Acculturation of Syrian Refugees in Germany: Using a Variation of the Multidimensional Individual Difference Acculturation (MIDA) Model in a New Context

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Abstract

Since 2011, there has been an ongoing civil war in Syria between various militant groups, ISIS, and the Syrian government, in response to the oppressive regime of the Syrian government of President Bashar al-Assad. As a result, the largest migration that the world has seen since the Second World War has transpired. Approximately 13 million Syrians have been forcefully displaced from their homes, making this one of the largest humanitarian crises of our time. Many Syrians have sought refuge in neighbouring countries, as well as in Europe, the United States, and Canada. There is notably little research on refugee adaptation in Europe, which is the focus of this study. Using aspects of the Multidimensional Individual Differences Acculturation (MIDA) model, this study looked to examine the sociocultural and psychophysical adaptation of Syrian refugees in Germany. Measures that were excluded from the current version of the MIDA model were Ingroup Contact and Outgroup Contact. Researchers at Ludwig Maximilians University Munich administered paper and pencil surveys to 265 participants in Nuremberg, Germany who were attending vocational and language schools. Results displayed a significant relationship between Psychosocial Resources and Integration, and Psychophysical Distress; Co-National Connectedness and Integration; and Hassles and Psychophysical Distress. This study looks to inform host country government policies about positive integration strategies for refugee adaptation.

Keywords: acculturation, Multidimensional Individual Differences Acculturation (MIDA) model, Syrian refugees, sociocultural adaptation, psychosocial adaptation, asylum seeker.

Introduction

There has been an ongoing civil war in Syria since 2011 (UNHCR, 2018). As a result, the largest migration in the world since World War II has occurred (McNatt et al., 2018). Specifically, 6.5 million Syrians have been displaced within their own country, and an additional 5.6 million have been forced to seek asylum in neighboring countries. Due to overcrowding and underfunding of refugee camps, refugees started to migrate to Europe (McNatt et al., 2018; UNHCR, 2018). Since 2011, there have been over one million asylum applications submitted in Europe, with the majority of claims accumulating in Germany (300,000) and Sweden (100,000; UNHCR, 2018). By the end of 2014, Syrian refugees constituted the second largest population of refugees worldwide, estimated at 3.33 million people (SCPR, 2014).

The United Nations High Commissioner for Refugees (2017) reported that these numbers increased by 14% in 2017, making Syrians the largest group of refugees worldwide. This mass movement of individuals has resulted in an ever-increasing need for humanitarian, stabilization, and resilience aid inside Syria and its neighboring countries (UNHCR, 2018).

Refugee Defined

Refugees are individuals who have been forced to flee their country due to conflict or a substantiated threat of persecution based on race, ethnicity, religion, or political affiliation (UNHCR, 2018). An asylum seeker is a person who has applied for refugee status by requesting international protection (UNHCR, 2018). Therefore, the difference between

the two groups is that refugees have attained protection status while asylum seekers await a decision about their claim. Therefore, all refugees begin as asylum seekers, however not all asylum seekers will become refugees.

In 1951, the UN Convention Relating to the Status of Refugees in Geneva established a European Union directive allowing individuals who are fleeing persecution the basic human right to asylum (Robinson, 1953). There are still aspects of the Geneva convention that affect applicants to the present day. Each case is observed on an individual basis and a committee oversees the process and decides whether each refugee meets the criteria set out by the convention (Kauppinen, 2013).

Syrian Refugees In Germany

Even before the Syrian conflict began, large numbers of asylum applications were accepted in Germany. The Organisation for Economic Co-operation and Development (1999) reported that Germany had accepted the largest in-flow of refugees between 1989 and 2010, with the United States, the United Kingdom, France, and Canada rounding out the top five countries. There has been a steady increase in asylum applications since the beginning of the Syrian conflict. In 2015, Germany had an asylum application acceptance rate of 48.5%, and the most successful group of refugees were Syrians, who were successfully accepted at a rate of 96% (Chemin et al., 2018). With such a high acceptance rate, Germany has become a highly sought-out destination for refugees fleeing the civil war in Syria.

In 2017, a total of 34,880 Syrians held refugee status in Germany, making Syria the most represented country for newcomers (Chemin et al., 2018). The number of refugees that will migrate from Syria to Germany is expected to rise in the future, seeing as the conflict has no end in sight (Chemin et al., 2018). The Migration Act of 2005 looks to integrate refugees who have the potential of residing permanently in Germany (Chemin et al., 2018). However, like other European countries, Germany is tightening their asylum restrictions, which will result in fewer benefits for successful applicants (Heisbourg, 2015). Thus, the Syrian refugee crisis creates the necessity for host countries to reassess their refugee policies. Therefore, it is important to study the nature of refugee adaptation in order to assure a copacetic relationship between newcomers and the host society.

