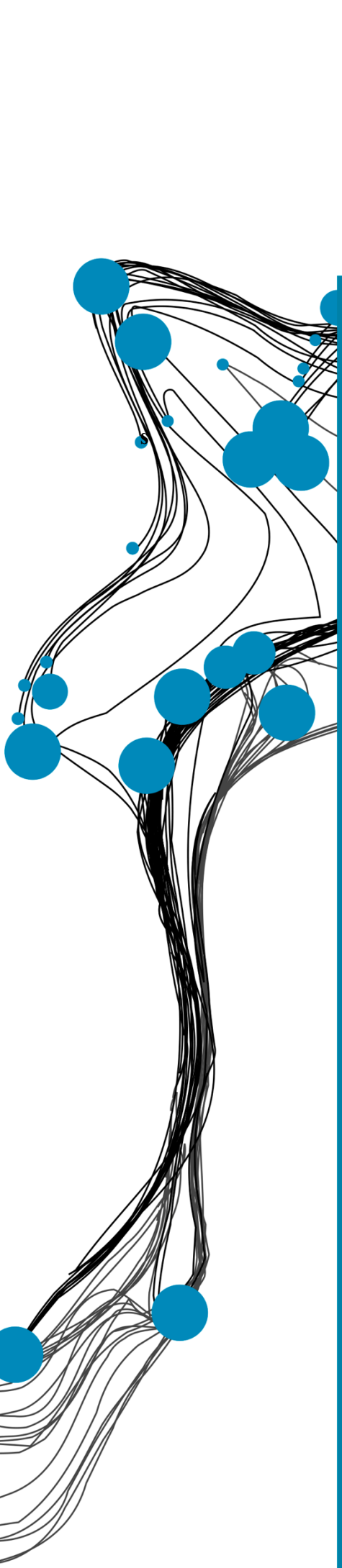

MASTER THESIS

Self-compassion as a predictor of mental health in Iranian refugees in the Netherlands

Author: Fariba Ghasemy

MSc, Health Psychology and Technology

First supervisor: Dr. Stans C.H.C. Drossaert
Second supervisor: Dr. Pelin Gül

25-06-2020

UNIVERSITY OF TWENTE.

Preface

In the hope of better days when no one will be forced to leave their dear homeland due to war, economic instability, and different political views. I hope this study provides information for relevant organizations and decision-makers to improve refugees' psychological conditions. There are some people that I would like to thank for helping me with this thesis. I wish to express my thanks and appreciation to my supervisors, Dr. Stans C.H.C. Drossaert and Dr. Pelin Gül for their valuable feedback and guidance while writing this thesis. Particularly, I would like to thank my beloved husband, Dr. Foad Sojoodi Farimani for all his support and encouragement. Moreover, special thanks to my dear friends Talin Yakob and Sogol Fathi Afshar, and all the anonymous Iranian refugees in the Netherlands who participated in this research.

Fariba Ghasemy

Enschede, June, 25th 2020

Abstract

Background: The large body of psychological research in the field of refugees has been focused on the psychopathological domain of mental health, while the positive dimension of wellbeing has been neglected. This study aims to explore the mental health and self-compassion among Iranian refugees in the Netherlands. It also intends to investigate the association of (positive and negative) mental health and self-compassion with socio-demographic and migration-related variables. Finally, it examines the correlation between (positive and negative) mental health and self-compassion.

Methods: This research comprises a cross-sectional study using an online survey design. In total, 116 adult Iranian refugees in the Netherlands (64 men and 52 women), with an average age of 35.3 years, have completed the questionnaire.

Results: More than half of the Iranian refugees (69.8%) were labeled as definite cases for depression and anxiety. Iranian refugees showed a low level of positive mental health within the range scores of 0-5, ($M = 2.1$, $SD = 1.2$). They also showed a moderate level of self-compassion within the range scores of (1-5), ($M = 3.1$, $SD = 0.8$). Furthermore, self-compassion showed a significant negative correlation with depression ($rs(116) = -.58$, $p < .01$), and anxiety ($rs(116) = -.68$, $p < .01$), and a significant positive correlation with positive mental health in refugees ($rs(116) = .53$, $p < .01$).

Conclusion: It can be concluded that a large number of Iranian refugees in the Netherlands suffer from severe depression, anxiety, and low mental wellbeing. This study also showed that self-compassion might be a predictor of positive and negative mental health among refugees. Future experimental research on self-compassion and mental health is needed in order to provide insight into whether an increase in self-compassion can improve the mental health of refugees.

Keywords: Self-compassion, Positive mental health, Depression, Anxiety, Refugee, Asylum seeker, Iran, The Netherlands.

Table of Contents

Abbreviations and Acronyms

CBS	Centraal Bureau voor de Statistiek (Statistics Netherlands)
COA	Centraal Opvang voor Asielzoeker (Central Reception for Asylum seekers)
EW	Emotional Wellbeing
IND	Immigratie en Naturalsatie Dienst (Immigration and Naturalization Department)
PTSD	Post-Traumatic Stress Disorder
PW	Psychological Wellbeing
SC	Self-compassion
SC-N	Self-compassion Negative subscale
SC-P	Self-compassion Positive subscale
SW	Social Wellbeing
UNHCR	United Nations High Commissioner for Refugees
WHO	World Health Organization

1.Introduction

The term refugee refers to a person who is forced to flee his/her home country due to different reasons, including economic instability, insecurity, war, political issues, or harassment and is afraid of going back to his/her country (UNHCR, 2019). During the last decades, the number of people worldwide escaping their homeland to seek refuge in other countries has increased significantly. The number of refugees globally has increased by 2.3 million people during 2018, and became 70.8 million by the end of the year (UNHCR, 2018). According to the statistics released by the Netherlands' Immigration and Naturalization Department (IND), 31,327 people applied for asylum in the country during the year of 2017 (IND, 2019). Although the number of requests was reduced to 22,167 in 2019, it is still a large number considering the population and area of the country. According to the recent data from IND, most of the requests came from Syria, Eritrea, and Iran (IND, 2019).

The present study focuses on Iranian refugees since they have recently become one of the largest populations in the Netherlands. Iranian migration balance (The difference between the number of Iranian migrants who have entered the Netherlands and the number of Iranian migrants who left the country) has dramatically grown from 440 in 2007 to 1124 in 2017 (CBS, 2019). According to the Dutch governmental statistics institution (CBS)[1], the total number of asylum requests registered by Iranians in the Netherlands was 2,420 in 2018, which compared to 555 in 2005, had a significant increase (CBS, 2019). The Iranian population in the Netherlands was reported to be 7,824 people in 2019 (CBS, 2019).

[1] Centraal Bureau voor de Statistiek

In this study, the below definitions applies to the mentioned terms:

Textbox 1: Definitions

Refugee: A person who is forced to flee his/her home country and is afraid of going back due to some life-threatening reasons such as insecurity, war, political issues.

Asylum seeker: A person who officially applied for sanctuary, but his/her request has not yet been processed.

Status holder: A person who has the legal Dutch residence permit for (un)determined time.

Retrieved from: "Handbook on procedures and criteria for determining refugee status and guidelines on international protection" (UNHCR, 2019).

1.2 The Mental Health of Refugees

The migration process, in general, can be very stressful because people have to leave their homes and start living in a new country with a different culture, language, and living environment. This process is significantly more challenging for refugees than other immigrants due to imposing psychological and mental damages. In addition to the common difficulties assigned to the migration process, refugees are psychologically under the pressure of stressful problems and events during three stages, namely premigration, the asylum-seeking journey, and postmigration in the destination country (WHO, 2019). Studies on refugees' mental health showed that refugees are weaker and more vulnerable than the native people in the host country due to the political, economic, and social problems they have experienced in their home country (Lau & Thomas, 2008; Mangrio & Forss, 2017). Moreover, the stressful events that take place before, during, and after the asylum procedure, as well as the uncertainty and fear of the unknown future, can all have a negative impact on the mental wellbeing of refugees (WHO, 2019). Some studies showed a wide range of mental problems such as depression, anxiety, and post-traumatic stress disorder (PTSD) among refugees and indicated their specific needs for psychological help (Steel et al., 2017; Sadeghi et al., 2016; Lindert et al., 2009; CONFLICT, n.d.; Fazel et al., 2005).

