
Nonlinearity and Convergent Modalities of Human Migration: A Biocultural Study of Quotidian Imperatives among Refugees in Transitional Settlements

Jelena Jankovic Rankovic

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NONLINEARITY AND CONVERGENT MODALITIES OF HUMAN MIGRATION:
A BIOCULTURAL STUDY OF QUOTIDIAN IMPERATIVES AMONG REFUGEES
IN TRANSITIONAL SETTLEMENTS

A Dissertation

Submitted to the Graduate School
of the University of Notre Dame
in Partial Fulfillment of the Requirements
for the Degree of

Doctor of Philosophy

by

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Notre Dame, Indiana

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Abstract

by

Jelena Jankovic-Rankovic

An ongoing human tragedy of massive displacement continues to unfold across the globe due to dramatically and rapidly changing global political and economic conditions that have compelled many people to migrate and embark on dangerous journeys in search of safety outside their country of origin. Once they leave their homeland, fleeing individuals face numerous constraints that significantly impede unauthorized movements across international borders. Their precarious and clandestine journeys are often paved by ongoing stress, risks, and recurrent trauma. Those who manage to cross multi-national borders routinely end up contained within the walls of temporary settlements, such as asylum centers. Within these liminal spaces, life is often characterized by enforced dependency on relief aid, persistent precarity, and imposed restrictions on movement. Despite prescribed idleness, the indignities of life in limbo and substantial recurrent uncertainty, refugees actively strive to defy structural constraints, challenge images depicting them as passive victims, and transform into active agents

contemplating ways to meet their needs beyond the relief packages. In this dissertation, I rekindle Bourdieu's (1977, 1990) concepts of habitus, *doxa*, and *bodily hexis*, and build on contemporary practice theories, using an integrative, biocultural approach. In doing so, I propose and operationalize the idea of Routinized Social Practices (RSPs) that serve as means of regularity as much as mitigators of psychosocial stress and drivers of health across and within refugee spaces. Drawing on both ethnographic data and physiological biomarkers, I show that the social, material, and personal dimensions of RSPs impart routine, promote normalcy, and afford continuity, while simultaneously alleviating an expected negative impact of unfavorable conditions of encampment.

By engaging in and valuing RSPs, the refugee's agency and practices remain in a recursive relationship with the formal structures that shape not only what they do and think, but also construct sociocultural conditions conducive to challenging these static arrangements through daily practices and survival strategies. Refugee narratives reveal that RSPs help them maintain livable lives and negotiate their vulnerability following their migratory journeys and temporary residence in novel communities. Agentive participation in local informal economies, social consumption of food and drink, and profound social interactions render their everyday life structured, normalized, and regulated, while creating a particular niche of coping and resilience within liminal, confined spaces. In terms of mental health and stress physiology, RSPs serve to mitigate some of the adverse psychological and physical effects of the journey-related trauma and life on hold, thereby affording better health outcomes. The integrative anthropological framework shows the complexities underlying RSPs and their biological effects on the realm of the ordinary that is never quite the same but is instead ever-changing.

To my wonderful family, who always encouraged me to achieve my highest aspirations
and fulfill my dreams

&

In loving memory of my father

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CHAPTER 1:

INTRODUCTION

1.1 Foreword

An ongoing human tragedy of massive displacement continues to unfold across the globe due to various causes, including wars, violence, economic deprivation, human rights violations, and persecution. By the end of 2020, there were approximately 79.5 million forcibly displaced people worldwide, including 45.7 million internally displaced people (IDPs), 29.6 million refugees, and 4.2 million asylum seekers (UNHCR, 2020a, 2020b). These populations of concern stood at their highest level since recording began in the 1980s (UNHCR, 2020a). Dramatically and rapidly changing global political and economic conditions in the last few years that we have witnessed compelled many people to migrate in search of safety outside their country of origin. This unfortunate reality has produced significant migration and mass movement of people across international borders (Townsend and Oomen, 2015). These large-scale events regularly induced by dire conditions in their home country have been driving people to undertake a perilous journey, often paved by significant physical and psychological hardship, trauma, and uncertainty, with potential effects on their health.

There are numerous anthropological studies aimed at disentangling the complex processes underlying human migration triggered by various economic, political, and environmental causes from a holistic perspective. However, anthropological research in

this area has predominately focused on pre-and post-displacement periods, leaving transitional migratory stages unexplored. Specifically, how the ongoing dynamics of this phase may influence and shape refugees' systems of everyday life, lived experiences, social practices, long-term health, and resilience remain understudied and poorly understood. BenEzer and Zetter (2014:302) argue that the migratory journey characterizes "a profoundly formative and transformative experience." In this dissertation, I examined the idea of a migratory journey as a life-changing event to further our understanding of the complex and bi-directional interplay between refugees' undertakings and complex structural and physical constraints in relation to their health outcomes once they arrive at their transit destination. Next, I develop a more nuanced, integrative, and human-centered understanding of the complex processes underlying the idea of transit migration in relation to the refugees' agency, social structures of migration management, and health. Finally, drawing on Bourdieu's (1977, 1990) concepts of practice and building on the ideas of daily routines (Highmore, 2010; Pink, 2012), routinized behaviors (Reckwitz, 2002), and practices as entity and performance (Shove, Pantzar, and Watson, 2012), I show the importance of a biocultural approach to everyday context and life, particularly in encampment situations. Specifically, by introducing and outlining my biocultural model of Routinized Social Practices (RSPs), I demonstrate how these mundane, day-to-day activities enable some refugees to become agents who contemplate and execute actions to meet their needs beyond the mandated subsistence-level aid and navigate complex structural systems to ensure a sense of control, regularity, and predictability and potentially experience better health outcomes. RSPs are critical in how refugees carry forward cultural traditions while also exchanging in novel meaning-

making in the context of new and challenging socio-ecologies, thereby avoiding the expected adverse consequences of temporary encampment.