Although the majority of cross-cultural research has focused on immigrants (see Abouguendia & Noels, 2001; Grigoryev & Berry, 2017; Safdar, Calvez, & Lewis, 2012) and sojourners (see Rasmi, Safdar, & Lewis, 2009; Zimmermann, Schubert, Bruder, & Hagemeyer, 2017), there is a small, but growing body of research focused on refugee adaptation (see Charles, & Denman, 2013; Juran & Broer, 2017). Considering the limited body of knowledge on refugees in Europe, it is important to research refugee adaptation. The goal of the current study is to contribute to the body of acculturation literature by examining the acculturation processes of Syrian

refugees in Germany. This study comes at a time of immigration policy reform in Germany. Therefore, researching acculturation of refugees residing in Germany may help inform policy makers' decisions during a time where human movement is at a historical high.

Acculturation

Acculturation occurs when different cultures come in contact with one another, and there are behavioural, psychological, and social changes which may occur through an exchange of norms, values, and beliefs (Redfield, Linton, & Herskovits, 1936). Acculturation effects may occur in both the heritage group and the dominant society in relation to shifts in one's clothing, language, religion and values (Sam & Berry, 2010). It is how newcomers handle these changes that is the focus of acculturation research (Berry, 2005; Safdar, Lay, & Struthers, 2003).

Due to interactions that newcomers encounter within the host society, individuals adopt acculturation strategies which affect one's adaptation to the new country (Berry, 1997). According to Berry (1997), acculturation strategies are based on two dimensions: cultural maintenance and participation with the host society. Cultural maintenance refers to the extent that an individual aspires to maintain their cultural heritage. Participation refers to the desire to partake in the larger society. Depending on how an individual aligns on these two dimensions, four acculturation strategies may occur: Assimilation, Integration, Separation, and Marginalization (Berry, 1997). Assimilation occurs when a newcomer departs from their heritage culture and participates in the larger society. Integration occurs when newcomers maintain their heritage culture and participate in the host society. Separation occurs when newcomers choose to maintain their ethnic identity with minimal participation in the host society. Marginalization occurs when newcomers withdraw from both the host society and their original one (Berry, 2005).

While acculturation strategies refer to how one aligns with their heritage and host cultures, adaptation refers to the outcomes of the acculturation process. Building on Berry's (1997) bi-dimensional model, Ward and colleagues (Searle & Ward, 1990; Ward & Rana-Deuba, 2000) introduced psychological adaptation and sociocultural adaptation factors which occur during cross-cultural encounters. Psychological adaptation is an internal factor that refers to one's psychological health and is measured within a clinical scope of coping and stress. This can be viewed as well-being and the satisfaction of one's relation with the host country. By contrast, sociocultural adaptation refers to external outcomes such as one's social skills and cultural learning which occurs within the new society. This can be seen as one's ability to fit in with the new culture and to navigate the social aspects of the culture such as communication.

Another important factor related to an individual's adaptation is acculturative stress. Acculturative stress refers to the negative side-effects of acculturation that result in a

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decrease in health symptoms, including an individual's physical, psychological, and social aspects (Berry, Kim, Minde, & Mok, 1987). The amount of stress that one experiences is contributed to numerous factors. Individual factors include psychological resources (e.g., self-esteem, language ability), social connections (e.g., quantity and quality of ingroup/outgroup contact), and demographics (e.g., age, sex, ethnicity, status of acculturating group; Ward & Kennedy, 1993). The contributing factors from the larger society are the attitudes that the host country holds towards immigrants (Ward & Kennedy, 1993). Furthermore, acculturation strategies were another indication of acculturative stress (Berry et al., 1987). Berry and colleagues show that Marginalization and Separation are associated with high levels of acculturative stress, while Integration was associated with low levels of stress, and Assimilation was associated with moderate levels of stress.

Building on previous acculturation models, Safdar et al. (2003) developed the Multidimensional Individual Differences Acculturation (MIDA) model. This model focuses on the relation between an individual's Psychosocial Resources (psychological wellbeing, cultural competence, and outgroup social support), and adaptation strategies which are relevant to the outcome of a newcomer's adaptation. Previously, the MIDA model has been effective in explaining the acculturation process when tested on immigrants (Safdar et al., 2003; 2009; 2012) and sojourners (Berger, Safdar, Spieß, Bekk, & Font, 2018; Rasmi et al., 2009). The current study examines whether the MIDA model (Berger et al., 2018; Rasmi et al., 2009; Safdar et al., 2003; 2009; 2012) can explain the acculturation processes of Syrian refugees within Germany. By testing the MIDA model on a new sample—namely refugees—we hope to showcase the generalizability of its use to go beyond previously tested samples (i.e., immigrants and sojourners).