1.3 Positive Mental Health

Mental health is more than the absence of psychological disorders such as anxiety and depression (Keyes, 2007; Tozer et al., 2018), and some additional conditions are required for an individual's mental wellbeing (Keyes, 2007; Keyes & Lopez, 2009). Keyes (2002), defines positive mental health as a combination of hedonic wellbeing with the psychological and social aspects of eudaimonic wellbeing (Keyes, 2002). Hedonic wellbeing – also called emotional wellbeing- encompasses the feelings of satisfaction, happiness, and interest in life. The psychological aspect of eudaimonic wellbeing refers to the positive functioning of an individual, such as self-acceptance, and having a purpose in life. The social aspect relates to the positive functioning within society, such as social integration and social coherence (Westerhof & Keyes, 2010). Keyes (2002) explains the presence of positive mental health as flourishing in life. It refers to a condition in which an individual feels enthusiastic about life and is actively engaged in psychological and social functioning. Keyes (2002) also describes the lack of positive mental health as languishing in life. An individual who is neither languishing nor flourishing in life is considered as moderately healthy (Keyes, 2002).

In the field of psychological research of refugees, a large body of research has been focused on the psychopathological domain of mental health, but the positive dimension of wellbeing has been neglected (Tozer et al., 2018). The study done by Tozer and colleagues (2018) is one of the few studies about positive psychology among refugees. They explored the contribution of resilience, acculturation, and school connectedness to the mental wellbeing of young refugees from twenty-four different countries in Australia. Their study showed that the higher level of psychological protective factors, including resilience, acculturation, and school connectedness, are associated with higher wellbeing and lower psychological issues such as anxiety. Another study by Kandemiri (2019) investigated the contribution of forgiveness as a positive factor in the Congolese refugees' mental wellbeing in South Africa. The result showed

that forgiveness might improve the mental health of female Congolese refugees and decrease their anxiety, depression, and anger (Kandemiri, 2019). Moreover, the research done by Bajwa and colleagues (2019) on different groups of adult refugees in Canada indicated how a supportive educational intervention through improving hope, resilience, optimism, and self-esteem, can increase life satisfaction and mental wellbeing among refugees (Bajwa et al., 2019).

1.4 Self-Compassion

Neff (2003) defines self-compassion as a capacity to be kind and caring towards oneself. Moreover, it is defined as an ability to alleviate ones' own suffering by generating a compassionate attitude rather than hurting oneself by being harshly self-critical (Neff, 2003a). Self-compassion is conceptualized by three interacting components:

1. Self-kindness versus Self-judgment
2. Common humanity versus Isolation
3. Mindfulness versus Over-identification.

Self-kindness is a tendency to treat oneself with sympathy and concern when confronting pain or failures. Furthermore, it constitutes having an open-minded attitude in order to accept difficult life situations as an inevitable part of life (Neff, 2003b; Neff, 2003a). The concept of common humanity in self-compassion refers to the realization that no one is perfect, and suffering, making mistakes or failure is a part of human nature. Thus, it is essential to forgive all one's mistakes and treat oneself respectfully. The final component, mindfulness, is about a moment to moment awareness of one's painful experiences and having a non-judgmental attitude towards one's own feelings, thoughts, and actions (Neff, 2003a) instead of ignoring or suppressing these difficult emotions.

The wide range of studies has been done over the past years indicated a significant association between self-compassion and mental health (Neff, 2009; Birnie et al., 2010;

Barnard & Curry, 2011;). Scientific evidence shows that self-compassion is a predictor of psychological wellbeing and mental health promotion (Smeets et al., 2014). Self-compassion not only increases the level of positive mind-states such as self-confidence, optimism, life satisfaction and happiness (Heffernan et al., 2010; Hollis-Walker & Colosimo, 2011; Yang et al., 2016), but could also be an important factor for decreasing anxiety (Arimitsu & Hofmann, 2015) and depression disorders (Baker et al., 2019; Raes, 2010; Wilson et al., 2019). The result of a systematic review of the relationship between self-compassion and psychopathology indicated that a higher level of self-compassion is associated with lower depression and anxiety. And conversely, a lower level of self-compassion is linked to higher depression and anxiety (MacBeth & Gumley, 2012).

1.5 Self-Compassion in Refugees

The number of studies on self-compassion has grown rapidly in the last decades (Brach, 2004); nonetheless, it has never been examined among refugees so far. A combination of the search terms "self-compassion" and "refugee" or "asylum seeker" in Scopus revealed no relevant hints. Searching for "self-compassion", "refugee", and "asylum seeker" on Google and Google scholar only resulted in one study. Langroudi and Skinta (2019), in their research, explored the specific needs of gender and sexual minorities (GSM) in Muslim refugees in the United States. Their study indicated the different psychological impacts of minority stress, and examined how this stress might be alleviated through a combination of Compassion-Focused Therapy (CFT) and Acceptance and Commitment Therapy (ACT). Their study showed that ACT and CFT could provide an appropriate framework for a therapy that suits the GSM's needs.

As a summary, refugees experience impaired mental health and have to deal with difficult emotions and suffering. Furthermore, they may blame themselves and be self-critical due to what they have experienced, have ignored, and have done in their lives. Although a wide range of studies have shown that self-compassion is a determinant of positive and negative

mental health among different sample groups, to the best knowledge of the author, self-compassion among refugees is yet to be studied to the full extend. Therefore, it is necessary to address this issue and provide information for relevant organizations and decision-makers to improve refugees' psychological condition.

The Present Study

This study aims to explore depression, anxiety, positive mental health, and specifically self-compassion as a predictor of mental health among Iranian refugees in the Netherlands. It intends to investigate the association of (positive and negative) mental health and self-compassion with socio-demographic (i.e., gender, age, education) and migration-related variables (i.e., length of stay, asylum status, language acculturation, and residential status). Moreover, it examines the correlation between (positive and negative) mental health and self-compassion among Iranian refugees in the Netherlands. To that end, the following questions shall be addressed:

Research Questions

1. How do Iranian refugees in the Netherlands score in negative and positive aspects of mental health and self-compassion?
2. To what extent are anxiety, depression, positive mental health, and self-compassion associated with socio-demographic variables (i.e., gender, age, education) and migration-related variables (i.e., length of stay, asylum status, language acculturation, and residential status)?
3. To what extent are depression, anxiety, positive mental health, and self-compassion among Iranian refugees in the Netherlands intercorrelated?

2. Methods

Study design

The following conducted research involved a cross-sectional study using an online survey design. The data collection was done in February 2020. The BMS Ethics Committee of the University of Twente has approved this investigation (200050).

2.1 Participants and Procedure of the Study

Participants were recruited among the Iranian refugees' group in the Netherlands with an advertisement on social media. Iranian refugees above 18 years old who lived in the Netherlands and could read, write, and speak in the Farsi language were considered eligible for this study. The URL link to the online questionnaire was shared along with an invitation message on social media, including Telegram groups/channels, Facebook pages, and Twitter, which are frequently read by Iranians. In the invitation message, the potential participants were informed about the purpose of the study, the approximate duration of the survey, the type of questions, and the confidentiality of the study (see Appendix 1). The interested participants who clicked on the link were asked to sign an online informed consent (see Appendix 2). If no informed consent was given, the individual could not participate in the study, and the questionnaire was displayed a "THANK YOU AND GOODBY" message. If the informed consent was approved, participants could fill out the questionnaire. In total, 230 responses were collected, from which about 116 were answered completely. The participants spent an average of 10 minutes on the survey. Since the participants were Farsi speaking, the information letter, consent form, and questionnaire were translated from English into Farsi. In order to respect the privacy of the participants, the IP addresses were not recorded.

