001. *Journal of Personality and Social Psychology*, 84(2), 365. doi:10.1037/0022-3514.84.2.365
- Freedman, S. R., & Enright, R. D. (1996). Forgiveness as an intervention goal with incest survivors. *Journal of Consulting and Clinical Psychology*, 64(5), 983. doi:10.1037//0022-006X.64.5.983
- Furnham, A. (1986). Response bias, social desirability and dissimulation. *Personality and Individual Differences*, 7(3), 385-400. doi:10.1016/0191-8869(86)90014-0
- Garnezy, N. (1993). Children in poverty: Resilience despite risk. *Psychiatry*, 56(1), 127-136. doi:10.1521/00332747.1993.11024627
- Gavrilovic, J. J., Schützwohl, M., Fazel, M., & Priebe, S. (2005). Who seeks treatment after a traumatic event and who does not? A review of findings on mental health service utilization. *Journal of Traumatic Stress*, 18(6), 595-605. doi:10.1002/jts.20068
- Gerritsen, A. A., Bramsen, I., Devillé, W., Van Willigen, L. H., Hovens, J. E., & Van Der Ploeg, Henk M. (2006). Physical and mental health of afghan, iranian and somali asylum seekers and refugees living in the netherlands. *Social Psychiatry and Psychiatric Epidemiology*, 41(1), 18-26. doi:10.1007/s00127-005-0003-5
- Global Protection Cluster Working Group. (2010). Handbook for the protection of internally displaced persons. *Last Updated March*,
- Glover, V. A. (2010). Altering explicit and implicit racial prejudice towards african american males.

- Gold, G. J., & Weiner, B. (2000). Remorse, confession, group identity, and expectancies about repeating a transgression. *Basic and Applied Social Psychology*, 22(4), 291-300. doi:10.1207/S15324834BASP2204_3
- Goldstein, S., & Brooks, R. B. (2012). *Handbook of resilience in children* Springer Science & Business Media.
- Gómez, M. M. N., Gutiérrez, R. M. V., Castellanos, S. A. O., Vergara, M. P., & Pradilla, Y. K. R. (2010a). Psychological well-being and quality of life in patients treated for thyroid cancer after surgery. *Terapia Psicológica*, 28(1), 69-84. doi:10.4067/S0718-48082010000100007
- Gómez, M. M. N., Gutiérrez, R. M. V., Castellanos, S. A. O., Vergara, M. P., & Pradilla, Y. K. R. (2010b). Psychological well-being and quality of life in patients treated for thyroid cancer after surgery. *Terapia Psicológica*, 28(1), 69-84.
- Gordon, K. C., Baucom, D. H., & Snyder, D. K. (2000). The use of forgiveness in marital therapy. In E. M. Michael, I. P. Kenneth & E. T. Carl (Eds.), *Forgiveness: Theory, research, and practice* (pp. 203-227)
- Gordon, K. C., Burton, S., & Porter, L. (2004). Predicting the intentions of women in domestic violence shelters to return to partners: Does forgiveness play a role? *Journal of Family Psychology*, 18(2), 331. doi:10.1037/0893-3200.18.2.331
- Grant, A. M., Curtayne, L., & Burton, G. (2009). Executive coaching enhances goal attainment, resilience and workplace well-being: A randomised controlled study. *The Journal of Positive Psychology*, 4(5), 396-407. doi:<http://dx.doi.org/10.1080/17439760902992456>

- Greenberg, J. (1996). *The quest for justice on the job: Essays and experiments* Sage Publications, Incorporated.
- Greenwald, A. G., & Banaji, M. R. (1995). Implicit social cognition: Attitudes, self-esteem, and stereotypes. *Psychological Review*, 102(1), 4. doi:10.1037/0033-295X.102.1.4
- Greenwald, A. G., Nosek, B. A., & Banaji, M. R. (2003). Understanding and using the implicit association test: I. an improved scoring algorithm. *Journal of Personality and Social Psychology*, 85(2), 197. doi:10.1037/0022-3514.85.2.197
- Greenwald, A. G., Poehlman, T. A., Uhlmann, E. L., & Banaji, M. R. (2009). Understanding and using the implicit association test: III. meta-analysis of predictive validity. *Journal of Personality and Social Psychology*, 97(1), 17. doi:10.1037/a0015575
- Greenwald, A. G., McGhee, D. E., & Schwartz, J. L. K. (1998). Measuring individual differences in implicit cognition: The implicit association test. *Journal of Personality and Social Psychology*, 74(6), 1464-1480. doi:10.1037/0022-3514.74.6.1464
- Griffith, J., & West, C. (2013). Master resilience training and its relationship to individual well-being and stress buffering among army national guard soldiers. *The Journal of Behavioral Health Services & Research*, 40(2), 140-155. doi:10.1007/s11414-013-9320-8
- Grossman, B., Wirt, R., & Davids, A. (1985). Self-esteem, ethnic identity, and behavioral adjustment among anglo and chicano adolescents in west texas. *Journal of Adolescence*, 8(1), 57-68. doi:10.1016/S0140-1971(85)80007-5

- Group, T. W. (1998). The world health organization quality of life assessment (WHOQOL): Development and general psychometric properties. *Social Science & Medicine*, 46(12), 1569-1585. doi:10.1016/S0277-9536(98)00009-4
- Guyatt, G. H., Feeny, D. H., & Patrick, D. L. (1993). Measuring health-related quality of life. *Annals of Internal Medicine*, 118(8), 622-629. doi:10.7326/0003-4819-118-8-199304150-00009
- Hagedoorn, M., Buunk, B. P., Kuijer, R. G., Wobbles, T., & Sanderman, R. (2000). Couples dealing with cancer: Role and gender differences regarding psychological distress and quality of life. *Psycho-Oncology*, 9(3), 232-242.
- Halsey, L. G., Curran-Everett, D., Vowler, S. L., & Drummond, G. B. (2015). The fickle P value generates irreproducible results. *Nature Methods*, 12(3), 179-185.
- Hanauer, L., Martini, J., & Al-Shahery, O. (2011). *Managing Arab-Kurd Tensions in Northern Iraq After the Withdrawal of US Troops*,
- Hanke, K., & Fischer, R. (2013). Socioeconomical and sociopolitical correlates of interpersonal forgiveness: A three- level meta- analysis of the enright forgiveness inventory across 13 societies. *International Journal of Psychology*, 48(4), 514-526. doi:10.1080/00207594.2011.651086
- Hauser, R. M., Springer, K. W., & Pudrovskaya, T. (2005). Temporal structures of psychological well-being: Continuity or change. *Meetings of the Gerontological Society of America, Orlando, Florida*,
- Hawthorne, G., Herrman, H., & Murphy, B. (2006). Interpreting the WHOQOL-BREF: Preliminary population norms and effect sizes. *Social Indicators Research*, 77(1), 37-59. doi:10.1007/s11205-005-5552-1

- Heins, M. J., Korevaar, J. C., Hopman, P. E., Donker, G. A., Schellevis, F. G., & Rijken, M. P. (2016). Health- related quality of life and health care use in cancer survivors compared with patients with chronic diseases. *Cancer*, doi:10.1002/cncr.29853
- Helgeson, V. S. (2003). Social support and quality of life. *Quality of Life Research*, 12(1), 25-31. doi:10.1023/A:1023509117524
- Hepp-Dax, S. H. (1996). *Forgiveness as an educational goal with fifth-grade inner city children*. New York: Fordham University.
- Hewstone, M., Cairns, E., Voci, A., McLernon, F., Niens, U., & Noor, M. (2004). Intergroup forgiveness and guilt in northern ireland. In R. B. Nyla, & D. Bertjan (Eds.), *Collective guilt: International perspectives* (pp. 193-215)
- Hildon, Z., Montgomery, S. M., Blane, D., Wiggins, R. D., & Netuveli, G. (2010). Examining resilience of quality of life in the face of health-related and psychosocial adversity at older ages: What is "right" about the way we age? *The Gerontologist*, 50(1), 36-47. doi:10.1093/geront/gnp067 [doi]
- Hjemdal, O., Friborg, O., Stiles, T. C., Martinussen, M., & Rosenvinge, J. H. (2006). A new scale for adolescent resilience: Grasping the central protective resources behind healthy development. *Measurement and Evaluation in Counseling and Development*, 39(2), 84.
- Hocker, J. L., & Wilmot, W. W. (1985). *Interpersonal conflict* WCB/McGraw-Hill.
- Hofmann, W., Gawronski, B., Gschwendner, T., Le, H., & Schmitt, M. (2005). A meta-analysis on the correlation between the implicit association test and explicit self-report measures. *Personality & Social Psychology Bulletin*, 31(10), 1369-1385. doi:31/10/1369 [pii]

- Hoge, E. A., Austin, E. D., & Pollack, M. H. (2007). Resilience: Research evidence and conceptual considerations for posttraumatic stress disorder. *Depression and Anxiety*, 24(2), 139-152. doi:10.1002/da.20175
- Holling, C. S. (1996). Engineering resilience versus ecological resilience. In C. S. Schulze (Ed.), *Engineering within ecological constraints* (pp. 31-44). Washington, D.C: National Academy press.
- Hoxter, A. L., & Lester, D. (1994). Gender differences in prejudice. *Perceptual and Motor Skills*, 79(3_suppl), 1666-1666.
- Hughes, M., Kiecolt, K. J., Keith, V. M., & Demo, D. H. (2015). Racial identity and well-being among african americans. *Social Psychology Quarterly*, 78(1), 25-48. doi:10.1177/0190272514554043
- Huijts, I., Kleijn, W. C., van Emmerik, A. A., Noordhof, A., & Smith, A. J. (2012). Dealing with man- made trauma: The relationship between coping style, posttraumatic stress, and quality of life in resettled, traumatized refugees in the netherlands. *Journal of Traumatic Stress*, 25(1), 71-78. doi:10.1002/jts.21665
- Hunt, N., & Gakenyi, M. (2005). Comparing refugees and nonrefugees: The bosnian experience. *Journal of Anxiety Disorders*, 19(6), 717-723. doi:10.1016/j.janxdis.2004.08.004
- Huta, V., & Ryan, R. M. (2010). Pursuing pleasure or virtue: The differential and overlapping well-being benefits of hedonic and eudaimonic motives. *Journal of Happiness Studies*, 11(6), 735-762. doi:10.1007/s10902-009-9171-4
- International Organization for Migration. (May 2016). *Displacement tracking matrix DTM*. (No. 44). Iraq: IOM.

- Jacelon, C. S. (1997). The trait and process of resilience. *Journal of Advanced Nursing*, 25(1), 123-129.
- Jackson, J., Herman, A., Williams, D., Stein, D., Haile, R., Mohammed, S., & Sonnega, J. (2012). Perceived discrimination and psychological well-being in the USA and south africa. *Ethnicity & Health*, 17(1), 111. doi:10.1080/13557858.2012.654770
- Jacobsen, K. (2002). Livelihoods in conflict: The pursuit of livelihoods by refugees and the impact on the human security of host communities. *International Migration*, 40(5), 95-123. doi:10.1111/1468-2435.00213
- Jamison, M. G., Weidner, A. C., Romero, A. A., & Amundsen, C. L. (2007). Lack of psychological resilience: An important correlate for urinary incontinence. *International Urogynecology Journal*, 18(10), 1127-1132. doi:10.1007/s00192-007-0315-y
- Jenkins, P. E., Hoste, R. R., Meyer, C., & Blissett, J. M. (2011). Eating disorders and quality of life: A review of the literature. *Clinical Psychology Review*, 31(1), 113-121. doi:10.1016/j.cpr.2010.08.003
- Johnson, J., Wood, A. M., Gooding, P., Taylor, P. J., & Tarrier, N. (2011). Resilience to suicidality: The buffering hypothesis. *Clinical Psychology Review*, 31(4), 563-591. doi:10.1016/j.cpr.2010.12.007
- Johnson, H. D., Wernli, M. A., & LaVoie, J. C. (2013). Situational, interpersonal, and intrapersonal characteristic associations with adolescent conflict forgiveness. *The Journal of Genetic Psychology: Research and Theory on Human Development*, 174(3), 291-315. doi:10.1080/00221325.2012.670672

- Jung Ah, M., Yoon, S., Lee, C., Chae, J., Lee, C., Song, K., & Kim, T. (2013). Psychological resilience contributes to low emotional distress in cancer patients. *Supportive Care in Cancer*, 21(9), 2469-2476. doi:10.1007/s00520-013-1807-6
- Kalayjian, A., & Paloutzian, R. F. (2009). *Forgiveness and reconciliation: Psychological pathways to conflict transformation and peace building* Springer Science & Business Media.
- Karremans, J. C., Van Lange, P. A., Ouwerkerk, J. W., & Kluwer, E. S. (2003). When forgiving enhances psychological well-being: The role of interpersonal commitment. *Journal of Personality and Social Psychology*, 84(5), 1011. doi:10.1037/0022-3514.84.5.1011
- Keyes, C. L., Shmotkin, D., & Ryff, C. D. (2002). Optimizing well-being: The empirical encounter of two traditions. *Journal of Personality and Social Psychology*, 82(6), 1007. doi:10.1037/0022-3514.82.6.1007
- King, L. A., King, D. W., Fairbank, J. A., Keane, T. M., & Adams, G. A. (1998). Resilience–recovery factors in post-traumatic stress disorder among female and male vietnam veterans: Hardiness, postwar social support, and additional stressful life events. *Journal of Personality and Social Psychology*, 74(2), 420.
- Kira, I. A., Lewandowski, L., Templin, T., Ramaswamy, V., Ozkan, B., Hammad, A., & Mohanesh, J. (2006). The mental health effects of retributive justice: The case of iraqi refugees. *Journal of Muslim Mental Health*, 1(2), 145-169. doi:10.1080/15564900600980756
- Kira, I. A., Amer, M. M., & Wrobel, N. H. (2014). Arab refugees: Trauma, resilience, and recovery. *Biopsychosocial perspectives on arab americans* (pp. 175-195) Springer.