Multidimensional Individual Differences Acculturation (MIDA) Model

In the present study, the acculturation process of refugees will be assessed using the MIDA model (Berger et al., 2018; Rasmi et al., 2009; Safdar et al., 2003; 2009; 2012). The MIDA model consists of core predictor variables (Psychosocial Resources, Co-National Connectedness, and Hassles) which result in three adaptive outcomes (Ingroup contact, Outgroup contact, and Psychophysical Distress). Four acculturation strategies (Integration, Assimilation, Separation, and Marginalization) are also built into the model and have an effect on the acculturation process. The MIDA model is focused on changes that occur at the individual level rather than alterations that happen in the larger society (Safdar et al., 2012).

The first two core variables, Psychosocial Resources and Co-National Connectedness, are composite variables. Psychosocial Resources are a combination of factors within an individual which consists of psychological well-being (PWB),

perceived cultural competency, and outgroup support. In other words, Psychosocial Resources are a measure of an individual's resilience. Previously, it was shown that individuals with high levels of PWB are more resilient, which has been shown to have a positive relation to one's social adaptation, resulting in less stress (Ryff & Singer, 1996; as cited by Berger et al., 2018). The second composite variable, Co-National Connectedness, focuses on ingroup connections. Ingroup connections refers to the extent that one feels that they belong in their ethnic group and their perceptions of ingroup social support (Safdar, Struthers, & van Oudenhoven, 2009). According to Safdar and colleagues (2009), having close ties with one's own ethnic group is associated with better social adaptation. Lastly, Hassles are annoyances that an individual frequently encounters (Lay & Nguyen, 1998). For example, immigrants who encounter prejudice and discrimination, communication barriers, or conflict with family and members of either the ingroup or outgroup may show decreases in their psychological health and adaptation (Abouguendia & Noels, 2001).

The second part of the MIDA model focuses on the acculturation strategies of newcomers. Acculturation strategies are considered the mediators between the composite variables and the outcome variables. The acculturation strategies are informed by Berry's (1997) bi-dimensional model of acculturation. These variables are understood as the choice to maintain one's heritage culture or their desire to participate in the new society. Subsequently, the alignment one makes towards their heritage group or host culture results in four acculturation strategies (Assimilation, Integration, Separation, or Marginalization) that affect the outcome of one's adaptation to the new society (Berry, 1997).

The last piece of the model consists of three outcome variables: Ingroup Contact, Outgroup Contact, and Psychophysical Distress. Ingroup Contact refers to interaction with one's heritage culture, while Outgroup Contact refers to interactions with members of the host society and are indicators of sociocultural adaptation. Psychophysical Distress is a composite variable which refers to one's psychological and physical health symptoms. As such, Psychophysical Distress is an indicator of a newcomers' ill being (e.g., on-going depression; Safdar et al., 2012; Ryff & Singer, 2006).

In sum, the MIDA model proposes that core predictor variables (Psychosocial Resources, Co-National Connectedness, and Hassles) along with acculturation strategies (Assimilation, Integration, Separation, and Marginalization) affect the adaptation outcomes of newcomers. The outcome variables (Ingroup Contact, Outgroup Contact, and Psychophysical Distress) measure an individual's sociocultural and psychological adaptation.

The MIDA Model In The Current Study

The present study uses a variation of MIDA model. The reason the MIDA model will not be employed in its fullest

form is the limitations of this particular project. The data that was used was previously collected in Germany by researchers at Ludwig Maximilians University Munich (LMUM). In their study, LMUM did not collect data for the outcome variables Outgroup Contact or Ingroup Contact, meaning this study could not look at two of the outcome variables. As a result, the present study focuses on the association between the core predictor variables (Psychological Resources, Co-National Connectedness, and Hassles), acculturation strategies (Assimilation, Integration, Separation, and Marginalization), and how they relate to an individual's sociocultural and psychological adaptation to Germany.

Hypothesis 1

Psychosocial Resources are positively associated with Integration (H1a) and Assimilation (H1b). Considering that Psychosocial Resources relates to one's resilience stemming from PWB, outgroup support, and cultural competency, it is intuitive how this variable is related to these strategies, as they align with a positive outlook towards the host country. Comparatively, it is logical that being low in resources may drive one towards Separation or Marginalization. Additionally, Psychosocial Resources are negatively associated with Psychophysical Distress (H1c). One who is high in resources should have less distress than one who has little-to-no resources. For example, someone who has cultural competency (e.g., fluent in the host country's language) should have an easier time with day-to-day communication, compared to someone who cannot speak the host language.