2.2 Materials

The online questionnaire that was conducted in this research included several questions over socio-demographic and migration-related factors, language acculturation, self-compassion, positive mental health, depression and anxiety.

2.2.1 Socio-Demographic and Migration-Related Variables

In this study, socio-demographic variables including age, gender, and education: (1- Less than high school, 2- High school graduate,3- Bachelor, 4- Master or higher) were measured. Moreover, asylum status (asylum seeker, status holder), residential status (living in a refugee center, living in the private house, living with a Dutch family), language acculturation, and the length of stay in the Netherlands (LOS) as migration-related variables were examined. The participants could choose the answering options, which fits their situation the best (For exact wording and answering option see table1).

2.2.2 Language Acculturation

The language acculturation of the participants was measured through an adapted version of the Short Acculturation Scale for Hispanics (SASH) (Marin et al.,1987). This scale consists of four items:

1. "In general, what language(s) do you read and speak?"
2. "What language do you usually speak at home?"
3. "In what language do you usually think?"
4. "What language do you usually speak with your friends?"

In the reference scale, participants are asked to determine their preference for using Spanish (as their mother language) and English (as their second language) based on a five-point Likert scale. In the current study, SASH was translated to Farsi, and respondents were asked to indicate their preference for using Farsi (as their mother language) and Dutch (as their second language) through scoring scales: "1= only Farsi", "2= Farsi better than Dutch", "3= Both

equally", "4=More Dutch than Farsi" and "5= only Dutch". Based on the reference scale, score 2.99 was considered as the cut-off point, and the scores higher than this point indicated more language acculturation. The reliability of the adapted Farsi-Dutch version of SASH was established with Cronbach's alpha at 0.75. The scale score was calculated by computing the average of scores.

2.2.3 Self-compassion

Self-compassion (SC) was measured through the short form of the Self-Compassion Scale (SCS–SF) developed by Raes et al. (2011). The 12-item Self-Compassion Scale (short form) measures the level of self-compassion through following six components:

1. *Self-kindness* (e.g., "I try to be understanding and patient towards those aspects of my personality I don't like"),
2. *Self-judgment* (e.g., "I'm intolerant and impatient towards those aspects of my personality I don't like"),
3. *Common humanity* (e.g., "When I feel inadequate in some way, I try to remind myself that feelings of inadequacy are shared by most people"),
4. *Isolation* (e.g., "When I fail at something that's important to me, I tend to feel alone in my failure"),
5. *Mindfulness* (e.g., "When something upsets me, I try to keep my emotions in balance")
6. *Over-identification* (e.g., "When I fail at something important to me, I become consumed by feelings of inadequacy").

The respondents were asked to determine how often they behave in the stated manner via a five-point Likert scale (1=Almost never; 5=Almost always). Self-kindness, common humanity, and mindfulness items are regarded as self-compassion positive subscale (SC-P) and measure self-compassion. Moreover, self-judgment, isolation, and over-identification items are

considered to be self-compassion negative subscale (SC-N) and measure self-criticism (López et al., 2015). Khanjani et al. (2016) investigated the psychometric properties of the Farsi version of SCS-SF in Iran. The SCS-SF Farsi version, which used in the current study, had shown a good internal consistency with Cronbach's alphas 0.86 for the total scale. The Cronbach's alpha for the negative and positive subscales were 0.82 and 0.76, respectively. Three mean scores were calculated for the total scale and its subscales. A higher score in the positive subscale indicates a higher level of self-compassion, and a higher score in negative subscale indicates a higher level of self-criticism. Because in total scale, negative subscale items are scored in reverse, then a higher score in the total scale indicates a higher level of self-compassion

2.2.4 Positive Mental Health

The participants' positive mental health was measured with the Mental Health Continuum-Short Form (MHC) (Keyes et al., 2008). MHC is a 14-item self-report questionnaire that measures three components of positive mental health:

1. *Emotional Wellbeing (EW)* consists of happiness, interest in life, and satisfaction (e.g., "During the past month, how often did you feel happiness?").
2. *Social Wellbeing (SW)* consists of five items (e.g., "During the past month, how often did you feel that people are basically good?").
3. *Psychological Wellbeing (PW)* consists of six items (e.g., "During the past month, how often did you feel that you liked most parts of your personality"?).

Participants were asked to determine how often they experience each statement during the past month via a six-point Likert scale (Never, Once or twice, About once a week, About two or three times a week, Almost every day, Every day). The study conducted by Rafiey et al. (2017) demonstrated the reliability and validity of the Farsi version of the MHC scale (short form) in Iran. In the current study, the Farsi version of MHC (short form) has shown internal consistency

with the Cronbach's alpha of 0.92 for the total scale. The alpha for emotional, social, and psychological wellbeing subscales was obtained as 0.87, 0.83 and 0.83, respectively. Four mean scores were calculated for the total scale and its three subscales. In the total scale and all subscales, higher scores indicate a higher level of positive mental health.

2.2.5 Anxiety and Depression

In order to measure anxiety and depression, the Hospital Anxiety and Depression Scale (HADS) (Zigmond & Snaith, 1983) was used. It consists of 14 items: 7 items measure depression (e.g., "I still enjoy the things I used to enjoy") and 7 items related to anxiety (e.g., "Worrying thoughts go through my mind"). Each item is scored by a four-point Likert scale from 0 to 3, depending on how strongly the participant experiences the item during the past week. The scores for each subscale of anxiety and depression are ranged between 0 to 21, and the scores for the total scale are ranged from 0 to 42. In the subscales, the scores of 11 to 21 are considered definite cases, 8 to 10 doubtful cases, and 0 to 7 healthy or being none cases (Zigmond & Snaith, 1983). In the total scale, the scores 19 or more are considered definite cases, 13 to 18 doubtful cases, and scores below 13 represent healthy or being none cases (Razavi et al., 1990). The study done by Montazeri et al. (2003) demonstrated the reliability and validity of the Farsi version of HASD in Iran. In the current study, the Farsi version of HADS has shown internal consistency with the alpha of 0.88 for the total scale. The alpha for anxiety and depression subscales were 0.81 and 0.75, respectively. Three sum scores were calculated for anxiety and depression subscales, and the total scale.

2.3 Data analysis

All data were analyzed using SPSS version 25. To gain an overall view of the data, the descriptive statistics consisting of the means and standard deviations for HADS, MHC, SC, and all subscales were computed (see table2). For answering the first research question, the mean scores on depression, anxiety, positive mental health and self-compassion of Iranian

refugees were calculated (RQ1). Furthermore, to obtain a better view of the outcomes, the result of above calculation was compared against the norm scores from the Dutch population and the one from Iranians in Iran. It should be noted that the author was not able to find concrete data for self-compassion, depression and anxiety regarding the general Iranian population. However, the most relevant studies in this regard was found to be among the manufacturing employees in Iran (Heidari et al., 2019) and Iranian undergraduates' students in the country (Ghorbani et al., 2012). The differences between mean scores and comparison scores were tested with the one-sample t-test (see table 2). The association of depression, anxiety, positive mental health, and self-compassion with socio-demographic variables (i.e., age, education, gender) and migration-related variables (i.e., asylum status, residential status, length of stay, language acculturation) were investigated in two ways. Firstly, the differences between means of categorical variables (i.e., gender, asylum status, residential status) were examined with Mann-Whitney and Kruskal-Wallis tests (see table 3). Secondly, the association of ordinal variables (i.e., age, education, length of stay, language acculturation) with HADS, MHC and SC were calculated with Spearman correlation (RQ2). Moreover, the Spearman correlation coefficient was calculated between all the relevant variables (depression, anxiety, positive mental health, and self-compassion) (see table 4) (RQ3). Spearman coefficient ranges from +1 to –1. Zero can be interpreted as no association, and (–1 or +1) can be described as a perfect direct or inverse relationship between the two variables. Values in the range of ±0.40 are interpreted as "week correlation" and correlations with an absolute values in the ranges of 0.40 – 0.69, 0.70 – 0.89 and 0.90 - 1.00 are considered moderate, strong and very strong respectively (Schober, et al 2018).