- Kirmayer, L. J., Narasiah, L., Munoz, M., Rashid, M., Ryder, A. G., Guzder, J., . . . Canadian Collaboration for Immigrant and Refugee Health (CCIRH). (2011). Common mental health problems in immigrants and refugees: General approach in primary care. *CMAJ : Canadian Medical Association Journal = Journal De L'Association Medicale Canadienne*, 183(12), E959-67. doi:10.1503/cmaj.090292 [doi]
- Kline, P. (2000). *Handbook of psychological testing* (2nd ed.). London: Routledge.
- Klohn, E. C. (1996). Conceptual analysis and measurement of the construct of ego-resiliency. *Journal of Personality and Social Psychology*, 70(5), 1067. doi:10.1037/0022-3514.70.5.1067
- Knifsend, C. A., & Juvonen, J. (2013). The role of social identity complexity in inter-group attitudes among young adolescents. *Social Development*, 22(3), 623-640. doi:10.1111/j.1467-9507.2012.00672.x
- Knudsen, S. d. P., Eidemak, I., & Molsted, S. (2016). Health related quality of life in 2002 and 2015 in patients undergoing hemodialysis: A single center study. *Renal Failure*, , 1-6. doi:<http://dx.doi.org/10.1080/0886022X.2016.1207051>
- Kruger, L., & Prinsloo, H. (2008). The appraisal and enhancement of resilience modalities in middle adolescents within the school context. *South African Journal of Education*, 28(2), 241-259.
- Kruglanski, A. W., & Higgins, E. T. (2013). *Social psychology: Handbook of basic principles* Guilford Publications.
- Laban, C. J., Komproe, I. H., Gernaat, H. B., & de Jong, J. T. (2008). The impact of a long asylum procedure on quality of life, disability and physical health in iraqi asylum

- seekers in the netherlands. *Social Psychiatry and Psychiatric Epidemiology*, 43(7), 507-515. doi:10.1007/s00127-008-0333-1
- Laban, C. J., Gernaat, H. B. P. E., Komproe, I. H., van, d. T., & De Jong, J. (2005). Postmigration living problems and common psychiatric disorders in iraqi asylum seekers in the netherlands. *Journal of Nervous and Mental Disease*, 193(12), 825-832. doi:10.1097/01.nmd.0000188977.44657.1d
- Lane, K. A., Banaji, M. R., Nosek, B. A., & Greenwald, A. G. (2007). Understanding and using the implicit association test: IV. In B. Wittenbrink, & N. S. Schwarz. (Eds.), *Implicit measures of attitudes: Procedures and controversies* (pp. 59-102) New York: Guilford Press.
- Lawford, J., & Eiser, C. (2001). Exploring links between the concepts of quality of life and resilience. *Pediatric Rehabilitation*, 4(4), 209-216. doi:10.1080/13638490210124024
- Lawler-Row, K. A. (2010). Forgiveness as a mediator of the religiosity—Health relationship. *Psychology of Religion and Spirituality*, 2(1), 1. doi:10.1037/a0017584
- Lazarus, R. (1993). From psychological stress to the emotions: A history of changing outlooks. *Annual Reviews Inc*, 44, 1-21.
doi:<http://www.annualreviews.org/doi/pdf/10.1146/annurev.ps.44.020193.000245>
- Levin, S., van Laar, C., & Sidanius, J. (2003). The effects of ingroup and outgroup friendships on ethnic attitudes in college: A longitudinal study. *Group Processes & Intergroup Relations*, 6(1), 76-92. doi:10.1177/1368430203006001013
- Levy, B. S., & Sidel, V. W. (2000). *War and public health* American Public Health Association.

- Levy, B. S., & Sidel, V. W. (2009). Health effects of combat: A life-course perspective. *Annual Review of Public Health, 30*, 123-136.
doi:10.1146/annurev.publhealth.031308.100147
- Lewis, J. A., Manne, S. L., DuHamel, K. N., Vickburg, S. M. J., Bovbjerg, D. H., Currie, V., . . . Redd, W. H. (2001). Social support, intrusive thoughts, and quality of life in breast cancer survivors. *Journal of Behavioral Medicine, 24*(3), 231-245.
doi:10.1023/A:1010714722844
- Li, M., Xu, J., He, Y., & Wu, Z. (2012). The analysis of the resilience of adults one year after the 2008 wenchuan earthquake. *Journal of Community Psychology, 40*(7), 860-870. doi:10.1002/jcop.21496
- Lindencrona, F., Ekblad, S., & Hauff, E. (2008). Mental health of recently resettled refugees from the middle east in sweden: The impact of pre-resettlement trauma, resettlement stress and capacity to handle stress. *Social Psychiatry and Psychiatric Epidemiology, 43*(2), 121-131. doi:10.1007/s00127-007-0280-2
- Lindfors, P., & Lundberg, U. (2002). Is low cortisol release an indicator of positive health? *Stress and Health, 18*(4), 153-160. doi:10.1002/smi.942
- López, R. C. V., Arredondo, C. I. A., & Salcedo, J. (2011). *The effects of internal displacement on host communities: A case study of suba and ciudad bolívar localities in bogotá, colombia* Brookings Institution-London School of Economics Project on Internal Displacement.
- Lorenz, D. F. (2013). The diversity of resilience: Contributions from a social science perspective. *Natural Hazards, 67*(1), 7-24. doi:10.1007/s11069-010-9654-y

- Luthar, S. S., & Cicchetti, D. (2000). The construct of resilience: Implications for interventions and social policies. *Development and Psychopathology*, 12(04), 857-885.
doi:10.1017/S0954579400004156
- Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child Development*, 71(3), 543-562.
doi:10.1111/1467-8624.00164
- Macaskill, A., Maltby, J., & Day, L. (2002). Forgiveness of self and others and emotional empathy. *The Journal of Social Psychology*, 142(5), 663-665.
- Maccoby, E. E. (1998). *The two sexes: Growing up apart, coming together* Harvard University Press.
- Mackenzie, C., McDowell, C., & Pittaway, E. (2007). Beyond 'do no harm': The challenge of constructing ethical relationships in refugee research. *Journal of Refugee Studies*, 20(2), 299-319.
- Magallares, A. (2012). Well-being and prejudice toward obese people in women at risk to develop eating disorders. *The Spanish Journal of Psychology*, 15(3), 1293.
doi:10.5209/rev_SJOP.2012.v15.n3.39415
- Maison, D., Greenwald, A. G., & Bruin, R. (2001). The implicit association test as a measure of implicit consumer attitudes.
- Mak, W. W., Ng, I. S., & Wong, C. C. (2011). Resilience: Enhancing well-being through the positive cognitive triad. *Journal of Counseling Psychology*, 58(4), 610.
doi:10.1037/a0025195

- Maltby, J., Day, L., & Hall, S. (2015). Refining trait resilience: Identifying engineering, ecological, and adaptive facets from extant measures of resilience. *PloS One*, *10*(7), e0131826. doi:10.1371/journal.pone.0131826
- Maltby, J., Macaskill, A., & Gillett, R. (2007). The cognitive nature of forgiveness: Using cognitive strategies of primary appraisal and coping to describe the process of forgiving. *Journal of Clinical Psychology*, *63*(6), 555-566. doi:10.1002/jclp.20367
- Maltby, J., Day, L., Żemojtel-Piotrowska, M., Piotrowski, J., Hitokoto, H., Baran, T., . . . Flowe, H. D. (2016). An ecological systems model of trait resilience: Cross- cultural and clinical relevance. *Personality and Individual Differences*, *98*, 96-101. doi:10.1016/j.paid.2016.03.100
- Maltby, J., Day, L., & Barber, L. (2005). Forgiveness and happiness. the differing contexts of forgiveness using the distinction between hedonic and eudaimonic happiness. *Journal of Happiness Studies*, *6*(1), 1-13. doi:10.1007/s10902-004-0924-9
- Martin, A. (2005). Environmental conflict between refugee and host communities. *Journal of Peace Research*, *42*(3), 329-346. doi:10.1177/0022343305052015
- Martin-Herz, S. P., Zatzick, D. F., & McMahon, R. J. (2012). Health-related quality of life in children and adolescents following traumatic injury: A review. *Clinical Child and Family Psychology Review*, *15*(3), 192-214. doi:10.1007/s10567-012-0115-x
- Masten, A. S. (1994). Resilience in individual development: Successful adaptation despite risk and adversity.
- Masten, A. S. (2007). Resilience in developing systems: Progress and promise as the fourth wave rises. *Development and Psychopathology*, *19*(03), 921-930. doi:10.1017/S0954579407000442

- Masten, A. S., Powell, J. L., & Luthar, S. S. (2003). A resilience framework for research, policy, and practice. *Resilience and Vulnerability: Adaptation in the Context of Childhood Adversities*, , 1-25. doi:10.1017/CBO9780511615788.003
- Masten, A. S., & Reed, M. (2002). Resilience in development. In S. J. Lopez, & C. R. Snyder (Eds.), *Oxford handbook of positive psychology* (pp. 74-88) Oxford University Press, USA.
- Matanov, A., Giacco, D., Bogic, M., Ajdukovic, D., Franciskovic, T., Galeazzi, G. M., . . . Priebe, S. (2013). Subjective quality of life in war-affected populations. *BMC Public Health*, 13, 624-2458-13-624. doi:10.1186/1471-2458-13-624 [doi]
- McCullough, M. E. (2000). Forgiveness as human strength: Theory, measurement, and links to well-being. *Journal of Social and Clinical Psychology*, 19(1), 43-55. doi:10.1521/jscp.2000.19.1.43
- McCullough, M. E. (2001). Forgiveness: Who does it and how do they do it? *Current Directions in Psychological Science*, 10(6), 194-197. doi:10.1111/1467-8721.00147
- McCullough, M. E., Bellah, C. G., Kilpatrick, S. D., & Johnson, J. L. (2001). Vengefulness: Relationships with forgiveness, rumination, well-being, and the big five. *Personality and Social Psychology Bulletin*, 27(5), 601-610. doi:10.1177/0146167201275008
- McCullough, M. E., Sandage, S. J., & Worthington Jr, E. L. (1997). *To forgive is human: How to put your past in the past* InterVarsity Press.
- McGlynn*, C., Niens, U., Cairns, E., & Hewstone, M. (2004). Moving out of conflict: The contribution of integrated schools in northern ireland to identity, attitudes, forgiveness

- and reconciliation. *Journal of Peace Education*, 1(2), 147-163.
doi:10.1080/1740020042000253712
- McGrath, R. E., & Meyer, G. J. (2006). When effect sizes disagree: The case of r and d . *Psychological Methods*, 11(4), 386. doi:10.1037/1082-989X.11.4.386
- McLernon, F., Cairns, E., Hewstone, M., & Smith, R. (2004). The development of intergroup forgiveness in northern ireland. *Journal of Social Issues*, 60(3), 587-601.
doi:10.1111/j.0022-4537.2004.00373.x
- McNulty, J. K. (2010). Forgiveness increases the likelihood of subsequent partner transgressions in marriage. *Journal of Family Psychology*, 24(6), 787.
doi:10.1037/a0021678
- McNulty, J. K., & Fincham, F. D. (2012). Beyond positive psychology? toward a contextual view of psychological processes and well-being. *American Psychologist*, 67(2), 101. doi:10.1037/a0024572
- Migliorini, C., Callaway, L., & New, P. (2013). Preliminary investigation into subjective well-being, mental health, resilience, and spinal cord injury. *The Journal of Spinal Cord Medicine*, 36(6), 660-665. doi:10.1179/2045772313Y.0000000100
- Mikulincer, M., & Florian, V. (1998). The relationship between adult attachment styles and emotional and cognitive reactions to stressful events.
- Miller, N., & Brewer, M. (1984). *Groups in contact: The psychology of desegregation*. Academic Press.
- Miller, T. W. (1988). Advances in understanding the impact of stressful life events on health. *Psychiatric Services*, 39(6), 615-622. doi:10.1176/ps.39.6.615

- Min, J., Jung, Y., Kim, D., Yim, H., Kim, J., Kim, T., . . . Chae, J. (2013). Characteristics associated with low resilience in patients with depression and/or anxiety disorders. *Quality of Life Research*, 22(2), 231-241. doi:10.1007/s11136-012-0153-3
- Min, M. O., Minnes, S., Kim, H., & Singer, L. T. (2013). Pathways linking childhood maltreatment and adult physical health. *Child Abuse & Neglect*, 37(6), 361-373. doi:10.1016/j.chiabu.2012.09.008
- Mone, E., & Kline, P. (2003). Coping with war: Three strategies employed by adolescent citizens of sierra leone. *Child and Adolescent Social Work Journal*, 20(5), 321-333. doi:10.1023/A:1026091712028
- Mota, C. P., & Matos, P. M. (2015). Adolescents in institutional care: Significant adults, resilience and well-being. *Child & Youth Care Forum*, 44(2), 209-224. doi:10.1007/s10566-014-9278-6
- Mroczek, D. K., & Spiro III, A. (2005). Change in life satisfaction during adulthood: Findings from the veterans affairs normative aging study. *Journal of Personality and Social Psychology*, 88(1), 189. doi:10.1037/0022-3514.88.1.189
- Muldoon, O. T., & Lowe, R. D. (2012). Social identity, groups, and post- traumatic stress disorder. *Political Psychology*, 33(2), 259-273. doi:10.1111/j.1467-9221.2012.00874.x
- Mummendey, A., Kessler, T., Klink, A., & Mielke, R. (1999). Strategies to cope with negative social identity: Predictions by social identity theory and relative deprivation theory. *Journal of Personality and Social Psychology*, 76(2), 229-245. doi:10.1037/0022-3514.76.2.229
- Munn, T. (2002). *Encyclopedia of global environmental change* Citeseer.