Hypothesis 2

Co-National Connectedness is positively associated with Integration (H2a) and Separation (H2b), and negatively associated with Assimilation (H2c). One with close ethnic ties may chose Integration because there are ties with both the host culture and their ethnic culture, or they may choose Separation as this relates to close ties with one's culture. Furthermore, one who has support from their ethnic group may not align with Assimilation, considering its ties with participation in the host society while abandoning their heritage culture.

Hypothesis 3

Hassles are positively associated with Psychophysical Distress. An individual who encounters daily hassles such as discrimination, language barriers, or conflict with family or others may encounter more stress than someone who has low levels of ongoing hassles.

Methods

Participants

The above hypotheses were tested using a community sample of 265 participants that attended language and vocational training centers in Nuremberg, Germany. The

majority of participants were male (78.6%), and the mean age was 33 years old ($SD = 10.2$). The majority of individuals were asylum seekers (94.9%). Of the sample, 37.9% had secondary education, 34.2% had higher education, and 12.5% had elementary education. The sample was representative for the typical Syrian refugee in Germany, who is on average 18-34 years of age (Juran & Broer, 2017). The majority of asylum applicants between 2011-2017 (71%), were below age 30, and 60.2% were male. Among the typical Syrian refugees in Germany, 18% have a university education, 20% have secondary education, and 22% attained primary level education (Juran & Broer, 2017).

Materials

The survey was distributed by LMUM. The questionnaires and consent forms were in German and Arabic. The consent forms assured anonymity and confidentiality. Participation was voluntary, and participants were allowed to leave without repercussion. The first half of the survey focused on work experience and the second part on psychological factors. All measures were rated on a 6-point scale ranging from 0 (less favorable) to 5 (favorable).

Demographic Information

Demographic data were gathered, including gender, age, marital status, average size of family, family members in Germany, length of stay in Germany, host country language proficiency, education level, and occupation status.

Psychological Well-Being Scale

This 18-item subscale is a part of the composite variable Psychosocial Resources. This scale is a shorter version of a previous one created by Ryff (1989). Items ask participants to reflect on different aspects of their personal well-being (e.g., "For me, life has been a continuous process of learning, changing, and growth" and "People wander aimlessly through life, but I am not one of them" [$\alpha = .54$]).

Cultural Competence Scale

The 11-item scale is another subscale of Psychosocial Resources and is a shorter version (Safdar et al., 2003) of Lay and Nguyen's scale (1998). This scale measures an individual's ability to communicate with members of the host country (e.g., "I know how to communicate with my people at work or on the street who are Germans"), and cultural knowledge pertaining to the host culture (e.g., "I feel that I have the necessary skills to adjust to the German culture" [$\alpha = .67$]).

Social Support Outgroup Scale

The final subscale of Psychosocial Resources consists of 10-items that were taken from the Index of Sojourner Social Support (Ong & Ward, 2005; Podsiadlowski, Spieß, Stroppa, & Vauclair, 2008). These items were modified so that they

referred to the outgroup (e.g., “Your friends from Germany share your good and bad times” [$\alpha = .77$]).

Ethnic Identity Scale

The 10-item Co-National Connectedness subscale takes items from an early adaptation (Safdar et al., 2003) of Cameron, Sato, Lay, and Lalonde’s (1997) Ethnic Identity Scale. These items measured identification with people of the heritage culture (e.g., “I feel that I am a part of [ethnic] culture” and “Being part of [ethnic] culture is embarrassing to me” [$\alpha = .81$]).

Social Support Ingroup Scale

The 10-items were taken from the Index of Sojourner Social Support (Ong & Ward, 2005; Podsiadlowski et al., 2008) and are a subscale of Co-National Connectedness. These items measure perceived ingroup support, for example: “Your family/friends or other refugees comfort you whenever you are feeling homesick” ($\alpha = .92$).

Hassles Checklist

This scale has 12-items which originate from Lay and Nguyen (1998), and questions individuals about different types of hassles they encounter (e.g., “Being overburdened with traditional family duties and obligations” and “Often being mistaken for someone from a different country other than my home country” [$\alpha = .66$]).

Acculturation Strategies

This 8-item scale is derived from earlier versions of the MIDA model (Safdar et al., 2003; 2009; 2012) which originated from Demes and Geeraert’s (2014) scale. The scale measures acculturation orientation towards the heritage culture (e.g., “It is important for me to take part in Syrian traditions” [$\alpha = .86$]) and the new society (e.g., “It is important for me to develop my German characteristics” [$\alpha = .87$]).

Psychological Health Scale

This 9-item scale originates from Safdar et al.’s (2009) psychological distress inventory and asks participants how they have felt over the past 4 weeks (e.g., “Have you felt downhearted and blue?” and “Have you felt calm and peaceful?” [$\alpha = .75$]).