3.Results

3.1 Description of the Study Group

Table 1 shows the descriptive statistics of the study group. In total, 116 participants (64 men and 52 women), with an average age of 35.3 (SD=8.2), have completed the questionnaire. The participants were heterogeneous in the level of education, length of stay in the Netherlands, the asylum status, and the residential status. The time they have been living in the Netherlands varied from 1 to 360 months (M=40.0, SD=47.8), but most were in the Netherlands between 1 and 5 years, and more than half of them were graduated from the university. A few of the participants had the Dutch residence permit (i.e., status holder) and resided in a private home or lived with a Dutch family. While a large number of participants lived in the refugee centers, waiting for a residence permit (i.e., asylum seekers). The far majority (n= 106, 91%) showed low language acculturation regarding the cut-off score 2.99. This means a large number of Iranian refugees in the Netherlands do not use the Dutch language in their daily life (M=1.9, SD=0.7).

Table 1: Descriptive statistic of the participants (N =116)

Variable	Category	Frequency	Percent	Mean ± SD
Gender	male	64	55.2%	
	female	52	44.8%	
Age	< 30	31	26.7%	35.3 ± 8.2
	(31-40)	65	56.0%	
	(41-50)	14	12.1%	
	>50	6	5.2%	
Education	1- Less than high school	2	1.7%	
	2- High school graduate	37	31.9%	
	3- Bachelor	60	51.7%	
	4- Master or higher	17	14.7%	
Length of stay in the Netherlands	1-12 months	23	19.8%	40.0 ± 47.8
	13-60 months	72	62.1%	
	61-120 months	14	12.1%	
	>120 months	7	6.0%	
Residential status	Living in a refugee center	77	66.4%	
	Living in the private house	34	29.3%	
	Living with a Dutch family	5	4.3%	
Asylum status	Asylum seeker	81	69.8%	
	Status holder	35	30.2%	
Language-Acculturation	Range: 1-5	-	-	1.9 ± 0.7

3.2 Negative and Positive Mental Health of Iranian Refugees in the Netherlands

Table 2 summarizes the statistics representing the mental health of Iranian refugees in the Netherlands. Given that the scores higher than 11 in both anxiety and depression subscales are considered definite cases, it can be concluded that many Iranian refugees suffer from a high level of depression and anxiety. A significantly higher level of anxiety and depression, compared to the general Dutch population and Iranians in Iran (i.e., manufacturing employees) can be observed among the sample group. Iranian refugees demonstrated a low level of positive mental health within the range scores of 0-5. Their total mean score of MHC was noticeably lower than the general Dutch population and the general Iranian population in Iran. Furthermore, within the range scores of (1-5), Iranian refugees showed a significant moderate level of self-compassion, which was lower than the general Dutch population but did not differ significantly from Iranians in Iran (i.e., undergraduates' students).

Table 2. Anxiety, depression, mental wellbeing and self-compassion of Iranians in the Netherlands (N=116)

Measure	Range	Mean ± SD	n(%)	Comparison scores			
				Dutch in NL	p[1]	Iranians in Iran	p[1]
HADS total	0-42	22.9 ± 8.6	-	8.4 ±3.6[A]	0.00	4.3 [D]	0.00
Score <13 (Being none cases)			19 (16.4%)				
Score 13-19 (Doubtful cases)			16 (13.8%)				
Score>19 (Definite cases)			81 (69.8%)				
HADS Anxiety	0-21	11.4 ± 4.3		5.1± 3.6[A]	0.00	2.2 ± 2.9[D]	0.00
Score <8 (Being none cases)			25 (21.6%)				
Score 8-11 (Doubtful cases)			22 (19%)				
Score>11 (Definite cases)			69 (59.5%)				
HADS Depression	0-21	11.6 ± 4.7		3.4 ±3.3[A]	0.00	2.2 ± 2.6[D]	0.00
Score <8 (Being none cases)			29 (25%)				
Score 8-11 (Doubtful cases)			14 (12.1%)				
Score>11 (Definite cases)			73 (62.9%)				
MHC total	0-5	2.1 ± 1.2	-	3.0±0.9[B]	0.00	3.2 ± 0.8[E]	0.00
Emot. WB		1.7 ± 1.4		3.7±0.9	0.00	3.0± 1.0	0.00
Social WB		2.0± 1.3		2.3±1.0	0.00	2.8±0.8	0.00
Psych WB		2.4 ± 1.2		3.2±1.0	0.00	3.5±0.9	0.00
SC total	1-5	3.1± 0.8	-	3.3±0.5[C]	0.00	3.1± 0.5[F]	0.97
Sc positive		3.2 ± 0.8					
Sc negative		3.0 ± 0.9					

Note. HADS= Hospital Anxiety and Depression Scale; MHC=Mental Health Continuum; SC= Self-compassion Scale-Short; Sc-negative= Self-compassion negative subscale; Sc-positive= Self-compassion positive subscale; WB= Wellbeing; (Spinhoven et al., 1997)[A],(In the present study, the MHC scores were ranged from 0-5, while in Lamers et al.'s (2011) research the scores were ranged from 1-6, therefore one was deducted from mean scores in Lamers et al.'s (2011) study.)[B], (López et al., 2015, In order to compare the presented scores in this study to the current study, the sum score of self-compassion in the Dutch population was changed to the mean score)[C], (Heidari et al., 2019 investigated anxiety and depression among Iranian manufacturing employees)[D],(Shaban et al., 2020, In order to compare the presented scores in this study to the current study, the sum score of MHC in the Iranian population in Iran was changed to the mean score)[E], (Ghorbani et al., 2012 investigated self-compassion among Iranian undergraduates' students. The long form of self-compassion was conducted in this study)[F] ; (Differences between mean scores and comparison scores were tested with One sample T-test)[1]. ($p \leq 0.05$).

3.3 To what extent are (positive and negative) mental health and self-compassion associated with socio-demographic & migration-related variables?

To examine the association of depression, anxiety, positive mental health, and self-compassion with socio-demographic and migration-related variables (RQ2), the mean score of categorical variables (i.e., gender, asylum status, residential status) were calculated and compared with each other (see table 3 for results). Moreover, the correlation between ordinal variables (i.e., age, education, length of stay, language acculturation), and depression, anxiety, positive mental health and self-compassion were computed. From table 3 can be read that men showed a significantly higher self-compassion than women. Also, asylum seekers reported a significantly higher level of anxiety and depression than status holders. Moreover, people who live in refugee centers showed a significantly higher level of depression than people who live in their private homes and/or live with a Dutch family.