- Murray, C., King, G., Lopez, A., Tomijima, N., & Krug, E. (2002). Armed conflict as a public health problem. *Available at SSRN 1082870*,
- Myers, E., Hewstone, M., & Cairns, E. (2009). Impact of conflict on mental health in northern ireland: The mediating role of intergroup forgiveness and collective guilt. *Political Psychology*, 30(2), 269-290. doi:10.1111/j.1467-9221.2008.00691.x
- Netuveli, G., Wiggins, R. D., Montgomery, S. M., Hildon, Z., & Blane, D. (2008). Mental health and resilience at older ages: Bouncing back after adversity in the british household panel survey. *Journal of Epidemiology and Community Health*, 62(11), 987-991. doi:10.1136/jech.2007.069138 [doi]
- Newman, R. (2005). APA's resilience initiative. *Professional Psychology: Research and Practice*, 36(3), 227-229. doi:10.1037/0735-7028.36.3.227
- Noor, M., Brown, R., & Prentice, G. (2008). Prospects for intergroup reconciliation: Social-psychological predictors of intergroup forgiveness and reparation in northern ireland and chile. In N. Arie, M. Thomas & D. F. Jeffrey (Eds.), *Social psychology of intergroup reconciliation: From violent conflict to peaceful co-existence* (pp. 97-114) Oxford University Press Oxford.
- Nosek, B. A., Greenwald, A. G., & Banaji, M. R. (2007). The implicit association test at age 7: A methodological and conceptual review. In A. B. John (Ed.), *Social psychology and the unconscious: The automaticity of higher mental processes* (pp. 265-292). New York and Hove: Psychology Press.
- Nosek, B. A., Greenwald, A. G., & Banaji, M. R. (2005). Understanding and using the implicit association test: II. method variables and construct validity. *Personality & Social Psychology Bulletin*, 31(2), 166-180. doi:10.1177/0146165205277144 [pii]

- Novoa, M., & Ballesteros de Valderrama, Blanca Patricia. (2006). The role of the psychologist in an intensive care unit. *Universitas Psychologica*, 5(3), 599-612. doi:10.1017/S1360641701002611
- Nurius, P. S., Green, S., Logan-Greene, P., & Borja, S. (2015). Life course pathways of adverse childhood experiences toward adult psychological well-being: A stress process analysis. *Child Abuse & Neglect*,
- Nygren, B., Aléx, L., Jonsén, E., Gustafson, Y., Norberg, A., & Lundman, B. (2005). Resilience, sense of coherence, purpose in life and self-transcendence in relation to perceived physical and mental health among the oldest old. *Aging & Mental Health*, 9(4), 354-362. doi:10.1080/1360500114415
- Nyklícek, I., & Kuijpers, K. F. (2008). Effects of mindfulness-based stress reduction intervention on psychological well-being and quality of life: Is increased mindfulness indeed the mechanism? *Annals of Behavioral Medicine*, 35(3), 331-340. doi:10.1007/s12160-008-9030-2
- Ohaeri, J. U., & Awadalla, A. W. (2009). The reliability and validity of the short version of the WHO quality of life instrument in an arab general population. *Annals of Saudi Medicine*, 29(2), 98-104. doi:08-697 [pii]
- Orathinkal, J., Vansteenwegen, A., Enright, R. D., & Stroobants, R. (2007). Further validation of the dutch version of the enright forgiveness inventory. *Community Mental Health Journal*, 43(2), 109-128. doi:10.1007/s10597-006-9065-4
- Orhan, O. (2014). *The situation of syrian refugees in the neighboring countries: Findings, conclusions and recommendations (ORSAM)*. (No. 189). doi:http://www.orsam.org.tr/en/enUploads/Article/Files/201452_189ing.pdf

- Ostrand, N. (2015). The syrian refugee crisis: A comparison of responses by germany, sweden, the united kingdom, and the united states. *Journal on Migration and Human Security*, 3(3), 255. doi:<http://dx.doi.org/10.14240/jmhs.v3i3.51>
- Palic, S., & Elklit, A. (2011). Psychosocial treatment of posttraumatic stress disorder in adult refugees: A systematic review of prospective treatment outcome studies and a critique. *Journal of Affective Disorders*, 131(1), 8-23. doi:10.1016/j.jad.2010.07.005
- Panter- Brick, C., Grimon, M., & Eggerman, M. (2014). Caregiver—child mental health: A prospective study in conflict and refugee settings. *Journal of Child Psychology and Psychiatry*, 55(4), 313-327. doi:10.1111/jcpp.12167
- Papadopoulos, R. K. (2002). Refugees, home and trauma. I: RK papadopoulos.(red.) therapeutic care for refugees. *No Place Like Home*,
- Paula, S. (2016). Introduction: Forgiveness and conflict.44(4), 999-1006.
doi:<https://doi.org/10.1007/s1140>
- Pedersen, D. (2002). Political violence, ethnic conflict, and contemporary wars: Broad implications for health and social well-being. *Social Science & Medicine*, 55(2), 175-190. doi:10.1016/S0277-9536(01)00261-1
- Perna, L., Mielck, A., Lacruz, M. E., Emeny, R. T., Holle, R., Breitfelder, A., & Ladwig, K. H. (2012). Socioeconomic position, resilience, and health behaviour among elderly people. *International Journal of Public Health*, 57(2), 341-349. doi:10.1007/s00038-011-0294-0
- Pettigrew, T. F., & Meertens, R. W. (1995). Subtle and blatant prejudice in western europe. *European Journal of Social Psychology*, 25(1), 57-75. doi:10.1002/ejsp.2420250106

- Pettigrew, T. F., Christ, O., Dick, v., R., Zick, A., Wagner, U., & Meertens, R. W. (2008). Relative deprivation and intergroup prejudice. *Volume=64;Issue=2;Startpage=385;Endpage=401*, 64(2), 385-401. doi:10.1111/j.1540-4560.2008.00567.x
- Pinquart, M., & Sörensen, S. (2001). Gender differences in self-concept and psychological well-being in old age: A meta-analysis. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 56(4), P195-P213.
- Polk, L. V. (1997). Toward a middle-range theory of resilience. *Advances in Nursing Science*, 19(3), 1-13. doi:10.1097/00012272-199703000-00002
- Porter, M., & Haslam, N. (2005). Predisplacement and postdisplacement factors associated with mental health of refugees and internally displaced persons: A meta-analysis. *Jama*, 294(5), 602-612. doi:10.1001/jama.294.5.602
- Power, D. V., Moody, E., Trussell, K., O'Fallon, A., Chute, S., Kyaw, M., . . . Mamo, B. (2010). Caring for the karen. A newly arrived refugee group. *Minnesota Medicine*, 93(4), 49-53.
- Pretsch, J., Flunger, B., & Schmitt, M. (2012). Resilience predicts well-being in teachers, but not in non-teaching employees. *Social Psychology of Education*, 15(3), 321-336. doi:10.1007/s11218-012-9180-8
- Prigerson, H. G., Horowitz, M. J., Jacobs, S. C., Parkes, C. M., Aslan, M., Goodkin, K., . . . Neimeyer, R. A. (2009). Prolonged grief disorder: Psychometric validation of criteria proposed for DSM-V and ICD-11. *PLoS Med*, 6(8), e1000121.
- Qualls, R. C., Cox, M. B., & Schehr, T. L. (1992). Racial attitudes on campus: Are there gender differences? *Journal of College Student Development*,

- Rabkin, J. G., Remien, R., Williams, J. B., & Katoff, L. (1993). Resilience in adversity among long-term survivors of AIDS. *Psychiatric Services*, 44(2), 162-167.
doi:<http://dx.doi.org/10.1176/ps.44.4.371>
- Richard, F. D., Bond Jr, C. F., & Stokes-Zoota, J. J. (2003). One hundred years of social psychology quantitatively described. *Review of General Psychology*, 7(4), 331.
doi:<http://dx.doi.org/10.1037/1089-2680.7.4.331>
- Richardson, G. E. (2002). The metatheory of resilience and resiliency. *Journal of Clinical Psychology*, 58(3), 307-321. doi:10.1002/jclp.10020
- Richman, W. L., Kiesler, S., Weisband, S., & Drasgow, F. (1999). A meta-analytic study of social desirability distortion in computer-administered questionnaires, traditional questionnaires, and interviews. *Journal of Applied Psychology*, 84(5), 754.
doi:10.1037/0021-9010.84.5.754
- Ring, L., Höfer, S., McGee, H., Hickey, A., & O'Boyle, C. (2007). Individual quality of life: Can it be accounted for by psychological or subjective well-being? *Social Indicators Research*, 82(3), 443-461. doi:10.1007/s11205-006-9041-y
- Robinson, W. P., & Tajfel, H. (1996). *Social groups and identities: Developing the legacy of henri tajfel* Psychology Press.
- Rothgerber, H. (1997). External intergroup threat as an antecedent to perceptions in in-group and out-group homogeneity. *Journal of Personality and Social Psychology*, 73(6), 1206-1212. doi:10.1037//0022-3514.73.6.1206
- Rutter, M. (1990). Psychosocial resilience and protective mechanisms. In J. Rolf, N. Garnezy, A. S. Masten & D. Cicchetti (Eds.), *Risk and protective factors in the*

development of psychopathology (pp. 181-214) New York: Cambridge University Press.

- Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology*, 52(1), 141-166. doi:10.1146/annurev.psych.52.1.141
- Ryan, R. M., Huta, V., & Deci, E. L. (2008). Living well: A self-determination theory perspective on eudaimonia. *Journal of Happiness Studies*, 9(1), 139-170. doi:10.1007/s10902-006-9023-4
- Ryff, C. D. (1989a). Beyond ponce de leon and life satisfaction: New directions in quest of successful ageing. *International Journal of Behavioral Development*, 12(1), 35-55. doi:10.1177/016502548901200102
- Ryff, C. D. (1989b). Happiness is everything, or is it? explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, 57(6), 1069. doi:10.1037/0022-3514.57.6.1069
- Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology*, 69(4), 719. doi:<http://dx.doi.org/10.1037/0022-3514.69.4.719>
- Ryff, C. D., Love, G. D., Essex, M. J., & Singer, B. (1998). Resilience in adulthood and later life. *Handbook of aging and mental health* (pp. 69-96) Springer.
- Ryff, C. D., & Singer, B. H. (2008). Know thyself and become what you are: A eudaimonic approach to psychological well-being. *Journal of Happiness Studies*, 9(1), 13-39.

- Ryff, C. D. (2014). Psychological well-being revisited: Advances in the science and practice of eudaimonia. *Psychotherapy and Psychosomatics*, 83(1), 10-28.
doi:10.1159/000353263 [doi]
- Ryff, C. D., & Singer, B. H. (2000). Biopsychosocial challenges of the new millennium. *Psychotherapy and Psychosomatics*, 69(4), 170-177. doi:12390 [pii]
- Ryff, C. D., Love, G. D., Urry, H. L., Muller, D., Rosenkranz, M. A., Friedman, E. M., . . . Singer, B. (2006). Psychological well-being and ill-being: Do they have distinct or mirrored biological correlates? *Psychotherapy and Psychosomatics*, 75(2), 85-95.
doi:10.1159/000090892
- Sagone, E., & De Caroli, M. E. (2014). Relationships between psychological well-being and resilience in middle and late adolescents. *Procedia-Social and Behavioral Sciences*, 141, 881-887.
- Samplin, E., Ikuta, T., Malhotra, A. K., Szeszko, P. R., & DeRosse, P. (2013). Sex differences in resilience to childhood maltreatment: Effects of trauma history on hippocampal volume, general cognition and subclinical psychosis in healthy adults. *Journal of Psychiatric Research*, 47(9), 1174-1179.
- Samuels, G. M., & Pryce, J. M. (2008). "What doesn't kill you makes you stronger": Survivalist self-reliance as resilience and risk among young adults aging out of foster care. *Children and Youth Services Review*, 30(10), 1198-1210.
doi:10.1016/j.childyouth.2008.03.005
- Sandage, S. J., & Jankowski, P. J. (2010). Forgiveness, spiritual instability, mental health symptoms, and well-being: Mediator effects of differentiation of self. *Psychology of Religion and Spirituality*, 2(3), 168. doi:10.1037/a0019124

- Saxena, S., Orley, J., & WHOQOL Group. (1997). Quality of life assessment: The world health organization perspective. *European Psychiatry, 12*, 263s-266s.
doi:10.1016/S0924-9338(97)89095-5
- Schaafsma, J. (2011). Discrimination and subjective well-being: The moderating roles of identification with the heritage group and the host majority group. *European Journal of Social Psychology, 41*(6), 786-795. doi:10.1002/ejsp.825
- Schick, M., Zumwald, A., Knopfli, B., Nickerson, A., Bryant, R. A., Schnyder, U., . . . Morina, N. (2016). Challenging future, challenging past: The relationship of social integration and psychological impairment in traumatized refugees. *European Journal of Psychotraumatology, 7*, 28057. doi:10.3402/ejpt.v7.28057 [doi]
- Schneiderman, N., Ironson, G., & Siegel, S. D. (2005). Stress and health: Psychological, behavioral, and biological determinants. *Annual Review of Clinical Psychology, 1*, 607-628. doi:10.1146/annurev.clinpsy.1.102803.144141 [doi]
- Schweitzer, R., Melville, F., Steel, Z., & Lacherez, P. (2006). Trauma, post-migration living difficulties, and social support as predictors of psychological adjustment in resettled sudanese refugees. *Australian and New Zealand Journal of Psychiatry, 40*(2), 179-187. doi:10.1111/j.1440-1614.2006.01766.x
- Schweitzer, R., Murray, K., & Davidson, G. (2008). Psychological wellbeing of refugees resettling in australia: A literature review prepared for the australian psychological society. *Australian Psychological Society*,
- Seaton, E. K., & Yip, T. (2009). School and neighborhood contexts, perceptions of racial discrimination, and psychological well-being among african american adolescents. *Journal of Youth and Adolescence, 38*(2), 153-163. doi:10.1007/s10964-008-9356-x