Health Symptoms Scale

This 6-item scale investigates signs of an individual’s health. This scale originated from Safdar et al.’s (2003) scale (e.g., “I seem to get sick a little easier than other people” and “My health is excellent” [$\alpha = .72$]).

Results

SPSS software, version 25 was used to run analytics. Descriptive statistics are found in **Table 1**. To procure the

confidence intervals on the correlations, I inputted the data in R studio. The data was screened for missing data and incomplete responses. The remaining data was checked for skewness and kurtosis to measure normality. The average participant response was above the midpoint (i.e., greater than 3 on a scale of 0-5) of the scales measuring PWB, cultural competence, and social engagement, while average scores were below the midpoint for ethnic identity, hassles, psychological health, and health symptoms. Cronbach’s Alpha was run for all of the scales (see **Table 2**). Correlation coefficients ranged from acceptable to high, although PWB was low ($\alpha = .54$). The low reliability of the PWB scale is discussed below.

The variables were standardized, and three composite variables (Psychosocial Resources, Co-National Connectedness, and Psychophysical Distress) were created using z-scores. Correlations between all predictor, moderator, and outcome variables are presented in **Table 3**. The acculturation strategies Marginalization and Separation were not included in the current model, as the frequency of endorsement was too low (6.4% and 2.4%, respectively; see **Table 4**). This may be due to the fact that Germany has such a high refugee acceptance rate and endorses integration, therefore, refugees that are attracted to Germany may not see value in Separation or Marginalization.

Consistent with H1, a significant relationship was found between Psychosocial Resources and Integration ($r(235) = .13$, 95% CI[.00, .25], $p = .046$; H1a). Therefore, H1a was supported, indicating that Syrian refugees who have more resources are likely to maintain their cultural heritage while also participating in the German society. There was also a significant relation between Psychosocial Resources and Psychophysical Distress ($r(240) = -.42$, CI[-.52, -.31], $p < .01$; H1c), indicating refugees with more resources displayed less distress. It was found that participants who scored high on Psychosocial Resources (i.e., PWB, cultural competence, and outgroup social support) reported significantly lower Psychophysical Distress. Therefore, hypothesis H1c was supported. However, a significant relation was not found between Psychological Resources and Assimilation ($r(235) = -.01$, CI[-.14, .12], $p = \text{n.s.}$; H1b). Therefore, hypothesis H1b was not supported, indicating that Syrian refugees may prefer to keep close ties with their ethnic group while adapting to the new society.

Consistent with H2, Co-National Connectedness (i.e., ethnic identity and ingroup social support) was significantly related to Integration ($r(246) = .27$, CI[.15, .38], $p < .01$; H2a). Participants with high scores on Co-National Connectedness were likely to endorse Integration, indicating that individuals who have a strong ethnic identity and ingroup social support endorse Integration. However, inconsistent with H2, Connectedness had no significant negative association with Assimilation ($r(246) = .08$, CI[.05, .20], $p = \text{n.s.}$; H2c). This finding may suggest that Germany’s welcoming nature towards refugees may decrease the desire

to strictly hold on to one's ethnic identity; this is evident in the significant desire to integrate. Considering only 2.4% of participants endorsed Separation, it was not possible to test H2b (Co-National Connectedness is positively associated with Separation). Future research should test to see if this is an anomaly.

Consistent with H3, a significant relation between Hassles and Psychophysical Distress was found. Participants who scored high on Hassles reported significantly more Psychophysical Distress ($r(243) = .16$, $CI[.03, .28]$, $p = .015$; H3). This indicates that individuals who experience more daily hassles report more psychological and physical health symptoms.

Furthermore, a two-stage hierarchical multiple regression analysis was conducted. Model one looked to examine whether Syrian refugees' Psychophysical Distress is a function of three variables: Psychosocial Resources, Co-National Connectedness, and Hassles. The regression analysis revealed that 20.7% of the variance of Psychophysical Distress was associated with Psychosocial Resources, Co-National Connectedness, and Hassles ($R = .455$, $R^2 = .207$, $F(3,223) = 19.444$, $p < .001$). The relation between Psychosocial Resources, Co-National Connectedness, Hassles, and Psychophysical Distress was: $\beta = -.39$, $t(3) = -5.49$, $p < .001$; $\beta = -.04$, $t(3) = -.52$, $p = n.s.$, $\beta = .25$, $t(3) = 4.09$, $p < .01$, respectively. In other words, as Psychosocial Resources, Co-National Connectedness, and Hassles increase by one standard deviation, Psychophysical Distress decreases by .39, .04, and increases by .25 standard deviations, respectively.