Table 3. Mean scores (SD) on depression, anxiety, positive mental health (MHC) and self-compassion (SC) by Gender, Asylum status and Residential status (N=116)

variables		Depression			Anxiety			MHC			SC		
	n	**M**	**(SD)**	**p**	**M**	**(SD)**	**p**	**M**	**(SD)**	p	**M**	**(SD)**	**p**
Gender [1]													
Male	64	11.1	(4.3)		11.0	(4.9)		2.2	(1.2)		3.2	(0.8)	
Female	52	11.7	(4.2)	.22	12.2	(4.4)	.47	1.9	(1.1)	.22	2.9	(0.8)	.05
Asylum status [1]													
Asylum seeker	81	12.2	(4.2)		12.2	(4.6)		2.0	(1.1)		3.0	(0.8)	
Status holder	35	9.3	(3.7)	**.00**	10.1	(4.7)	.04	2.4	(1.3)	.15	3.2	(0.8)	.24
Residential status [2]													
Living in a refugee center	77	12.1	(4.2)		12.0	(4.5)		2.0	(1.0)		3.1	(0.7)	
Living in a private house	34	9.9	(3.9)		10.9	(4.7)		2.2	(1.3)		3.1	(0.8)	
Living with a Dutch family	5	9.4	(5.3)	.02	8.6	(8.0)	.42	3.0	(1.9)	.42	3.4	(1.2)	.85

Note. MHC = Mental Health Continuum – Short Form; SC= Self-compassion Scale- Short; Asylum seeker = A person who officially applied for sanctuary, but his/her request has not yet been processed; Status holder: A person who has the legal Dutch residence permit for (un)determined time; Differences between groups were tested with Mann-Whitney[1] and Kruskal-Wallis[2] tests. ($p \leq 0.05$).

Language acculturation showed a significant positive correlation with self-compassion ($rs(116)= 0.33$, $p < 0.01$) and positive mental health ($rs(116)= 0.25$, $p < 0.01$). It also had a significant negative correlation with anxiety ($rs(116)= -0.28$, $p < 0.01$) and depression ($rs(116) = -0.30$, $p < 0.01$). Moreover, length of stay variable showed a significant negative correlation with depression ($rs(116)= -0.18$, $p < 0.05$). Finally, age and education showed no significant correlation with (positive and negative) mental health and self-compassion.

3.4 How are HADS, MHC, and SC Related?

Table 4. Spearman correlation test for HADS, MHC and SC (Including subscales), (N=116)

(Sub)scale	1	2	3	4	5	6	7	8	9	10
1=HADS										
2=Dep	.94**									
3=Anxiety	.95**	.80**								
4=MHC	-.66**	-.61**	-.64**							
5=EW	-.76**	-.70**	-.73**	.80**						
6=SW	-.53**	-.49**	-.51**	.89**	.67**					
7=PW	-.57**	-.52 **	-.57**	.93**	.93**	.71**				
8=SC	-.69**	-.58**	-.68**	.53**	.55**	.38**	.56**			
9= SC-N	.63**	.56**	.63 **	-.48**	-.48**	-.34**	-.51**	-.90**		
10= SC-P	-.59**	-.50**	-.61**	.51**	.52**	.37**	.54**	.89**	-.63**	

Note. N=116. HADS= Hospital Anxiety and Depression Scale; Anxiety (HADS Subscale); Dep=Depression (HADS Subscale); MHC = Mental Health Continuum – Short Form; EW= Emotional wellbeing; SW= Social wellbeing; PW= Psychological wellbeing; SC= Self-compassion Scale- Short; SC-N= Self-compassion Negative subscale; SC-P= Self-compassion Positive subscale; ** Correlation is significant at the 0.01 level (2-tailed).

Table 4 displays how HADS, MHC, and SC are related. In order to examine the correlation between depression, anxiety, positive mental health, and self-compassion among Iranian refugees in the Netherlands (RQ3), Spearman correlation coefficients between all scales and their subscales were computed. Regarding HADS and MHC (including their subscales) a

significant moderate to strong negative association was found between HADS and MHC (and their subscales). On the one hand, MHC and its components showed a significant moderate positive correlation with the self-compassion and its positive subscale; on the other hand, it had a significant moderate negative correlation with self-compassion negative subscale. Among MHC's components, social wellbeing had the weakest and psychological wellbeing had the strongest association with self-compassion and its positive and negative subscales. Regarding self-compassion (SC), a significant strong positive association was found between SC and self-compassion positive subscale (SC-P), while a very strong negative association was found between SC and self-compassion negative subscale (SC-N). Moreover, SC and SC-P showed a moderate negative correlation with HADS, depression, and anxiety, whereas SC-N showed a moderate positive correlation with HADS, depression, and anxiety. Compared to SC-P, SC-N correlated relatively stronger to HADS, depression, and anxiety, but correlated weaker to MHC.

4.Discussion

The present study is conducted to explore (positive and negative) mental health and self-compassion among Iranian refugees in the Netherlands. Moreover, the association of depression, anxiety, positive mental health, and self-compassion with socio-demographic (i.e., age, gender, education), and migration-related variables (i.e., asylum status, residential status, length of stay, language acculturation) was examined. Finally, the association between (positive and negative) mental health and self-compassion was investigated.

4.1 Positive and Negative Mental Health in Iranian Refugees

The present study demonstrated that Iranian refugees in the Netherlands suffer from high depression and anxiety in comparison with the Iranians in Iran (i.e., manufacturing employees) (Heidari et al., 2019), and the general Dutch population (Spinhoven et al., 1997). Surprisingly,

Iranian refugees' anxiety and depression were even higher than anxiety and depression among the Dutch amputees (Verschuren et al., 2016) and breast cancer patients in Iran (Montazeri et al., 2003). Moreover, Iranian refugees in the Netherlands had lower positive mental health compared to the general Dutch population (Lamers et al., 2011) and general Iranian population in Iran (Shaban et al., 2020). In the present study, we were particularly interested in the level of self-compassion among Iranian refugees in the Netherlands. The results revealed that the level of self-compassion can be regarded as moderate; which was slightly lower than the level of self-compassion in the general Dutch population (López et al., 2015) and almost equal with the level of self-compassion among Iranian undergraduates' students in Iran (Ghorbani et al., 2012) (see table 2). The findings of this study are in line with the research done by Gerritsen et al.'s (2006) about the mental health of refugees that showed symptoms of depression and anxiety are highly prevalent among Iranian refugees in the Netherlands. Moreover, the previous finding of Beiser and Hou (2017) on the positive mental health in refugees and migrants from different countries in Canada showed that the positive mental health among refugees was lower than other migrants. As a possible explanation, it can be said that refugees experience a low level of happiness and life satisfaction since they are far from their family and friends. They also have difficulty in pursuing their goals because of the uncertain future. Moreover, it is difficult for refugees to build a sense of belonging in the society because of language and cultural limitations. All of these issues can affect refugees' mental health, since mental health is not achieved only by the absence of mental disease, and the presence of the positive mental wellbeing is also necessary. Therefore, refugee organizations such as Centraal Opvang voor Asielzoeker[2] (COA), along with medical services, should organize different group activities with the cooperation of Dutch volunteers and help refugees to find friends, perform artistic activities, find a voluntary job, and be more acquainted with the new language and culture.

[2] Central Reception for Asylum seekers

4.2 Association of HADS, MHC, and SC with Socio-Demographic and Migration-Related Variables

The results of this research showed that asylum seekers had a higher level of anxiety and depression than status holders. These findings are aligned with the previous investigations which showed that asylum seekers suffer from more mental disturbance than the refugees who have a resident permit (Heeren et al., 2014; Momartin et al., 2006; Gerritsen et al., 2006). One possible explanation is that the lack of resident permit can lead to psychological insecurity (Fazel et al., 2012), less service access, and more living difficulties, which all affect the mental health of asylum seekers (Nickerson et al., 2011). Based on these findings, it is recommended that the relevant organizations such as COA and IND consider the refugees' psychological conditions and reduce the length of the asylum procedure as much as possible by increasing the number of staff or changing the interview methods.