- Seifert, T. (2005). Assessment of the ryff scales of psychological well-being. *Retrieved August, 6, 2007.*
- Seligman, M. E., & Csikszentmihalyi, M. (2000). *Positive psychology: An introduction.* American Psychological Association.
- Shade, A., Read, J. S., Welkie, D. G., Kratz, T. K., Wu, C. H., & McMahon, K. D. (2011). Resistance, resilience and recovery: Aquatic bacterial dynamics after water column disturbance. *Environmental Microbiology, 13*(10), 2752-2767. doi:10.1111/j.1462-2920.2011.02546.x
- Sheldon, K. M., & King, L. (2001). Why positive psychology is necessary. *American Psychologist, 56*(3), 216. doi:10.1037/0003-066X.56.3.216
- Shonkoff, J. P., Boyce, W. T., & McEwen, B. S. (2009). Neuroscience, molecular biology, and the childhood roots of health disparities: Building a new framework for health promotion and disease prevention. *Jama, 301*(21), 2252-2259. doi:10.1001/jama.2009.754
- Shrestha, S., Stanley, M. A., Wilson, N. L., Cully, J. A., Kunik, M. E., Novy, D. M., . . . Amspoker, A. B. (2015). Predictors of change in quality of life in older adults with generalized anxiety disorder. *International Psychogeriatrics / IPA, 27*(7), 1207-1215. doi:10.1017/S1041610214002567
- Siebert, A. (2009). *The resiliency advantage: Master change, thrive under pressure, and bounce back from setbacks: Easyread super large 18pt edition* ReadHowYouWant.com.
- Skevington, S. M., Lotfy, M., & O'Connell, K. A. (2004). The world health organization's WHOQOL-BREF quality of life assessment: Psychometric properties and results of

- the international field trial. A report from the WHOQOL group. *Quality of Life Research*, 13(2), 299-310. doi:10.1023/B:QURE.0000018486.91360.00
- Skomorovsky, A., & Stevens, S. (2013). Testing a resilience model among canadian forces recruits. *Military Medicine*, 178(8), 829-837. doi:10.7205/MILMED-D-12-00389
- Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Bernard, J. (2008). The brief resilience scale: Assessing the ability to bounce back. *International Journal of Behavioral Medicine*, 15(3), 194-200. doi:10.1080/10705500802222972
- Smith, H. J., & Pettigrew, T. F. (2015). Advances in relative deprivation theory and research. *Social Justice Research*, 28(1), 1-6. doi:10.1007/s11211-014-0231-5
- Springer, K. W., & Hauser, R. M. (2006). An assessment of the construct validity of ryff's scales of psychological well-being: Method, mode, and measurement effects. *Social Science Research*, 35(4), 1080-1102. doi:10.1016/j.ssresearch.2005.07.004
- Stanton, A. L., Revenson, T. A., & Tennen, H. (2007). Health psychology: Psychological adjustment to chronic disease. *Annu.Rev.Psychol.*, 58, 565-592.
doi:10.1146/annurev.psych.58.110405.085615
- Staub, E. (2005). Constructive rather than harmful forgiveness, reconciliation, and ways to promote them after genocide and mass killing. *Handbook of Forgiveness*, , 443-459.
doi:10.4324/9780203955673.ch27
- Stavropoulou, M. (1998). Displacement and human rights: Reflections on UN practice. *Human Rights Quarterly*, 20(3), 515-554. doi:10.1353/hrq.1998.0033
- Steel, Z., Chey, T., Silove, D., Marnane, C., Bryant, R. A., & Van Ommeren, M. (2009). Association of torture and other potentially traumatic events with mental health

- outcomes among populations exposed to mass conflict and displacement: A systematic review and meta-analysis. *Jama*, 302(5), 537-549. doi:10.1001/jama.2009.1132
- Steel, Z., Silove, D., Phan, T., & Bauman, A. (2002). Long-term effect of psychological trauma on the mental health of vietnamese refugees resettled in australia: A population-based study. *The Lancet*, 360(9339), 1056-1062. doi:10.1016/S0140-6736(02)11142-1
- Stephan, W. G., & Stephan, C. W. (2000). An integrated threat theory of prejudice. In S. Oskamp (Ed.), *Reducing prejudice and discrimination* (pp. 23-45) Psychology Press.
- Stephan, W. G., Boniecki, K. A., Ybarra, O., Bettencourt, A., Ervin, K. S., Jackson, L. A., . . . Renfro, C. L. (2002). The role of threats in the racial attitudes of blacks and whites. *Personality and Social Psychology Bulletin*, 28(9), 1242-1254. doi:10.1177/01461672022812009
- Studley, B., & Chung, M. C. (2015). Posttraumatic stress and well-being following relationship dissolution: Coping, posttraumatic stress disorder symptoms from past trauma, and traumatic growth. *Journal of Loss and Trauma*, 20(4), 317-335. doi:10.1080/15325024.2013.877774
- Subkoviak, M. J., Enright, R. D., Wu, C., Gassin, E. A., Freedman, S., Olson, L. M., & Sarinopoulos, I. (1995). Measuring interpersonal forgiveness in late adolescence and middle adulthood. *Journal of Adolescence*, 18(6), 641-655. doi:10.1006/jado.1995.1045
- Sullivan, G. M., & Feinn, R. (2012). Using effect size-or why the P value is not enough. *Journal of Graduate Medical Education*, 4(3), 279-282.

- Szigeti, A. (2014). Focusing forgiveness. *The Journal of Value Inquiry*, 48(2), 217-234.
doi:10.1007/s10790-014-9422-4
- Tajfel, H., & Turner, J. C. (2004). The social identity theory of intergroup behavior.
doi:10.1177/053901847401300204
- Taloyan, M., Johansson, L. M., Saleh-Stattn, N., & Al-Windi, A. (2011). Acculturation strategies in migration stress among kurdish men in sweden: A narrative approach. *American Journal of Men's Health*, 5(3), 198-207. doi:10.1177/1557988310368844
[doi]
- Tam, T., Hewstone, M., Kenworthy, J. B., Cairns, E., Marinetti, C., Geddes, L., & Parkinson, B. (2008). Postconflict reconciliation: Intergroup forgiveness and implicit biases in northern ireland. *Journal of Social Issues*, 64(2), 303-320.
doi:10.1111/j.1540-4560.2008.00563.x
- Tang, S. S., & Fox, S. H. (2001). Traumatic experiences and the mental health of senegalese refugees. *The Journal of Nervous and Mental Disease*, 189(8), 507-512.
doi:<http://dx.doi.org/10.1097/00005053-200108000-00003>
- Taylor, S. E., & Stanton, A. L. (2007). Coping resources, coping processes, and mental health. *Annu.Rev.Clin.Psychol.*, 3, 377-401.
doi:10.1146/annurev.clinpsy.3.022806.091520
- Teerawichitchainan, B., & Korinek, K. (2012). The long-term impact of war on health and wellbeing in northern vietnam: Some glimpses from a recent survey. *Social Science & Medicine*, 74(12), 1995-2004. doi:10.1016/j.socscimed.2012.01.040

- Tempany, M. (2009). What research tells us about the mental health and psychosocial wellbeing of sudanese refugees: A literature review. *Transcultural Psychiatry*, 46(2), 300-315. doi:10.1177/1363461509105820 [doi]
- Tempski, P., Santos, I. S., Mayer, F. B., Enns, S. C., Perotta, B., Paro, H. B., . . . Baldassin, S. (2015). Relationship among medical student resilience, educational environment and quality of life. *PloS One*, 10(6), e0131535.
doi:<http://dx.doi.org/10.1371/journal.pone.0131535>
- Tett, R. P., Steele, J. R., & Beauregard, R. S. (2003). Broad and narrow measures on both sides of the personality–job performance relationship. *Journal of Organizational Behavior*, 24(3), 335-356. doi:10.1002/job.191
- The International Organization for Migration. (February 2016). *Displacement tracking matrix*. (No. <http://iomiraq.net/dtm-page>).Retrieved (13th March 2016).
- The International Organization for Migration. (May, 2015). *Displacement tracking matrix*. (No. <http://iomiraq.net/dtm-page>).Retrieved (3rd June 2015).
- The World Bank. (March, 2015). *Kurdistan regional government (KRG): Economic and social impact assessment of the syrian conflict and ISIS insurgency*. (No. Available at <http://documents.worldbank.org/curated/en/2015/03/24143945/kurdistan-regional-government-krgeconomic-social-impact-assessment-syrian-conflict-isis-insurgency>).(accessed 5th June2015).
- Theron, L. (2006). The role of personal protective factors in anchoring psychological resilience in adolescents with learning difficulties. *South African Journal of Education*, 24(4), 317–321. doi:25008/86546

- Tian, J., & Hong, J. (2014). Assessment of the relationship between resilience and quality of life in patients with digestive cancer. *World Journal of Gastroenterology: WJG*, 20(48), 18439. doi:10.3748/wjg.v20.i48.18439
- Tomás, J. M., Sancho, P., Melendez, J. C., & Mayordomo, T. (2012). Resilience and coping as predictors of general well-being in the elderly: A structural equation modeling approach. *Aging & Mental Health*, 16(3), 317-326. doi:10.1080/13607863.2011.615737
- Toussaint, L., & Friedman, P. (2009). Forgiveness, gratitude, and well-being: The mediating role of affect and beliefs. *Journal of Happiness Studies*, 10(6), 635-654. doi:10.1007/s10902-008-9111-8
- Toussaint, L., & Webb, J. R. (2005). Gender differences in the relationship between empathy and forgiveness. *The Journal of Social Psychology*, 145(6), 673-685.
- Toussaint, L., Williams, D., Musick, M., & Everson, S. (2001). Forgiveness and health: Age differences in a US probability sample. *Journal of Adult Development*, 8(4), 249-257. doi:10.1023/A:1011394629736
- Tribe, R. (2002). Mental health of refugees and asylum-seekers. *Advances in Psychiatric Treatment*, 8(4), 240-247. doi:10.1192/apt.8.4.240
- Tugade, M. M., & Fredrickson, B. L. (2004). Resilient individuals use positive emotions to bounce back from negative emotional experiences. *Journal of Personality and Social Psychology*, 86(2), 320-345. doi:10.1037/0022-3514.86.2.320
- Turner, J., Hogg, M., Oakes, P., Reicher, S., & Wetherell, M. (1987). Rediscovering the social group: A self-categorization theory. *Contemporary Sociology*,

- Turner, R. J. (1981). Social support as a contingency in psychological well-being. *Journal of Health and Social Behavior*, , 357-367. doi:<http://dx.doi.org/10.2307/2136677>
- Turner, S. W., Bowie, C., Dunn, G., Shapo, L., & Yule, W. (2003). Mental health of kosovan albanian refugees in the UK. *The British Journal of Psychiatry : The Journal of Mental Science*, 182, 444-448. doi:10.1192/bjp.182.5.444
- Tusaie, K., & Dyer, J. (2004). Resilience: A historical review of the construct. *Holistic Nursing Practice*, 18(1), 3-10. doi:10.12691/education-2-7-5
- Tutu, D. (2000). *No future without forgiveness*. York, NY: Random House.: Random House.
- Tyler, T. R., & Smith, H. J. (1998). Social justice and social movements. In S. T. Fiske, D. T. Gilbert & G. Lindzey (Eds.), *Handbook of social psychology* (4th ed., pp. 595-629). Boston: McGraw-Hill: John Wiley & Sons.
- Ungar, M. (2011). Community resilience for youth and families: Facilitative physical and social capital in contexts of adversity. *Children and Youth Services Review*, 33(9), 1742-1748. doi:10.1016/j.childyouth.2011.04.027
- Ungar, M. (2013). Resilience, trauma, context, and culture. *Trauma, Violence & Abuse*, 14(3), 255-266. doi:10.1177/1524838013487805 [doi]
- UNHCR. (2013). Registration trends for syrians (02 april).(Available at <http://data.unhcr.org/syrianrefugees/country.php?id=103>), (accessed 10 March 2013).
- UNHCR. (2014a). United nations refugee agency, registration trends for syrians.(05 March), Available at <http://data.unhcr.org/syrianrefugees/country.php?id=103> (accessed 10 March 2014).

- UNHCR. (2014b). United nations refugee agency, registration trends for syrians (28 february).(Available at <http://data.unhcr.org/syrianrefugees/country.php?id=103>), (accessed 1 March 2014).
- UNHCR. (28 February 2014). *United nations refugee agency information management unit, monthly information kit, resource document.* (). (accessed 1 March 2014): Available at <http://data.unhcr.org/syrianrefugees/country.php?id=103>.
- UNHCR, United Nations High Commissioner for Refugees. (17 Feb 2016). Syria regional refugee response inter-agency information sharing portal. Retrieved from <http://data.unhcr.org/syrianrefugees/regional.php>
- UNHCR, United Nations High Commissioner for Refugees. (2014). *World at war UNHCR global trends forced displacement. available at.* ().<http://www.unhcr.org/556725e69.html> (accessed 5th August 2015).
- UNHCR, United Nations Refugee Agency. (18 December 2014). **UN and partners launch major aid plans for syria and region.** Retrieved from <http://www.unhcr.org/cgi-bin/texis/vtx/se> arch?page=search&docid=54929c676&query=syria
- UNHCR, United Nations Refugee Agency. (2014a). Registration trends for syrians.(accessed 28 February), Available at <http://data.unhcr.org/syrianrefugees/country.php?id=103> (accessed 1 March 2014).
- UNHCR, United Nations Refugee Agency. (2014b). Syria regional response plan: Iraq.((accessed 10 March 2014)), Available at <http://www.unhcr.org/syriarrp6/docs/syria-rrp6-iraq-response-plan.pdf#A>.
- United Nations Office for the Coordination of Humanitarian Affairs (OCHA). (27, January, 2015). *Iraq: Displacement - humanitarian snapshot.* (No. Available at