In addition to Psychosocial Resources, Co-National Connectedness, and Hassles, the second model of the hierarchical regression includes the acculturation strategies Integration and Assimilation. Introducing Integration and Assimilation into the model explained an additional 0.5% of the variance of Psychophysical Distress, which did not significantly improve the prediction of Psychophysical Distress ($R = .461$, $R^2 = .212$, $F(2,221) = 11.913$, $p = n.s.$). The relation between the acculturation strategies and Psychophysical Distress were: Integration $\beta = .08$, $t(3) = .553$, $p = n.s.$; and Assimilation $\beta = .01$, $t(3) = .049$, $p = n.s.$ In other words, as Integration and Assimilation increase by one standard deviation, Psychophysical Distress increases by .08, and .01 standard deviations, respectively.

Discussion

The present study tested aspects of the MIDA model with Syrian refugees in Germany, which consists of variables that exist within an individual (e.g. PWB and cultural competence) as well as external factors (e.g., social support and hassles). Prior to this study, the MIDA model has been tested with populations of immigrants (Safdar et al., 2003; 2009; 2012) and sojourners (Berger et al., 2018; Rasmi et al., 2009). The goal of this study was to test the MIDA model in a

new context, specifically with refugees. There were both consistent and inconsistent findings with previous tests of the MIDA model. However, it is important to note that key outcome variables (Ingroup Contact and Outgroup Contact) of the MIDA model were not examined in this study, therefore, the complete MIDA model was not tested.

The first consistent finding was the significant and positive relationship between Psychosocial Resources and Integration. Specifically, refugees who showed a strong sense of resilience by scoring high on PWB, cultural competency, and outgroup support were more likely to endorse an Integration adaptation strategy than those low in resilience. This finding is consistent with hypothesis H1a.

Resilience is related to the ability to acquire cultural knowledge such as language, along with strong social connections with members of the new society. Therefore, it is reasonable that those high in Psychosocial Resources would be better equipped to adapt to the host culture. This is consistent with previous findings (Berry, Phinney, Sam, & Vedder, 2006) that indicate individuals who have a firm understanding of how to speak the host nation's language and develop strong social ties with both host and ethnic cultures tend to endorse an Integration strategy. Therefore, the implications of equipping refugees with the resources needed to integrate successfully into the host society will not only benefit newcomers, but society as a whole. Free language courses are available in Germany, however, waiting lists are long, which creates a barrier to accessing these services (Green, 2015). Therefore, a focus on providing translation services for Syrian refugees, and expanding the current vocational infrastructure, is key to ease the successful integration of Syrian Refugees in Germany.

The second consistent finding is that there was an inverse relationship between Psychosocial Resources and Psychophysical Distress. Specifically, individuals who showed more resilience by scoring high on Psychosocial Resources scored lower on Psychophysical Distress. This finding supports hypothesis H1c.

The indication that refugees high in Psychosocial Resources show low levels of Psychophysical Distress is consistent with past use of the MIDA model (Safdar et al., 2009; 2012) which makes intuitive sense. Those high in resilience tend to show lower levels of stress because they have higher self-esteem, cultural competency, and outgroup social support (Safdar et al., 2009).

The third consistent finding is the significant and positive relationship between Co-National Connectedness and Integration. Specifically, Syrian refugees who had a strong sense of connection with their ethnic community and strong family bonds were more likely to endorse a positive integration adaptation strategy than those low in Co-National Connectedness. This finding is consistent with hypothesis H2a.

The indication that individuals who maintain close social connections with one's own ethnic community (ingroup) also

have strong family bonds makes intuitive sense. According to social identification theory, having strong social bonds is key to an individual's well-being (Lewin, 1948). Furthermore, Tajfel and Turner (1979) explain that being a part of a group increases your sense of belonging and self-concept. Tajfel (1979) explains that sense of belonging to an ethnic group is dependent on how the group is viewed by the dominant society. In the case of Syrian refugees in Germany, the open-door policy towards refugees provides a welcoming atmosphere, as seen by the Migration Act of 2005, which looks to integrate refugees into the country (Chemin et al., 2018). Therefore, it is plausible that Syrians feel good about being a part of their ethnic group, while feeling welcome and accepted in Germany. This might explain why those high in Connectedness also chose an Integration strategy. The implications of providing newcomers with a warm welcome while endorsing their engagement in their heritage culture may result in a positive integration strategy.

The fourth consistent finding is the significant and positive relationship between Hassles and Psychophysical Distress. Specifically, those individuals who perceived having more hassles in their daily lives reported having more symptoms related to both their psychological and physical health. This finding is consistent with Hypothesis 3.