Regarding the residential status, the obtained result showed that the group of asylum seekers who live in the refugee camps suffer from more depression and anxiety than the groups who live in their private home and/or live with Dutch families[3]. These findings are in line with the Ajduković & Ajdukovićs's (1993) study that showed refugees who lived with host families reported fewer symptoms of stress than those living in the refugee camps. Moreover, the other study showed that living in a private home with a sense of safety might be a predictor of less mental health problems (Fazel et al., 2012). One possible explanation could be the existence of problems in refugee camps that can impair refugees' mental health. A recommendation for solving this problem could be to interview refugees and staff in the refugee centers. Therefore, healthcare researchers can explore and provide information about the probable psychological and physical needs and barriers of refugees. They should make this information available to COA and IND in order to minimize barriers and meet needs as much as possible.

[3] It should be noted that only five persons out of the participants lived with Dutch families and this is not a significant observation.

The findings of this study showed that refugees who have lived longer in the Netherlands had lower depression than those with a shorter length of stay. These results appear to contradict the finding of Guajardo et al. (2016), who studied the length of stay and mental health in Iraqi refugees in Australia. Their study showed that refugees with longer length of stay had more psychological distress, than who lived shorter in Australia. One possible hypothesis to explain this discrepancy can be the difference between Australian and Dutch services for the refugees. Also, cultural differences between Iranians and Iraqi refugees and their core reasons for migration can be a key factor towards the above contrast. As future work, it is recommended to conduct a study among Iraqi refugees in the Netherlands or Iranian refugees in Australia and examine these hypotheses.

The present study demonstrated that the Iranian refugees with greater language acculturation had lower anxiety and depression, and higher positive mental health and self-compassion. The systematic review of Koneru et al. (2007) about acculturation and mental health showed that in some studies a higher level of acculturation was related to a higher level of mental health. Additionally, in other studies a higher level of acculturation was associated with a lower level of mental health (Koneru et al,.2007). One possible explanation for this discrepancy in literature could be the use of different acculturation scales. For example, in the present study the short acculturation scale (SASH) (Marin et al.,1987), measured only the language acculturation. Another possible hypothesis could be the role of a third hidden variable which has not been considered so far. Therefore, future research is recommended to examine if moderator variables (e.g., religious, cultural, social, and psychological background) can moderate the association of acculturation with mental health in refugees.

Lastly, the results of this research showed that none of the demographics characteristics (i.e., age and education) were significantly associated with (positive and negative) mental health and self-compassion, except gender: men showed significantly higher self-compassion

than women. These obtained results are aligned with the prior studies on the role of gender in self-compassion (Hill & Lynch, 1983; Yarnell et al., 2015; Bluth et al., 2016), that showed men had a higher level of self-compassion than women. One of the reasons could be the impact of sex stereotypes and gender roles, which may cause lower self-compassion in females than men (Hill & Lynch, 1983).

4.3 The Correlation between HADS, MHC, and SC

The present study suggested that anxiety and depression had a moderate negative association with positive mental health and its components (emotional, social, and psychological wellbeing). Keyes' (2002) findings showed although positive mental health and mental illness are somewhat intercorrelated, they are distinctive factors of wellbeing. (Keyes, 2002). This means that an individual despite having a mental illness, may still experience some aspects of mental health, such as personal growth. Also, a person even without experiencing a mental illness, may still do not feel mentally healthy (Westerhof & Keyes, 2010). Therefore, positive mental health should be considered as important as mental illness in refugees. A practical implication could be creating interventions which not only aim to prevent mental illness but also help refugees to live a meaningful and happy life. For example, refugee organizations (e.g., COA) besides alleviating refugees' anxiety and depression, can enhance their wellbeing by organizing group music therapy (including listening to music, playing instruments, and singing) in asylum centers (Hawkes, 2020; Hunt, 2005).

Consistent with previous research (Karakasidou & Stalikas, 2017) about the effect of a pilot self-compassion program on components of wellbeing, the present study showed that an increase in self-compassion was associated with an increase in positive mental health, also a decrease in depression and anxiety. This means people with higher self-compassion may have higher mental health. Moreover, the current study showed that the positive subscale of self-compassion (SC-P) correlated moderately to positive mental health. And compared to (SC-P),

the negative subscale of self-compassion (SC-N) correlated slightly weaker to positive mental health and correlated relatively stronger to depression and anxiety. These findings seem to be consistent with the previous findings of López et al., (2018 & 2015) on the self-compassion scale that showed in comparison with (SC-P), the negative subscale of self-compassion (SC-N) had a stronger positive correlation with depression. This means people who are more self-critical may experience a higher level of depression and anxiety and a relatively lower level of wellbeing (in three emotional, social, and psychological dimensions) than those who are less self-critical. As a result, self-compassion can be considered as a determinant factor for positive and negative mental health in Iranian refugees. A practical implication could be that, refugee organizations (i.e., COA and VluchtelingenWerk[4]), with the cooperation of health professionals, should improve refugees' mental health by organizing self-compassion group interventions such as "Making Friends with Yourself" (Bluth et al., 2016) or Mindful Self-Compassion program (MSC) (Neff & Germer, 2013).

Strengths, Limitations, and Recommendations for Future Research

The present study is the first to investigate the self-compassion as a predictor of positive and negative mental health among refugees. This study added to the existing body of knowledge by examining the level of (positive and negative) mental health and self-compassion in Iranian refugees in the Netherlands and made it possible to compare these parameters between different Dutch and Iranian populations. Another strong point of this research can be the collection of desired data within ten days, despite the fact that refugees often feel insecure about sharing their information with others.

There could be some limitations in this study. Firstly, it is expected that our recruitment with the advertisement on social media attracted mostly people who have access to the internet

[4] Dutch Council for Refugees

and/or people who have an account on the common online platforms (e.g., Facebook, and Twitter). Secondly, inclusion criteria (ability to read and write in Farsi) prevented illiterate refugees from participating in research. Therefore, as a future research it is recommended to conduct a face-to-face questionnaire in order to collect a sample that can better represent the target population. Thirdly, an attempt was made to keep the questionnaire to a reasonable length. Therefore, the Short Acculturation Scale for Hispanics (SASH) (Marin et al.,1987) was conducted in this research, which only measured the language acculturation. For a future research it is recommended to employ a complete version of the acculturation scale. Moreover, the examination of self-compassion among refugees from other nations is suggested for further studies because there is a lack of information in this area.

Conclusion

A large number of Iranian refugees in the Netherlands suffer from severe depression, anxiety, and low positive mental health. Especially asylum seekers who do not have the resident permit, and those who lived in the asylum centers are in concerning conditions. Refugees who have lived longer in the Netherlands and have had greater language acculturation showed a lower level of distress in comparison to their peers. Iranian refugees scored as moderated in self-compassion, which was slightly lower than the level of self-compassion in the general Dutch population and almost equal with the level of self-compassion among Iranian undergraduates' students in Iran. The male population among the sample group had a higher self-compassion than females. Moreover, the findings of this research showed that self-compassion might be a predictor of positive and negative mental health among refugees. Therefore, enhancing self-compassion in refugees may improve their mental wellbeing, also alleviate their depression and anxiety. Future experimental research on self-compassion and mental health is recommended in order to find out whether an increase in self-compassion can improve mental health of refugees.

Reference

Ajduković, M., & Ajduković, D. (1993). Psychological well-being of refugee children. Child abuse & neglect, 17(6), 843-854.

Arimitsu, K., & Hofmann, S. G. (2015). Cognitions as mediators in the relationship between self-compassion and affect. Personality and Individual Differences, 74, 41–48.

Bajwa, J., Abai, M., Couto, S., Kidd, S., Dibavar, A., & McKenzie, K. (2019). Psychological capital and life satisfaction of refugees in Canada: Evidence from a community-based educational support program. Journal of Community Psychology, 47(3), 504–516.