- http://reliefweb.int/sites/reliefweb.int/files/resources/irq_snapshot_en_150127.pdf).(accessed 3rd June 2015).
- United Nations Refugee Agency. (2014). *Syria regional response plan: Iraq*. available at. ().<http://www.unhcr.org/syriarrp6/docs/syria-rrp6-iraq-response-plan.pdf#A> (accessed 10 March 2014).
- United Nations Refugee Agency. (2015). UNHCR registration trends for syrians (15 july). Available at <Http://Data.Unhcr.Org/Syrianrefugees/Country.Php?id=103> (Accessed 27 July 2013),
- VandenBos, G. R. (2015). *APA dictionary of psychology*. (2nd ed.) American Psychological Association.
- Ventevogel, P., Jordans, M., Reis, R., & de Jong, J. (2013). Madness or sadness? local concepts of mental illness in four conflict-affected african communities. *Conflict and Health*, 7(1), 3. doi:<https://doi.org/10.1186/1752-1505-7-3>
- Verdugo Alonso, M. Á, Arias Martínez, B., Gómez Sánchez, L. E., & Schalock, R. L. (2010). Development of an objective instrument to assess quality of life in social services: Reliability and validity in spain.
- Verkuyten, M., & Martinovic, B. (2012). Social identity complexity and immigrants' attitude toward the host nation: The intersection of ethnic and religious group identification. *Personality & Social Psychology Bulletin*, 38(9), 1165-1177. doi:10.1177/0146167212446164 [doi]
- Wagnild, G. M., & Young, H. M. (1993). Development and psychometric evaluation of the resilience scale. *Journal of Nursing Measurement*, 1(2) doi:1, 165-178. doi: 10.1891/1061-3749.17.2.105

- Walsh, F. (2003). Family resilience: A framework for clinical practice. *Family Process*, 42(1), 1-18. doi:10.1111/j.1545-5300.2003.00001.x
- Walsh, W. A., & Banaji, M. R. (1997). The collective self^a. *Annals of the New York Academy of Sciences*, 818(1), 193-214. doi:10.1111/j.1749-6632.1997.tb48256.x
- Waterman, A. S., Schwartz, S. J., & Conti, R. (2008). The implications of two conceptions of happiness (hedonic enjoyment and eudaimonia) for the understanding of intrinsic motivation. *Journal of Happiness Studies*, 9(1), 41-79.
- Wenzel, L. B., Donnelly, J. P., Fowler, J. M., Habbal, R., Taylor, T. H., Aziz, N., & Cella, D. (2002). Resilience, reflection, and residual stress in ovarian cancer survivorship: A gynecologic oncology group study. *Psycho- Oncology*, 11(2), 142-153. doi:10.1002/pon.567
- Werner, E. E., & Smith, R. S. (1992). *Overcoming the odds: High risk children from birth to adulthood* Cornell University Press.
- Whitley, B., & Kite, M. (2009). *The psychology of prejudice and discrimination* Cengage Learning.
- WHOQOL group. (1995). The world health organization quality of life assessment (WHOQOL): Position paper from the world health organization. *Social Science & Medicine*, 41(10), 1403-1409. doi:10.1016/0277-9536(95)00112-K
- WHOQOL, W. (1993). Study protocol: Division of mental health. geneva. *World Health Organization*,
- Wilder, D. A., & Shapiro, P. (1991). Facilitation of outgroup stereotypes by enhanced ingroup identity. *Journal of Experimental Social Psychology*, 27(5), 431-452. doi:10.1016/0022-1031(91)90002-N

- Wilson, I. B., & Cleary, P. D. (1995). Linking clinical variables with health-related quality of life. *Jama*, 273(1), 59-65. doi:10.1001/jama.1995.03520250075037
- Wilson, T., Lindsey, S., & Schooler, T. (2000). A model of dual attitudes. *Psychological Review*, 107(1), 101. doi:<http://dx.doi.org/10.1037/0033-295X.107.1.101>
- 'World health organazation, (. (2016). **Environmental health in emergencies** Retrieved from http://www.who.int/environmental_health_emergencies/displaced_people/en/
- World Health Organization. (1996). WHOQOL-BREF: Introduction, administration, scoring and generic version of the assessment: Field trial version, december 1996.
- World Health Organization. (1997). WHOQOL:Measuring quality of life.*Available at* [http://www. who.int/mental_health/media/68.pdf](http://www.who.int/mental_health/media/68.pdf), (accessed 31 March 2014).
- Worthington Jr, E. L. (2006). *Forgiveness and reconciliation: Theory and application* Routledge.
- Worthington, E. L., vanOyen Witvliet, C., Lerner, A. J., & Scherer, M. (2005). Forgiveness in health research and medical practice. *EXPLORE: The Journal of Science and Healing*, 1(3), 169-176. doi:<http://dx.doi.org/10.1016/j.explore.2005.02.012>
- Worthington, E., & Scherer, M. (2004). Forgiveness is an emotion-focused coping strategy that can reduce health risks and promote health resilience: Theory, review, and hypotheses. *Psychology & Health*, 19(3), 385-405.
doi:10.1080/0887044042000196674
- Worthington, E., Witvliet, C. V. O., Pietrini, P., & Miller, A. (2007). Forgiveness, health, and well-being: A review of evidence for emotional versus decisional forgiveness, dispositional forgivingness, and reduced unforgiveness. *Journal of Behavioral Medicine*, 30(4), 291-302. doi:10.1007/s10865-007-9105-8

- Wu, H. (2011). The protective effects of resilience and hope on quality of life of the families coping with the criminal traumatising of one of its members. *Journal of Clinical Nursing*, 20(13- 14), 1906-1915. doi:10.1111/j.1365-2702.2010.03664.x
- Xu, J., & Ou, L. (2014). Resilience and quality of life among wenchuan earthquake survivors: The mediating role of social support. *Public Health*, 128(5), 430-437. doi:10.1016/j.puhe.2014.03.002
- Yasmeen, S., & Khan, M. I. (2017). Gender differences on resilience among CVD patients.
- Yates, T. M., & Masten, A. S. (2004). Fostering the future: Resilience theory and the practice of positive psychology. In P. A. Linley, & S. Joseph (Eds.), *Positive psychology in practice* (pp. 521-539). John Wiley & Sons Inc.
- Yi, J. P., Vitaliano, P. P., Smith, R. E., Yi, J. C., & Weinger, K. (2008). The role of resilience on psychological adjustment and physical health in patients with diabetes. *British Journal of Health Psychology*, 13(2), 311-325. doi:10.1348/135910707X186994
- Young, A. F., Russell, A., & Powers, J. R. (2004). The sense of belonging to a neighbourhood: Can it be measured and is it related to health and well being in older women? *Social Science & Medicine*, 59(12), 2627-2637.
- Younger, J. W., Piferi, R. L., Jobe, R. L., & Lawler, K. A. (2004). Dimensions of forgiveness: The views of laypersons. *Journal of Social and Personal Relationships*, 21(6), 837-855. doi:10.1177/0265407504047843
- Youssef, C. M., & Luthans, F. (2007). Positive organizational behavior in the workplace the impact of hope, optimism, and resilience. *Journal of Management*, 33(5), 774-800. doi:10.1177/0149206307305562

- Yu, X., Lau, J. T., Mak, W. W., Cheng, Y., Lv, Y., & Zhang, J. (2014). A pilot Theory-Based intervention to improve resilience, psychosocial well-being, and quality of life among people living with HIV in rural china. *Journal of Sex & Marital Therapy*, 40(1), 1-16. doi:10.1080/0092623X.2012.668512
- Yuen, W. W., Wong, W. C., Holroyd, E., & Tang, C. S. (2014). Resilience in work-related stress among female sex workers in hong kong. *Qualitative Health Research*, 24(9), 1232-1241. doi:10.1177/1049732314544968 [doi]
- Zaleski, E. H., Levey-Thors, C., & Schiaffino, K. M. (1998). Coping mechanisms, stress, social support, and health problems in college students. *Applied Developmental Science*, 2(3), 127-137. doi:http://dx.doi.org/10.1207/s1532480xads0203_2
- Zarate, M. A., Garcia, B., Garza, A. A., & Hitlan, R. T. (2004). Cultural threat and perceived realistic group conflict as dual predictors of prejudice. *Journal of Experimental Social Psychology*, 40(1), 99-105. doi:10.1016/S0022-1031(03)00067-2
- Zautra, A. J., Arewasikporn, A., & Davis, M. C. (2010). Resilience: Promoting well-being through recovery, sustainability, and growth. *Research in Human Development*, 7(3), 221-238. doi:10.1080/15427609.2010.504431
- Zetter, R. (1988). Refugees and refugee studies-A label and an agenda. *J.Refugee Stud.*, 1, 1.
- Zick, A., Pettigrew, T. F., & Wagner, U. (2008). Ethnic prejudice and discrimination in europe. *Journal of Social Issues*, 64(2), 233-251. doi:10.1111/j.1540-4560.2008.00559.x

Participant Consent Form

BACKGROUND INFORMATION

⁴Title:

Researcher: Izaddin Aziz, School of Psychology, University of Leicester

Purpose of data collection: Ph.D. research

Details of Participation: The purpose of this study is to examine different facets of psychological well-being and forgiveness. In this study, you will, through the interview, be asked a number of questions about how your purpose in life, relationships with others, attitudes to forgiveness and your perceived quality of life.

CONSENT STATEMENT

1. I understand that my participation is voluntary and that I may withdraw from the research at any time up until the end of this study, without giving any reason.
2. I am aware of what my participation will involve.
3. My data are to be held confidentially and only the researcher and supervisor will have access to them.
4. My data will be kept in a locked filing cabinet for a period of at least five years after the appearance of any associated publications. Any aggregate data (e.g. spreadsheets) will be kept in electronic form for up to one year after which time they will be deleted.
5. In accordance with the requirements of some scientific journals and organizations, my coded data may be shared with other competent researchers. My coded data may also be used in other related studies. My name and other identifying details will not be shared with anyone.
6. This study will take approximately six months to complete.
7. I will be able to obtain general information about the results of this research by providing my contact details to the experimenter.

I am giving my consent for data to be used for the outlined purposes of the present study

All questions that I have about the research have been satisfactorily answered.