It is logical that refugees who experience more hassles in their daily lives will also experience more distress. It is well-established within the literature that hassles are associated with higher levels of distress (Lay & Nguyen, 1998). Syrian refugees encounter both major life acculturative hassles (e.g., conflict, displacement, and loss of loved ones), and chronic daily stressors (e.g., disagreements with family and friends, pressure to perform well in school, and the burden of securing employment) (Seglem, Oppedal, & Roysamb, 2014). Therefore, the implications for host countries to invest in mental and physical health services that support newcomers' adaptation is crucial. It has been shown that sociocultural knowledge and cultural competency can promote mental health and PWB (Hassan et al., 2016); however, there are still consistent barriers for refugees seeking relevant health care facilities. Not only is language acquisition a barrier to accessing health care services (Green, 2015), but there is also a lack of humanitarian aid and funding of health care facilities in Germany (UNHCR, 2018). The need to develop effective ways of addressing displacement effects is key to creating a positive integration environment for Syrian refugees.

The first inconsistency within the MIDA model was that a positive relationship between Psychosocial Resources and Assimilation was not observed. By contrast, participants who reported having more resources displayed an inverse relationship with Assimilation. This finding did not support hypothesis H1b.

One reason that resourceful refugees may not endorse Assimilation could be because during times of conflict, it has been shown that cultural maintenance through one's ingroup social interactions is key to an individual's well-being (see

Hassan et al., 2016). Hassan and colleagues show that creating a culturally safe environment is key to building an understanding of the suffering caused by displacement, loss of loved ones, violence, and torture, helping Syrians create positive adaptation strategies. Therefore, it is logical for a refugee to endorse Integration, where they engage with their ingroup social support network, while gaining the benefits of participating in the larger society (meeting new people, gaining employment, and autonomy).

The second inconsistent finding is the lack of a negative relationship between Co-National Connectedness and Assimilation. Specifically, those who had close ties with their ethnic group and strong family social bonds showed no indication that they did not desire assimilation into the Germany society. This is inconsistent with H2c.

The indication that Assimilation is not endorsed by refugees with strong cultural ties and family bonds follows the previous argument that the host society's opinion of the refugee group affects the sense of belonging one has with their ethnic group (Tajfel, 1978). In Germany, Syrian refugees have the highest acceptance rate among all other groups of refugees (Chemin et al., 2018), indicating a positive opinion towards Syrian refugees as a group. Additionally, the Migration Act of 2005 looks to integrate refugees rather than assimilate them (Chemin et al., 2018). Taken together, there is an atmosphere of acceptance towards Syrian refugees in Germany. Therefore, it is plausible that Integration would be endorsed over Assimilation. In other words, refugees with strong ingroup connectedness tend not to endorse Assimilation in German society.

Limitations and Future Research

The first limitation of this study is that it excluded two major components of the MIDA model, and therefore did not allow for the opportunity to assess the complete strength of the model in the current context. Subsequent data collection that includes the outcome variables Ingroup Contact and Outgroup Contact will provide a more robust analysis. Considering the exclusion of the two key outcome variables, it was not possible to assess Berry's (1997) acculturation strategies as mediators. In other words, it was not possible to test whether these acculturation strategies led to positive or negative adaptation outcomes. Therefore, this study was unable to completely examine the MIDA model.

Second, the low reliability of the PWB scale ($\alpha = .54$) was unusual, conflicting with previous use of the scale that has shown acceptable to high reliability over decades of research (Berger et al., 2018; Gross, & John, 2003; Ryff, 1989; 1995; 1996; Safdar et al., 2003; 2009; 2012). A close inspection of the items revealed a couple of potential issues with the reliability and validity of the PWB scale.

One possible issue was with three of the items of the PWB scale: "I think it is important to have new experiences that challenge how you think about yourself and the world,"

"I have not experienced many warm and trusting relationships with others," and "I live life one day at a time and don't really think about the future." These may be considered double-barreled questions. Furthermore, these questions may have different meanings for an immigrant or refugee, considering the turmoil they have lived through.

First, conflict-affected Syrians are having many new experiences that challenge their self-concept and worldview; however, the majority of their experiences have been traumatic, rather than positive. Second, it may be difficult to answer a question about warm and trusting relationships. On one hand, Syrians may have many close ties and encounters with outgroup members who have provided humanitarian aid; on the other hand, their not-so-distant memories may be filled with distrust of their own government and various militant groups during the civil war in Syria. It may be difficult to get a true reading of warm and trusting relationships considering the traumas Syrians have undergone. Lastly, it is plausible that Syrians are only thinking about living one day at a time, considering their current plight. Being forcefully displaced from your home, losing loved ones, and leaving behind careers and possessions leaves one with a feeling of despair, and lack of hope (UNHCR, 2018). Until a solid living foundation is secured, it may be a difficult task for refugees to plan for their future.