Baker, D. A., Caswell, H. L., & Eccles, F. J. (2019). Self-compassion and depression, anxiety, and resilience in adults with epilepsy. Epilepsy & Behavior, 90, 154–161.

Barnard, L. K., & Curry, J. F. (2011). Self-compassion: Conceptualizations, correlates, & interventions. Review of General Psychology, 15(4), 289–303..

Beiser, M., & Hou, F. (2017). Predictors of positive mental health among refugees: results from Canada's General Social Survey. Transcultural psychiatry, 54(5-6), 675-695.

Birnie, K., Speca, M., & Carlson, L. E. (2010). Exploring self-compassion and empathy in the context of mindfulness-based stress reduction (MBSR). Stress and Health, 26(5), 359–371.

Brach, T. (2004). Radical acceptance: Embracing your life with the heart of a Buddha. Bantam.

Bluth, K., Gaylord, S. A., Campo, R. A., Mullarkey, M. C., & Hobbs, L. (2016). Making friends with yourself: A mixed methods pilot study of a mindful self-compassion program for adolescents. Mindfulness, 7(2), 479-492.

CBT. (2019, February 28). *Population*. Statistics Netherlands (Centraal Bureau voor de Statistiek). Retrieved from https://www.cbs.nl/en-gb/background/2018/47/population

CONFLICT, A. Culture, Context and the Mental Health and Psychosocial Wellbeing of Syrians.

Fazel, M., Reed, R. V., Panter-Brick, C., & Stein, A. (2012). Mental health of displaced and refugee children resettled in high-income countries: risk and protective factors. The Lancet, 379(9812), 266-282.

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.

Gerritsen, A. A., Bramsen, I., Devillé, W., van Willigen, L. H., Hovens, J. E., & Van Der Ploeg, H. 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.

Ghorbani, N., Watson, P. J., Chen, Z., & Norballa, F. (2012). Self-compassion in Iranian Muslims: Relationships with integrative self-knowledge, mental health, and religious orientation. International Journal for the Psychology of Religion, 22(2), 106-118.

Guajardo, M. G. U., Slewa-Younan, S., Smith, M., Eagar, S., & Stone, G. (2016). Psychological distress is influenced by length of stay in resettled Iraqi refugees in Australia. *International journal of mental health systems*, *10*(1), 4.

Hawkes, E. (2020). The Effects of Group Music Therapy on Levels of Anxiety, Depression, Well-Being, Functional Disability, and Distress in Adult Congolese Refugees. *SMU Journal of Undergraduate Research*, *5*(1), 8.

Heeren, M., Wittmann, L., Ehlert, U., Schnyder, U., Maier, T., & Müller, J. (2014). Psychopathology and resident status–comparing asylum seekers, refugees, illegal migrants, labor migrants, and residents. Comprehensive psychiatry, 55(4), 818-825.

Heffernan, M., Quinn Griffin, M. T., McNulty, S. R., & Fitzpatrick, J. J. (2010). Self-compassion and emotional intelligence in nurses. International Journal of Nursing Practice, 16(4), 366–373.

Heidari, Z., Feizi, A., Roohafza, H., Rabiei, K., & Sarrafzadegan, N. (2019). Are dietary patterns differently associated with differentiated levels of mental health problems? Results from a large cross-sectional study among Iranian manufacturing employees. *BMJ open*, *9*(1).

Hill, J. P., & Lynch, M. E. (1983). The intensification of gender-related role expectations during early adolescence. In Girls at puberty (pp. 201–228). Springer.

Hollis-Walker, L., & Colosimo, K. (2011). Mindfulness, self-compassion, and happiness in non-meditators: A theoretical and empirical examination. Personality and Individual Differences, 50(2), 222–227.

Hunt, M. (2005, July). Action research and music therapy: Group music therapy with young refugees in a school community. In *Voices: A world forum for music therapy* (Vol. 5, No. 2).

IND. (2019). *Asylum Trends Monthly Report on Asylum Applications in The Netherlands*. The Hague, The Netherlands. Retrieved from https://ind.nl/en/about-ind/figures-and-publications/Pages/Asylum-Trends.aspx

Kandemiri, P. (2019). Forgiveness as a positive contributing factor on the mental wellbeing of Congolese refugees and asylum seekers post-war experience. Journal of Human Behavior in the Social Environment, 29(8), 1044–1058.

Karakasidou, E., & Stalikas, A. (2017). The Effectiveness of a Pilot Self-Compassion Program on Well Being Components. Psychology, 8(4), 538-549.

Keyes, C. L. (2002). The mental health continuum: From languishing to flourishing in life. Journal of Health and Social Behavior, 207–222.

Keyes, C. L. (2007). Promoting and protecting mental health as flourishing: A complementary strategy for improving national mental health. American Psychologist, 62(2), 95.

Keyes, C. L., & Lopez, S. J. (2009). Toward a science of mental health. Oxford Handbook of Positive Psychology, 89–95.

Keyes, C. L., Wissing, M., Potgieter, J. P., Temane, M., Kruger, A., & Van Rooy, S. (2008). Evaluation of the mental health continuum–short form (MHC–SF) in setswana-speaking South Africans. Clinical Psychology & Psychotherapy, 15(3), 181–192.

Khanjani, S., Foroughi, A. A., Sadghi, K., & Bahrainian, S. A. (2016). Psychometric properties of Iranian version of self-compassion scale (short form). Pajoohandeh Journal, 21(5), 282-289.

Koneru, V. K., De Mamani, A. G. W., Flynn, P. M., & Betancourt, H. (2007). Acculturation and mental health: Current findings and recommendations for future research. Applied and Preventive Psychology, 12(2), 76-96.

Lamers, S. M., Westerhof, G. J., Bohlmeijer, E. T., ten Klooster, P. M., & Keyes, C. L. (2011). Evaluating the psychometric properties of the mental health continuum-short form (MHC-SF). Journal of clinical psychology, 67(1), 99-110.

Langroudi, K. F., & Skinta, M. D. (2019). Working with gender and sexual minorities in the context of Islamic culture: a queer Muslim behavioural approach. *the Cognitive Behaviour Therapist*, *12*.

Lau, W., & Thomas, T. (2008). Research into the psychological well-being of young refugees. International Psychiatry, 5(3), 60–62.

Lindert, J., von Ehrenstein, O. S., Priebe, S., Mielck, A., & Brähler, E. (2009). Depression and anxiety in labor migrants and refugees–a systematic review and meta-analysis. Social science & medicine, 69(2), 246-257.

López, A., Sanderman, R., & Schroevers, M. J. (2018). A close examination of the relationship between self-compassion and depressive symptoms. Mindfulness, 9(5), 1470-1478.

López, A., Sanderman, R., Smink, A., Zhang, Y., Van Sonderen, E., Ranchor, A., & Schroevers, M. J. (2015). A reconsideration of the Self-Compassion Scale's total score: self-compassion versus self-criticism. PloS one, 10(7).

MacBeth, A., & Gumley, A. (2012). Exploring compassion: A meta-analysis of the association between self-compassion and psychopathology. Clinical Psychology Review, 32(6), 545–552.

Mangrio, E., & Forss, K. S. (2017). Refugees' experiences of healthcare in the host country: A scoping review. BMC Health Services Research, 17(1), 814.

Marin, G., Sabogal, F., Marin, B. V., Otero-Sabogal, R., & Perez-Stable, E. J. (1987). Development of a short acculturation scale for Hispanics. Hispanic Journal of Behavioral Sciences, 9(2), 183-205.

Momartin, S., Steel, Z., Coello, M., Aroche, J., Silove, D. M., & Brooks, R. (2006). A comparison of the mental health of refugees with temporary versus permanent protection visas. Medical Journal of Australia, 185(7), 357-361.