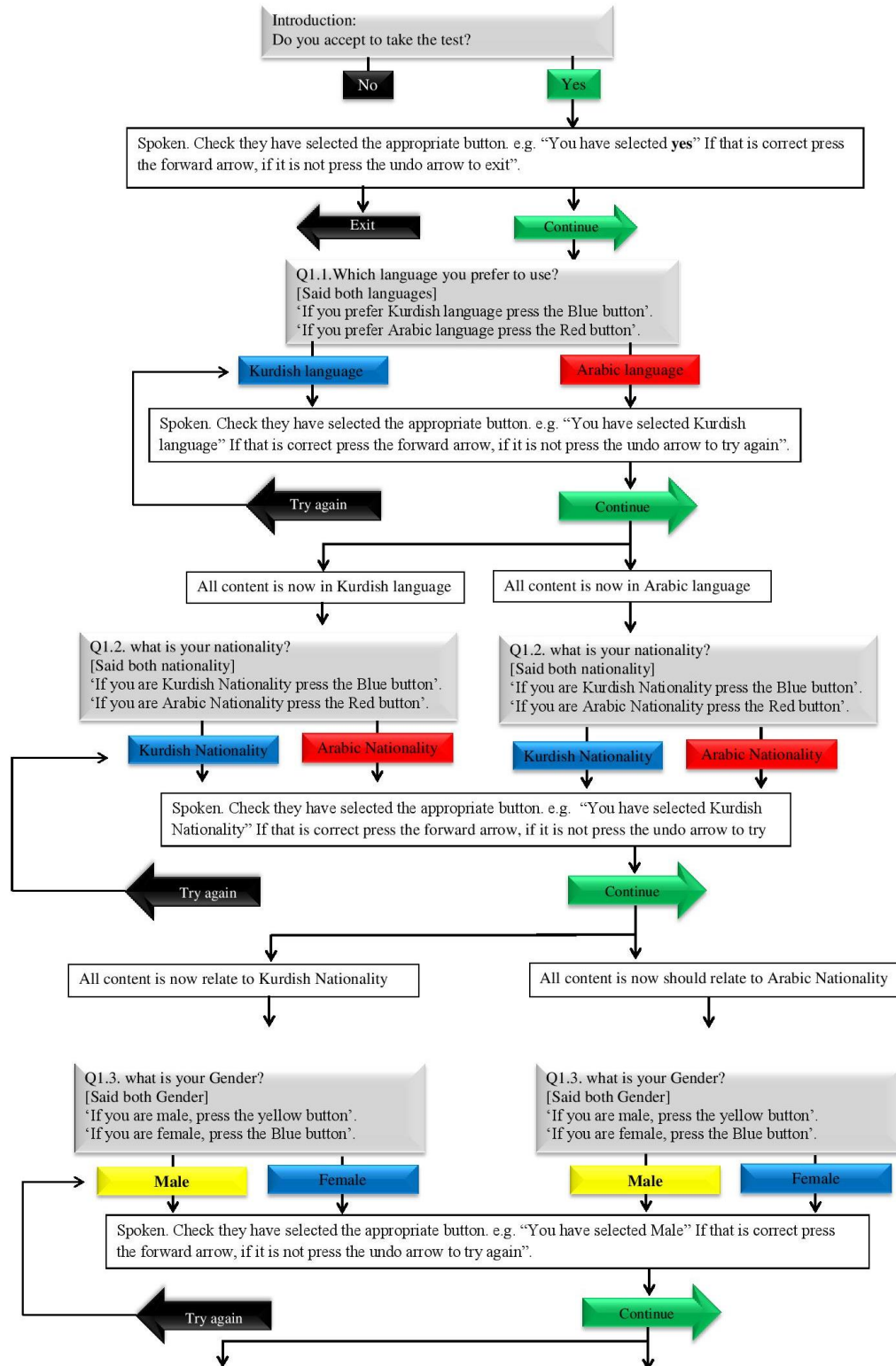
I agree to participate: ☐

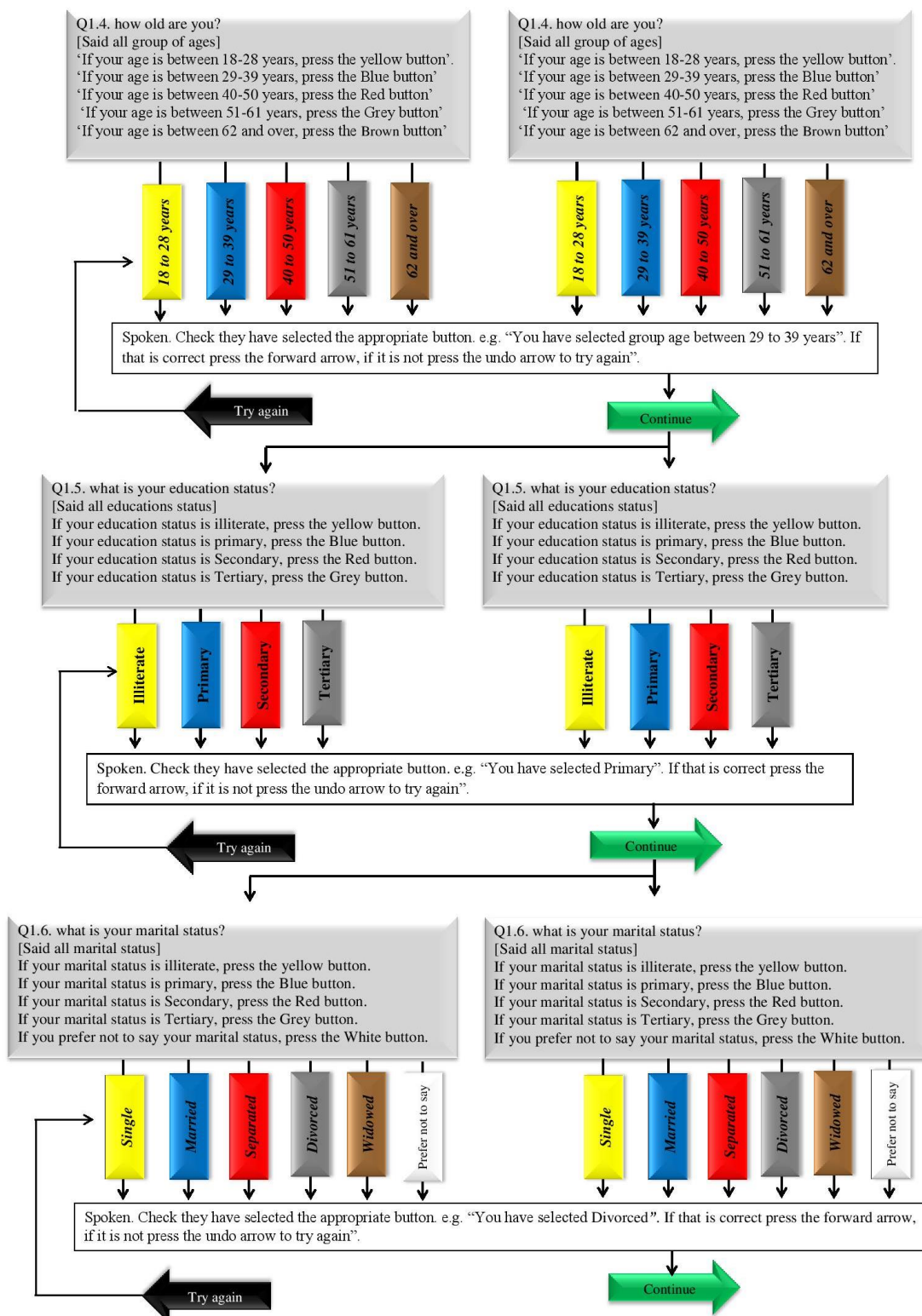
Participant's name (please print): _____ Date: _____

⁴ The same ethic form format was used to all studies but with different titles

Appendix - B

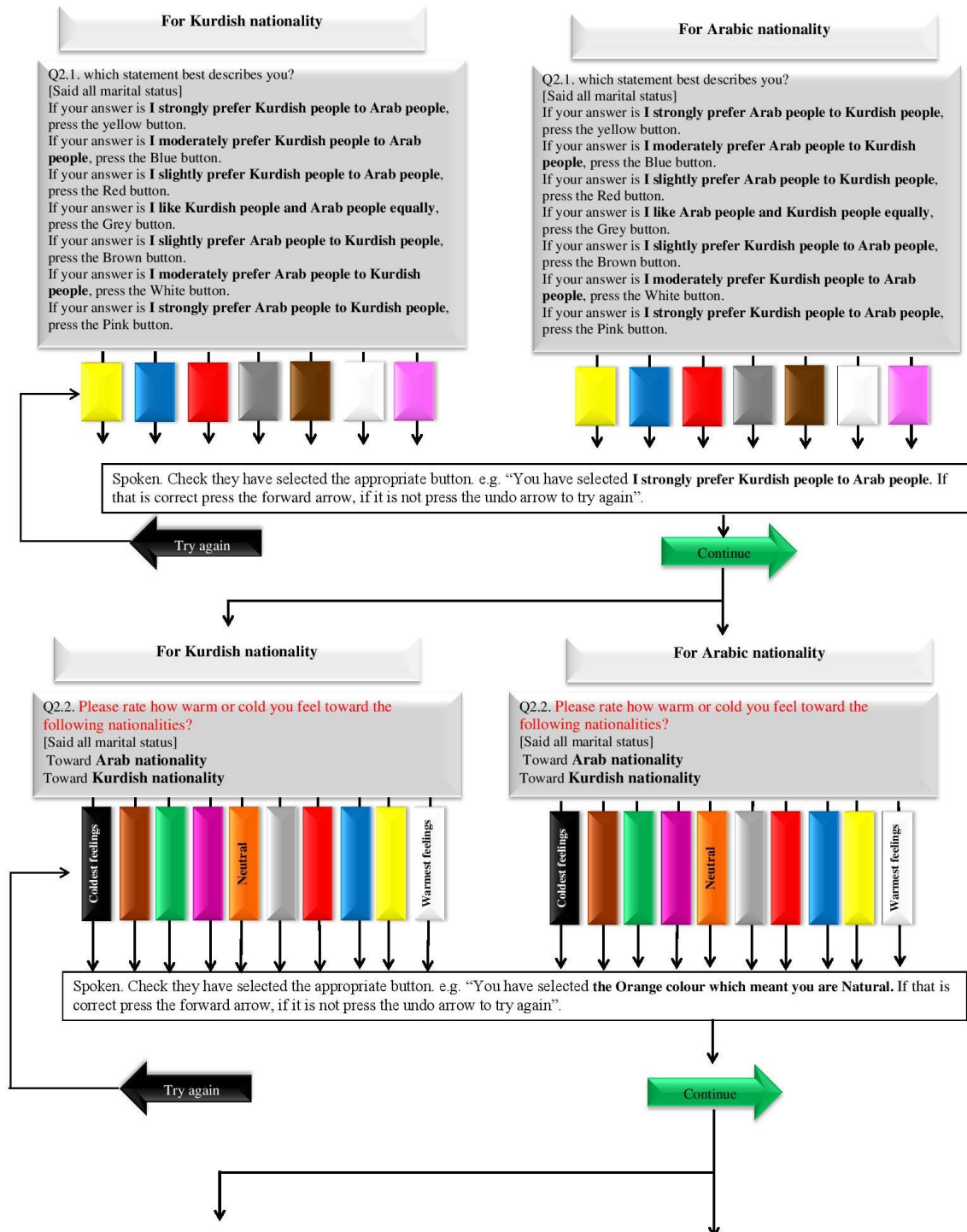
The map of the implicit association test program