One more item that may not be a relevant measure of well-being in a refugee context is: "For me, life has been a continuous process of learning, changing, and growth." Refugees have experienced a lot of recent changes in their life, and not all of them are positive (e.g., displacement, loss of family, loss of career, and loss of possessions). Therefore, the idea of change may not necessarily be perceived as a good thing for a refugee. Further investigation into the matter of the low reliability of the PWB scale is necessary. While the PWB scale may hold up in a variety of studies, it may not be an accurate measurement of refugee well-being.

It was not possible to analyze the hypothesis that states: Co-National Connectedness is positively associated with Separation (H1b). The reason H1b was not analyzed is because, in our sample, there was not a significant enough percentage that endorsed Separation (2.4%; see Table 4). Also noteworthy is the fact that only 6.4% of participants endorsed Marginalization (see Table 4). In an ad hoc analysis, it is argued that it is important to note the small numbers of refugees who endorse the negative adaptation strategies (Separation and Marginalization) to address misconceptions that refugees migrate with no intention of integrating into the host society. Future research should examine the low numbers of refugees who endorse Separation and Marginalization.

Although the limitations of this study are recognized, this study can be used as a foundation for future comparison studies of the MIDA model that focuses on refugees. While incomplete, there is still a basis for comparison that can be conducted on the variables herein. This is especially true of the low reliability of the PWB Scale ($\alpha = .54$). Further research

will be able to test whether this was an anomaly in the current study or whether the PWB Scale needs to be reassessed for refugee populations.

Conclusion

In sum, the current study has shown robust and novel findings about the process of acculturation for Syrian refugees in Germany. This study showed relationships between key variables (Psychosocial Resources and Hassles) and the Psychophysical Distress of Syrian refugees in Germany. Relationships between Psychosocial Resources, Co-National Connectedness, Hassles, and the acculturation strategy Integration were also displayed in this study. This research is a part of a growing body of work (see Charles, & Denman, 2013; Juran & Broer, 2017) that focuses on adaptation of refugees in Germany. Considering that this was not a longitudinal study, and it focuses on one group of refugees (Syrian) in one country (Germany), further comparison studies of refugees over time in different cultural contexts will provide more robust reliability and validity to the MIDA model.

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Tables

Table 1. Descriptive statistics for all variables

Variables	N	Mean	SD	Skewness		Kurtosis	
				Statistic	SE	Statistic	SE
Psychological Resources							
Psychological Well-being	252	3.26	.58	.092	.153	.447	.306
Cultural competence	251	3.26	.65	-.216	.153	.074	.306
Outgroup social support	246	3.08	1.35	.178	.155	3.095	.309
Co-National Connectedness							
Ethnic Identity	199	2.21	.87	.480	.172	.180	.343
Ingroup social support	251	3.27	1.14	-.536	.153	-.442	.306
Hassles	197	1.75	.81	.695	.156	1.139	.310
Psychophysical Distress							
Health symptoms	252	1.15	.92	.810	.153	.432	.306
Psychological health	253	1.70	.93	.431	.153	.457	.304

Note. N values range from 197 to 253 due to missing data. Standard deviation is noted by the column titled SD.

Table 2. Reliability of all scales

Variables	N Valid	N Excluded	Total	Cronbach's Alpha	N of items
Psychological Resources					
Psychological Well-being	156	109	265	.54	18
Cultural competence	203	62	265	.67	12
Outgroup social support	154	111	265	.77	10
Co-National Connectedness					
Ethnic Identity	103	162	265	.82	11
Ingroup social support	183	82	265	.92	10
Hassles	163	102	265	.66	11
Acculturation Attitudes					
Heritage Culture	191	74	265	.86	4
Host Culture	237	28	265	.87	4
Psychophysical Distress					
Health symptoms	199	66	265	.73	6
Psychological health	211	54	265	.75	9

Note: N Excluded refers to Listwise deletion based on all variables in the procedure.

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Table 3. Correlations between variables in the MIDA model

Variables	M	SD	1	2	3	4	5	6
1. Psychosocial Resources	7.57	1.24	-					
2. Co-National Connectedness	7.26	1.41	.53**	-				
3. Hassles	1.74	.81	.10	.16	-			
4. Integration	.48	.50	.13*	.27**	.10	-		
5. Assimilation	.42	.50	-.01	-.08	-.04	-.83**	-	
6. Psychophysical Distress	.01	.87	.42**	.19**	.16*	.03	-.09	-

Note. All variables are Pearson's correlations. ** $p < .01$. * $p < .05$

Table 4. Frequency of Individuals that Identified With Each Of The Acculturation Strategies

Variables	Frequency	Valid Percent
Integration	121	48.4
Assimilation	106	42.4
Marginalization	16	6.4
Separation	6	2.4

Note. Total: N = 265. Missing: N = 15. Valid: N = 250.