Montazeri, A., Vahdaninia, M., Ebrahimi, M., & Jarvandi, S. (2003). The Hospital Anxiety and Depression Scale (HADS): translation and validation study of the Iranian version. Health and quality of life outcomes, 1(1), 14.

Neff, K. (2003). Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. Self and Identity, 2(2), 85–101.

Neff, K. D. (2003). The development and validation of a scale to measure self-compassion. Self and Identity, 2(3), 223–250.

Neff, K. D. (2009). The role of self-compassion in development: A healthier way to relate to oneself. Human Development, 52(4), 211.

Neff, K. D., & Germer, C. K. (2013). A pilot study and randomized controlled trial of the mindful self-compassion program. Journal of clinical psychology, 69(1), 28-44.

Nickerson, A., Steel, Z., Bryant, R., Brooks, R., & Silove, D. (2011). Change in visa status amongst Mandaean refugees: Relationship to psychological symptoms and living difficulties. Psychiatry research, 187(1-2), 267-274.

Raes, F. (2010). Rumination and worry as mediators of the relationship between self-compassion and depression and anxiety. Personality and Individual Differences, 48(6), 757–761.

Raes, F., Pommier, E., Neff, K. D., & Van Gucht, D. (2011). Construction and factorial validation of a short form of the self-compassion scale. *Clinical psychology & psychotherapy*, *18*(3), 250-255.

Rafiey, H., Alipour, F., LeBeau, R., Amini Rarani, M., Salimi, Y., & Ahmadi, S. (2017). Evaluating the psychometric properties of the Mental Health Continuum-Short Form (MHC-SF) in Iranian earthquake survivors. International Journal of Mental Health, 46(3), 243–251

Razavi, D., Delvaux, N., Farvacques, C., & Robaye, E. (1990). Screening for adjustment disorders and major depressive disorders in cancer in-patients. *The British Journal of Psychiatry*, *156*(1), 79-83.

Sadeghi, R., Shojaeizadeh, D., Arefi, Z., & Shaahmadi, F. (2016). Social support and mental health status among Afghan immigrants in North of Iran. International Journal of Public Health Papers, 1, 1–6.

Schober, P., Boer, C., & Schwarte, L. A. (2018). Correlation coefficients: appropriate use and interpretation. Anesthesia & Analgesia, 126(5), 1763-1768.

Shaban, N., Alipour, F., Ghaedamini Harouni, G., Sabzi Khoshnami, M., Yazdani, A., & Arshi, M. (2020). Social predictors of positive mental health in adult population of Tehran. *Social Work in Mental Health*, *18*(1), 1-11.

Smeets, E., Neff, K., Alberts, H., & Peters, M. (2014). Meeting suffering with kindness: Effects of a brief self-compassion intervention for female college students. Journal of clinical psychology, 70(9), 794-807.

Spinhoven, P. H., Ormel, J., Sloekers, P. P. A., Kempen, G. I. J. M., Speckens, A. E. M., & Van Hemert, A. M. (1997). A validation study of the Hospital Anxiety and Depression Scale (HADS) in different groups of Dutch subjects. *Psychological medicine*, *27*(2), 363-370.

Steel, J. L., Dunlavy, A. C., Harding, C. E., & Theorell, T. (2017). The psychological consequences of pre-emigration trauma and post-migration stress in refugees and immigrants from Africa. Journal of immigrant and minority health, 19(3), 523-532.

Tozer, M., Khawaja, N. G., & Schweitzer, R. (2018). Protective factors contributing to wellbeing among refugee youth in Australia. Journal of Psychologists and Counsellors in Schools, 28(1), 66–83.

UNHCR. (2018). *Global Trends report.* From https://www.unhcr.org/globaltrends2018/

UNHCR. (2019). *Handbook on Procedures and Criteria for Determining Refugee Status | Under the 1951 Convention and the 1967 Protocol relating to the Status of Refugees.* Retrieved from https://www.unhcr.org/publications/legal/5ddfcdc47/handbook-procedures-criteria-determining-refugee-status-under-1951-convention.html

Verschuren, J. E., Geertzen, J. H., Enzlin, P., Dijkstra, P. U., & Dekker, R. (2016). Sexual functioning and sexual well-being in people with a limb amputation: a cross-sectional study in the Netherlands. Disability and rehabilitation, 38(4), 368-373.

Westerhof, G. J., & Keyes, C. L. (2010). Mental illness and mental health: The two continua model across the lifespan. Journal of adult development, 17(2), 110-119.

World Health Organization. (2019). Promoting the health of refugees and migrants. Draft global action plan 2019–2023. *72nd World health assembly*.

Wilson, A. C., Mackintosh, K., Power, K., & Chan, S. W. (2019). Effectiveness of self-compassion related therapies: A systematic review and meta-analysis. Mindfulness, 10(6), 979–995.

Yang, Y., Zhang, M., & Kou, Y. (2016). Self-compassion and life satisfaction: The mediating role of hope. Personality and Individual Differences, 98, 91–95.

Yarnell, L. M., Stafford, R. E., Neff, K. D., Reilly, E. D., Knox, M. C., & Mullarkey, M. (2015). Meta-analysis of gender differences in self-compassion. Self and Identity, 14(5), 499–520.

Zigmond, A. S., & Snaith, R. P. (1983). The hospital anxiety and depression scale. Acta Psychiatrica Scandinavica, 67(6), 361–370.

Appendix 1: Information Letter

Research Project Title: Self-compassion as a predictor of mental health in Iranian refugees in the Netherlands.
Researcher: Fariba Ghasemy (MSc student Health Psychology and Technology).

Dear Participant,
You are kindly invited to participate in this survey. The purpose of this study is to gain insight into the mental wellbeing of Farsi speaking refugees' in the Netherlands. More specifically, with this study we want to explore the level of self-compassion, anxiety, depression, and to examine the correlation between these variables. Your privet information will be kept confidential and will be used completely anonymously in a report as a master thesis. In this report the results will be presented on a group level, so except the researchers, nobody will have access to individual answers. This report will be available for relevant authorities and organizations, in the hope that they become more familiar with the psychological conditions of refugees and asylum seekers and provide more appropriate psychological services to them. This information will be used solely in this research and will not be used for any other purpose. Your participation may help in improving the mental health of Farsi speaking refugees in the Netherlands.

Procedure: After participating in this research, you will be kindly asked to fill out a questionnaire. The questionnaire is in Farsi and is included forty-eight questions; Twelve of the questions measure the level of self-compassion and is about how you have been feeling during the last 30 days. Fourteen questions are related to depression and anxiety, eight questions are about acculturation and the rest fourteen questions are about positive mental wellbeing which measures your emotional states (Life-satisfaction, Happiness, and Interest in life), psychological functioning (e.g., Self-acceptance, Purpose in life) and social functioning (e.g., Social Integration, Social Contribution). Your contribution in this survey is voluntary. There is not any compulsion and obligation for you to attend and continue this project, and you have the right to withdraw and stop participating at any time.

Duration of Procedures: The participation will last approximately 20 minutes.

Confidentiality: Your anonymity will be ensured in all parts of this research study. All information learned from you will be confidential and will not be accessible to third parties.

Contacts for questions: If you have any question or concern regarding this project, you are welcome to contact the researcher through following email address or phone number:

Researcher: Fariba Ghasemy
Email: -----
Phone number: ----

Appendix 2: Declaration of Consent Form

- I have read the information latter and completely understood the information.
- I am aware of the fact that participation in this survey is voluntary, and I am free to withdraw the survey without any reason, at any time.
- I am aware that the information learned from this survey will be used in a scientific report and it will be published.
- I am informed that my private information will be kept confidential.
- I agree that my information to be used for the purpose that is stated in the information letter.
- I declare my consent to voluntarily participate in this research study

Name Participant:

Participant Signature:

Date _____ _____ _____