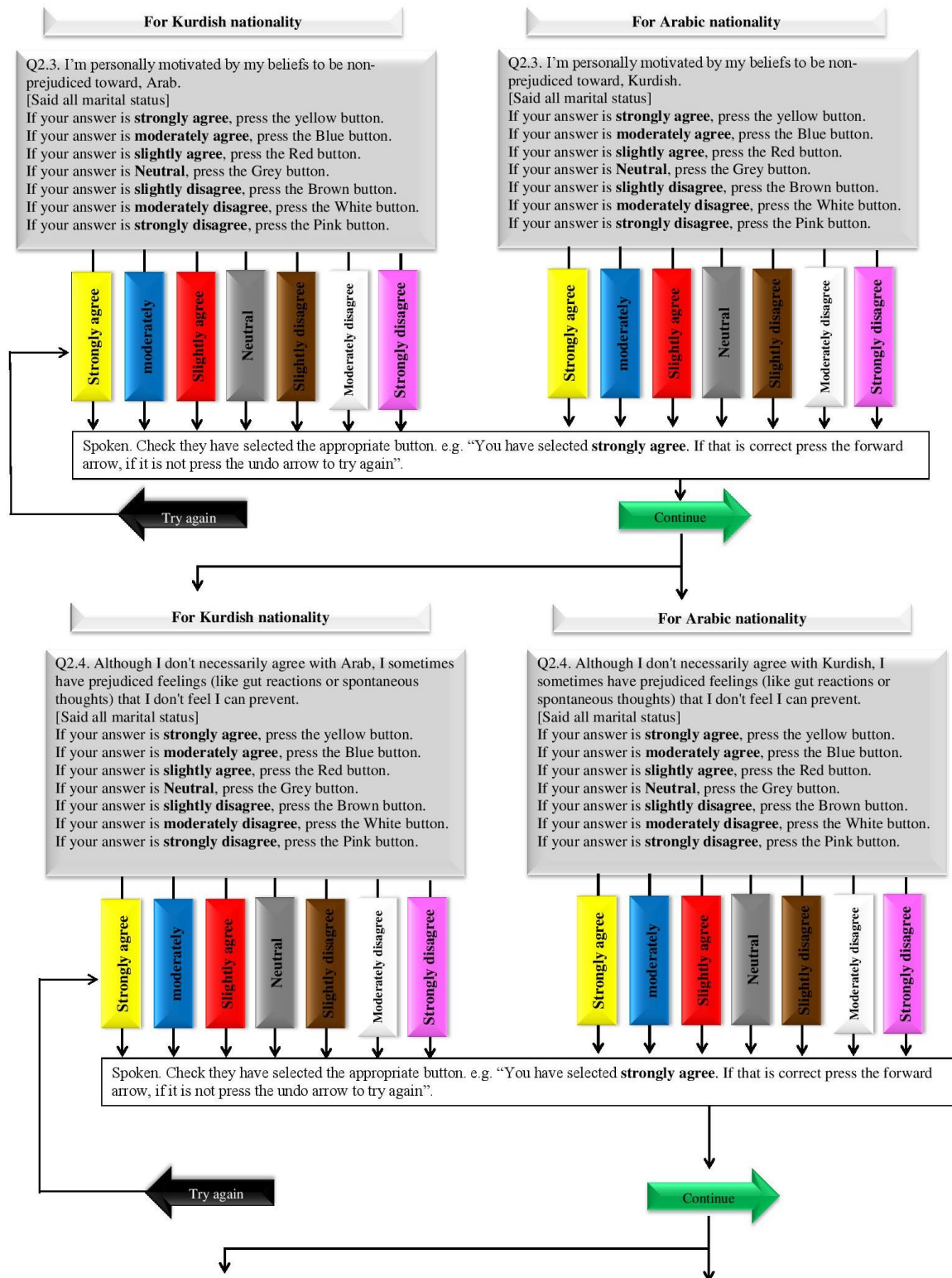


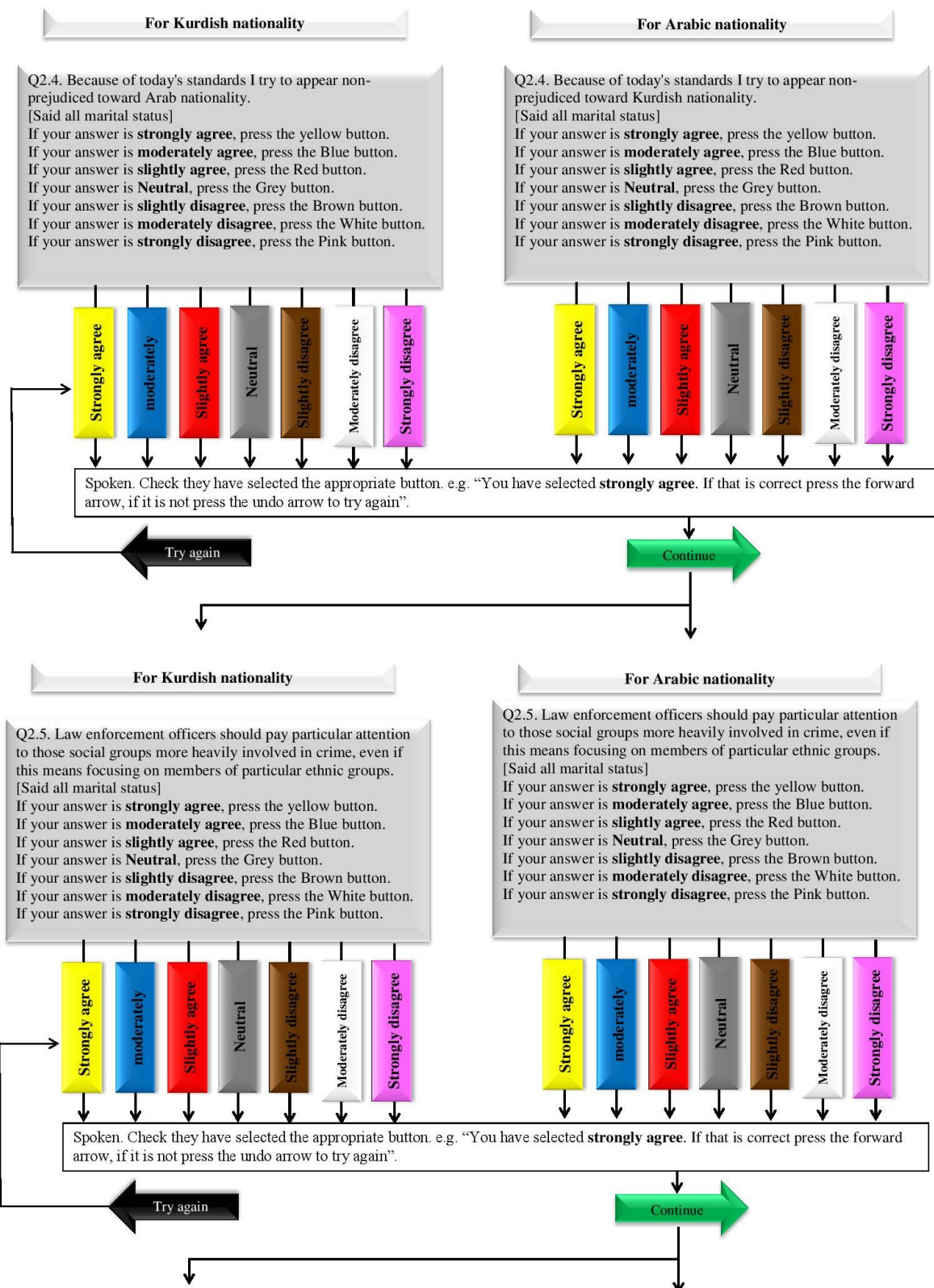


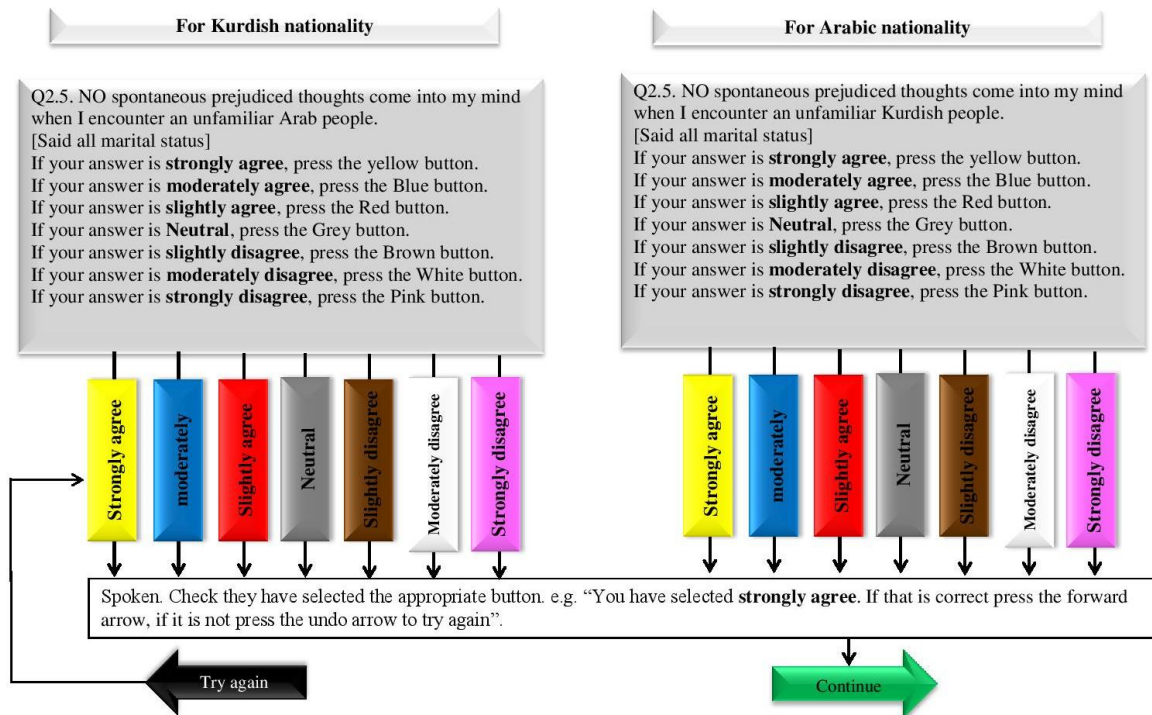
The IAT (implicit-association test) Program map:

2- Explicit questions

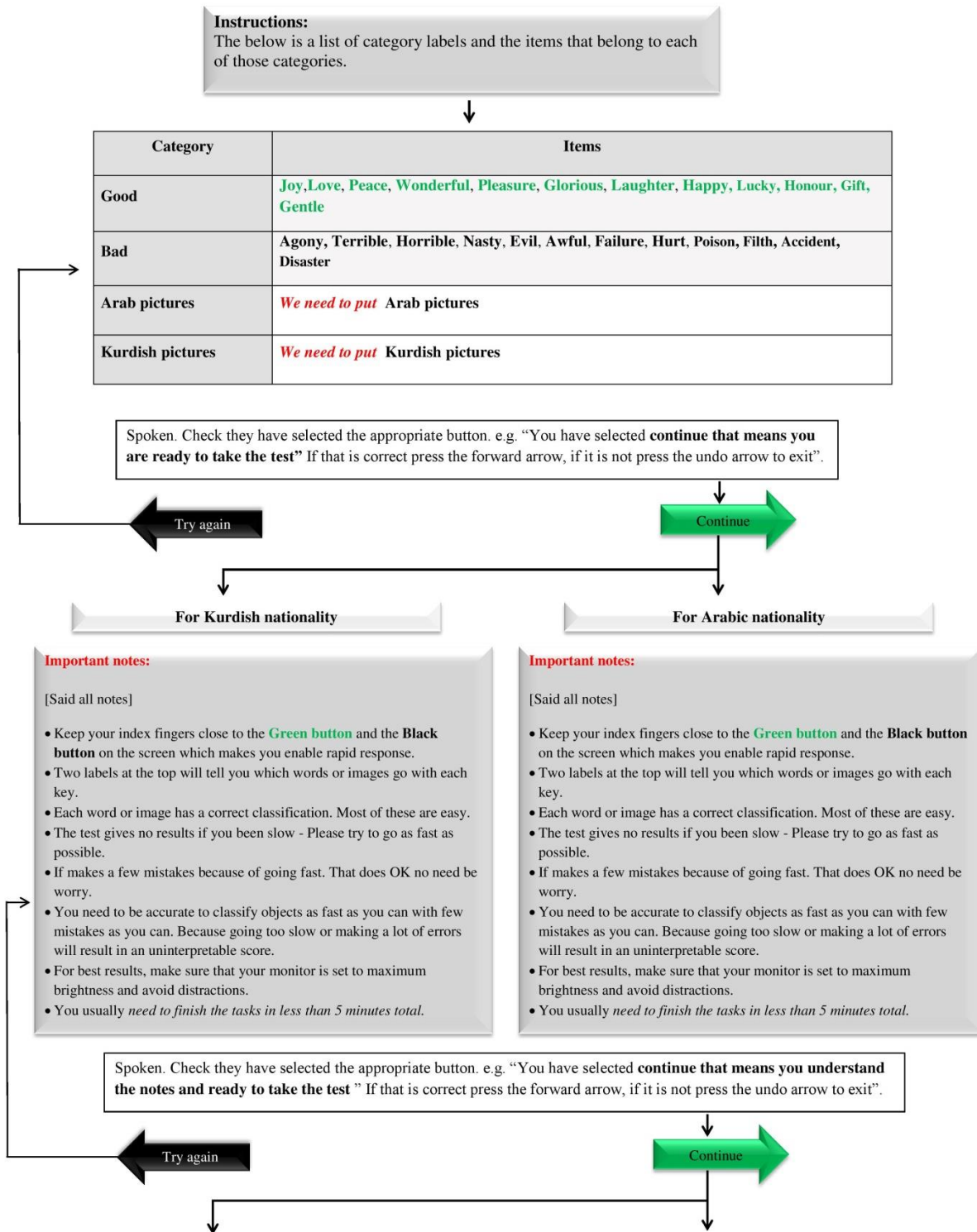


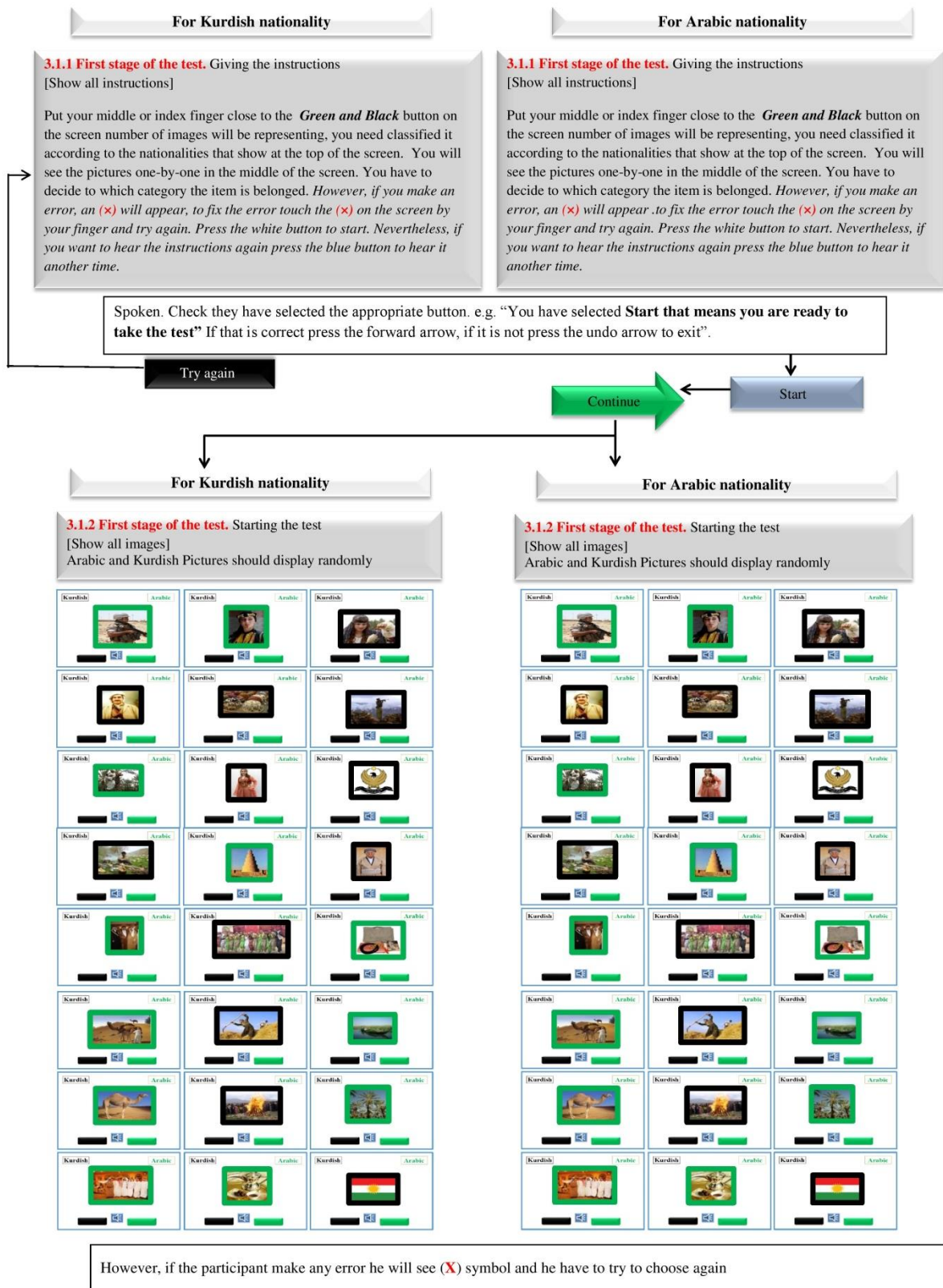


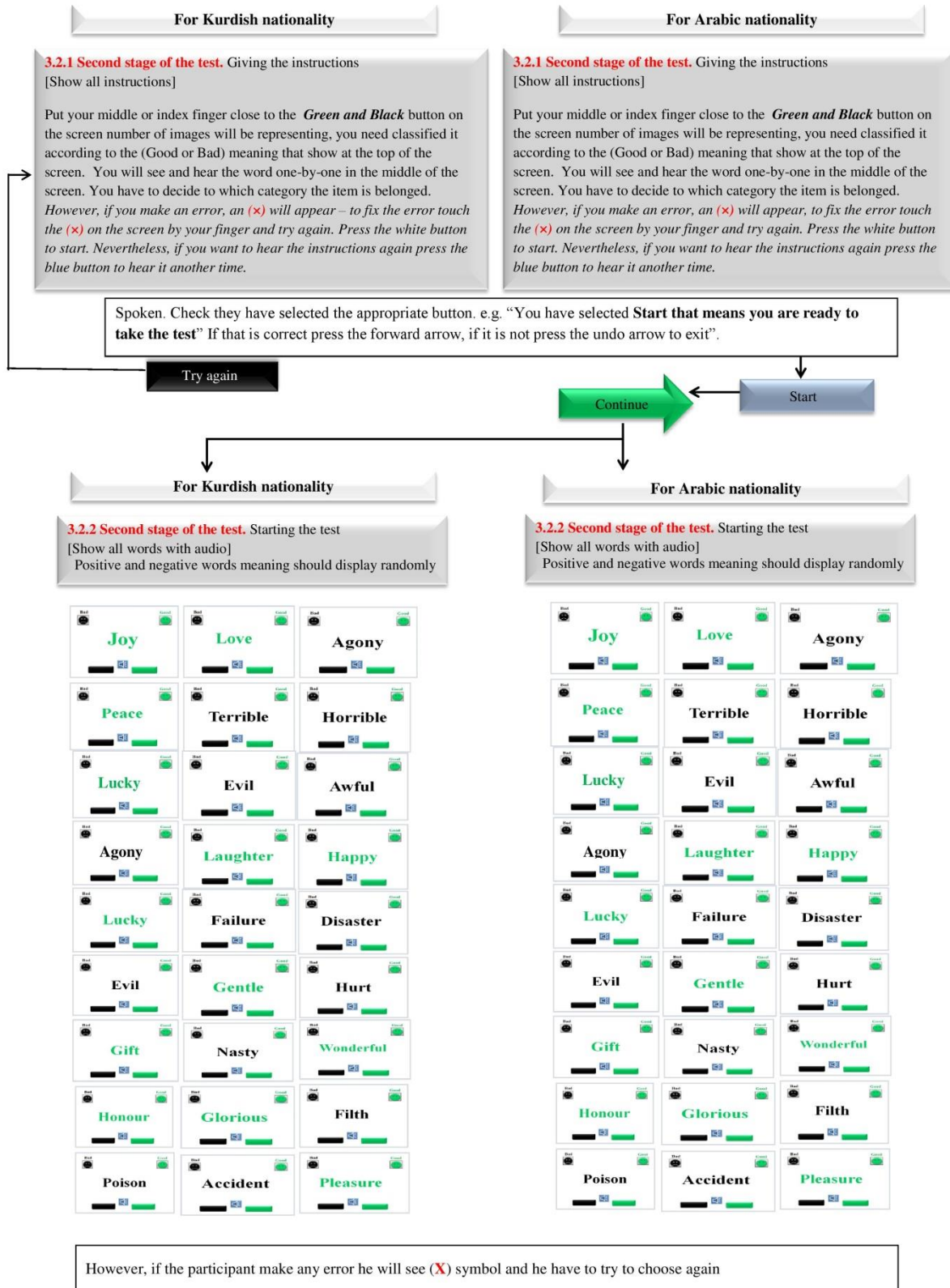


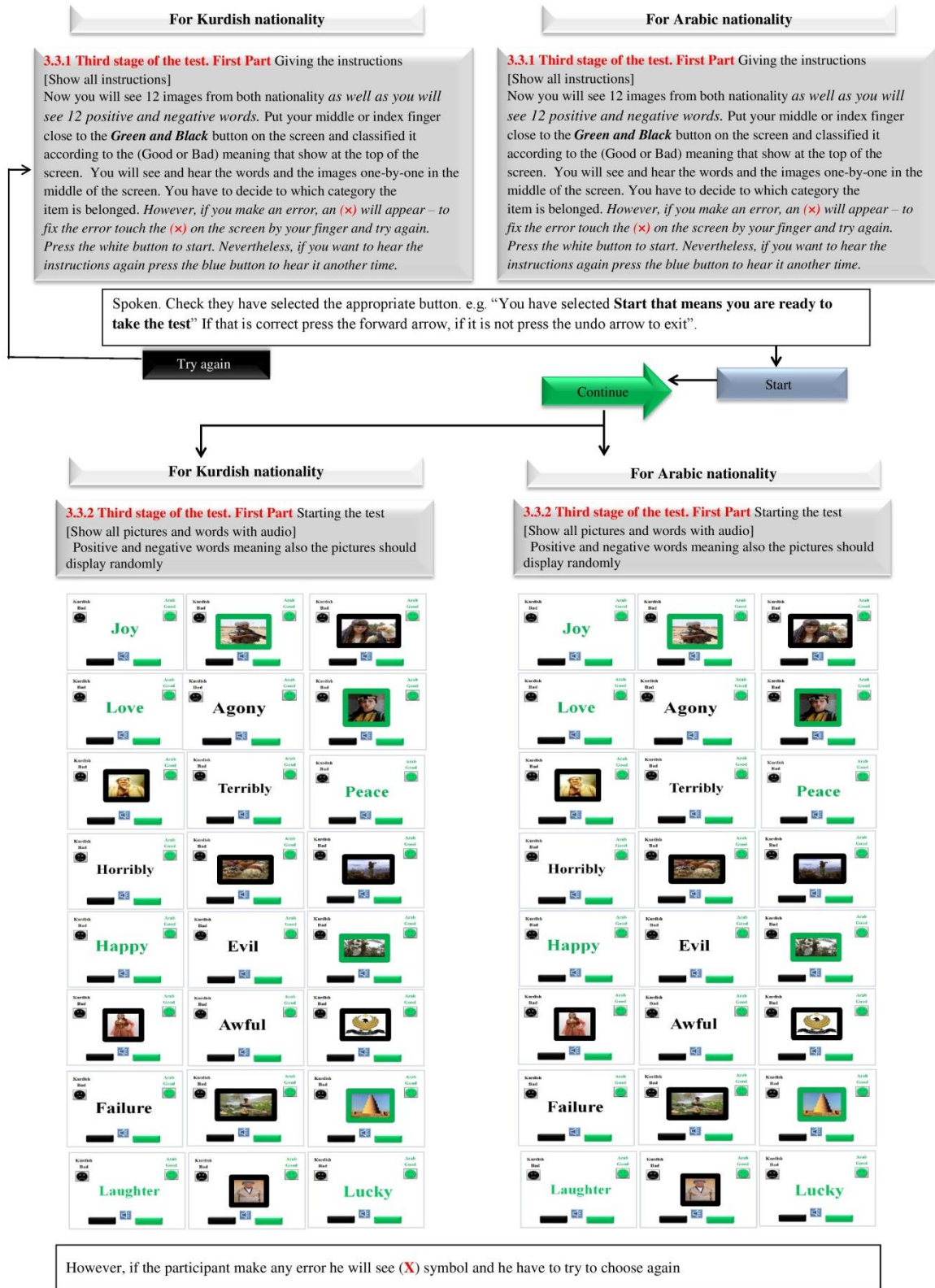


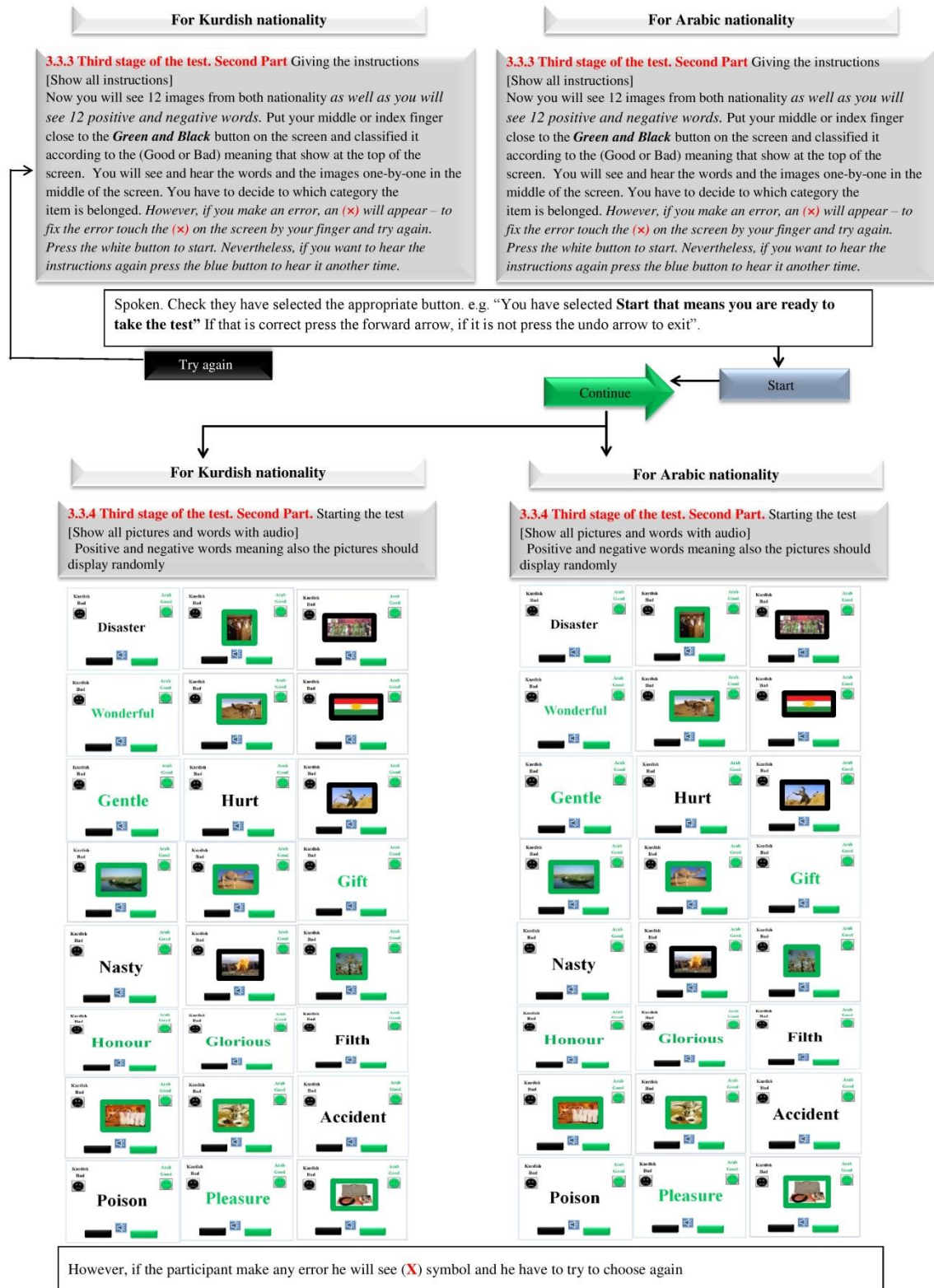
3- Implicit Test

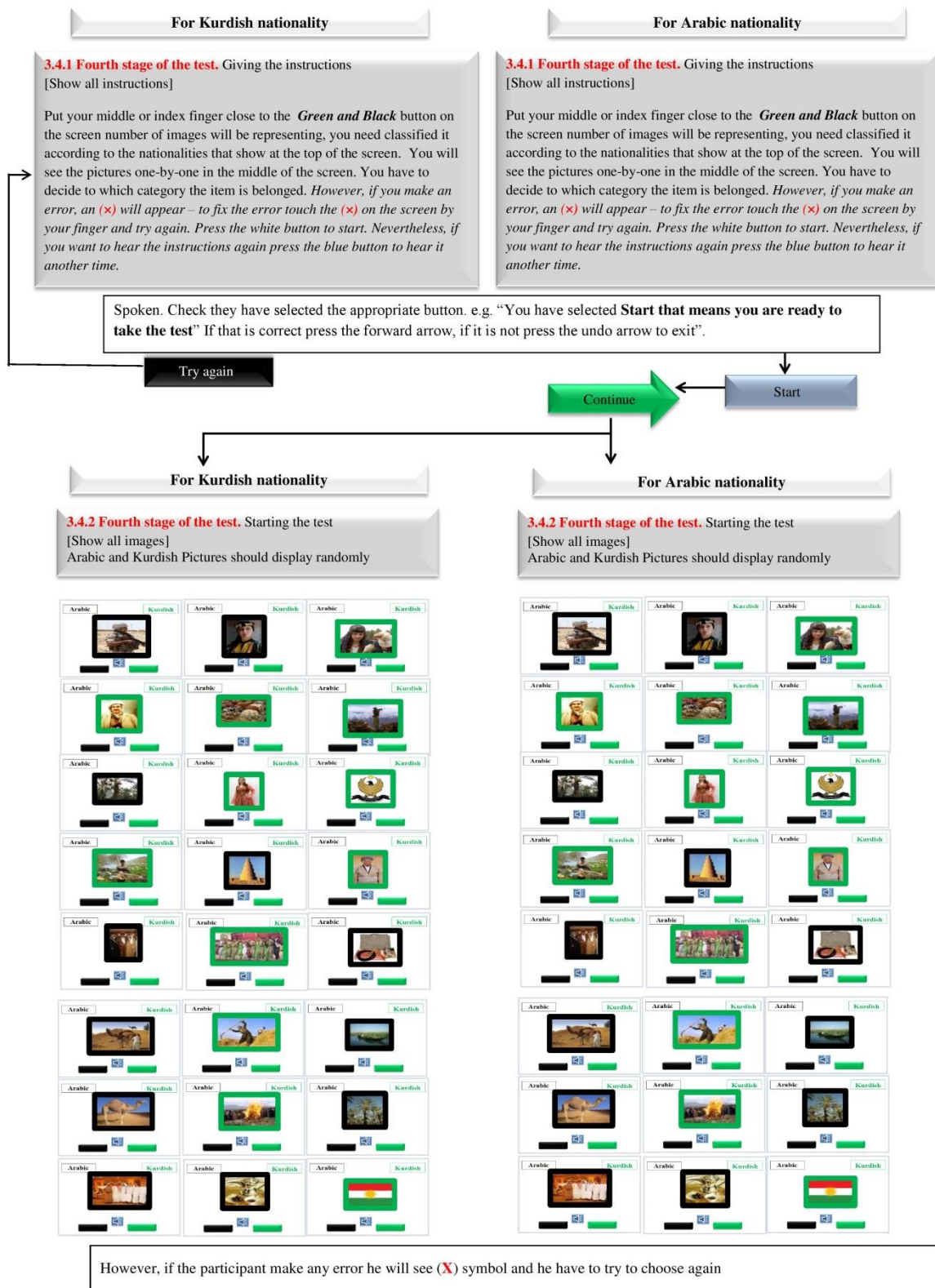












For Kurdish nationality

3.5.1 Fifth stage of the test. First Part Giving the instructions

[Show all instructions]
Now you will see 12 images from both nationality *as well as you will see 12 positive and negative words*. Put your middle or index finger close to the **Green and Black** button on the screen and classified it according to the (Good or Bad) meaning that show at the top of the screen. You will see and hear the words and the images one-by-one in the middle of the screen. You have to decide to which category the item is belonged. *However, if you make an error, an (X) will appear – to fix the error touch the (X) on the screen by your finger and try again.* Press the white button to start. Nevertheless, if you want to hear the instructions again press the blue button to hear it another time.

Spoken. Check they have selected the appropriate button. e.g. “You have selected **Start** that means you are ready to **take the test**” If that is correct press the forward arrow, if it is not press the undo arrow to exit”.

Try again

For Kurdish nationality

3.5.2 Fifth stage of the test First Part. Starting the test

[Show all pictures and words with audio]
Positive and negative words meaning also the pictures should display randomly



For Arabic nationality

3.5.1 Fifth stage of the test. First Part Giving the instructions

[Show all instructions]
Now you will see 12 images from both nationality *as well as you will see 12 positive and negative words*. Put your middle or index finger close to the **Green and Black** button on the screen and classified it according to the (Good or Bad) meaning that show at the top of the screen. You will see and hear the words and the images one-by-one in the middle of the screen. You have to decide to which category the item is belonged. *However, if you make an error, an (X) will appear – to fix the error touch the (X) on the screen by your finger and try again.* Press the white button to start. Nevertheless, if you want to hear the instructions again press the blue button to hear it another time.

Continue

Start

For Arabic nationality

3.5.2 Fifth stage of the test First Part. Starting the test

[Show all pictures and words with audio]
Positive and negative words meaning also the pictures should display randomly



However, if the participant make any error he will see (X) symbol and he have to try to choose again