1.2 Overview of the current problem

While most of today's refugees tend to stay and seek protection within their national borders or immediate region, some do move farther afield in search of safety and security (UNHCR, 2018). Those individuals, who decide to move far from their country of origin, must undergo the hazardous process of fleeing. Migratory journeys often involve numerous structural obstacles and dangers that refugees must overcome as they pursue safety in their final destinations. A mere glance at the US-Mexico border or the most recent developments at Europe's doorstep keeps reminding us of the significance of contemporary territorial edges where states exercise their sovereignty, control, and power (Johnson et al., 2011) and engender struggles over mobility. Specifically, highly secured borders accompanied by states' restrictive policies and heightened regulations profoundly influence and shape the complex migratory trajectories of many fleeing individuals who aspire to relocate to places with long-term stability. To circumvent such structural constraints imposed on clandestine human migration, many refugees must undertake more risky, dangerous migratory routes - they have to play the 'game' that often becomes a life and death experience for many of them. Prior anthropological work has illustrated a wide range of hazards, perils, and casualties fleeing people face as they try to cross the maritime borders of Europe in makeshift boats (Albahari, 2015; De Genova, 2017; Belloni, 2019), difficult physical and human terrain (Arsenijevic et al., 2017) or defy the US-Mexico border and repressive policies (De León, 2015; Vogt, 2018).

Once they leave their country of origin, refugees routinely experience numerous traumas, physical hardships, uncertainty, ongoing psychosocial stress, lack of social support, and/or sexual abuse (Arsenijevic et al., 2017; Gottvall et al., 2019; LeMaster et al., 2018; UNHCR, 2019b). Specifically, they often face threats and persecution when crossing the borders, physical fatigue, injuries, hunger, violence, family separation, and recurrent psychosocial stress (Dolma et al., 2006; Hsu et al., 2004; Mangrio et al., 2018; Sandalio, 2018). Overcoming such highly demanding and traumatic events while experiencing recurrent physical and psychological stress may also lead to a number of health consequences in refugee populations (Zimmerman et al., 2011). Prior research in this area has suggested that refugees suffer a higher incidence of mental disorders than those in the non-war affected general population (Bogic et al., 2015; Tinghög et al., 2017). Moreover, the dynamics of recurrent psychosocial stress and trauma may lead to a dysregulation of stress-responsive physiological axes, resulting in maladaptive neuroendocrine responses, as reflected by CORT levels, EBV titers, and blood pressure, increasing refugees' vulnerability to poor mental and physical health outcomes (Dajani et al., 2017; Doocy et al., 2015; Jankovic et al., 2020; Kaplan and Nunes, 2003; Mewes et al., 2017; Miller et al., 2007).

Furthermore, refugees who succeed in crossing international borders often end up confined in temporary settlements, such as asylum centers, in transit areas (i.e., Serbia in this context) where management and control mechanisms are enacted for those perceived as passive victims. The narrowness of host state obligations toward refugees and their complete reliance on humanitarian assistance justify their warehousing containment within the camp walls. They are treated as inert recipients requiring only food and

housing. The spaces, as Malkki (1992:34) argues, actually demonstrate a “technology of ‘care and control’” and “technology of power” (1995a: 498), not merely a physical infrastructure abounding with people who need protection. State and humanitarian practices of keeping refugees in protracted situations thus reinforce some of the central characteristics of refugee experiences, such as victimization, loss, and disempowerment (Korac, 2009).

With no viable prospects of moving ahead or going back home, many refugees feel stuck in these confined transit spaces, typically for an extended period. Within these liminal spaces, refugees simultaneously experience protracted uncertainty and lack of control over their present and alternative futures, along with no immediate scenarios for robust and far-reaching solutions to their precarious situation. For instance, at the end of 2020, most of the 26 million refugees worldwide continue to spend years and even decades living in provisional settlements that provide shelter and necessities while awaiting repatriation or resettlement (UNHCR, 2020). These transient refugee populations are routinely depicted as static and passive in their longing for the past and devoid of agency (Brun, 2015; McDowell, 2013). Each refugee experiences the feelings of being undesirable and placeless (Agier, 2008:28), an individual who lacks power, autonomy, and dignity (McDowell, 2013:68), and cast as a marginal life (Turner, 2005).

Moreover, life in these regulated and managed transitional spaces is often characterized by persistent precarity, boredom, volatility, uncertainty, and violence (Agier, 2011; Brun, 2015; Oka, 2011). These various encampment stressors, often compounded by exposure to traumatic events and recurrent psychosocial stress the refugees experience before and during their flight, may lead to a number of health

consequences with short- and long-term implications for their well-being and resilience. As I have noted, prior research in this area has suggested that refugees' experiences of recurrent trauma have been associated with their poorer mental health outcomes (Fazel et al., 2005; Tempany, 2009) and multiple patterns of HPA axis function and dysregulation (Dajani et al., 2017; Doocy et al., 2015; Jankovic et al., 2020; Kaplan and Nunes, 2003; Mewes et al., 2017).

Despite the indignities of life in limbo and substantial recurrent uncertainty, refugees within these spaces actively strive to mitigate these numerous stressors by establishing social mechanisms in the form of culturally appropriate routinized social practices (RSPs) as a means of challenging their treatment as passive clients with a “dependency syndrome” (Turner, 2005:260) or “relief mentality” (Kibreab, 1993:323). Moreover, the re-establishment, reproduction, and persistence of RSPs – patterns and practices of everyday life – afford perception of control and certainty while simultaneously acting as drivers of health outcomes across and within transient refugee spaces. By operationalizing the complexities and variations underlying RSPs, I shed light on abstract discussions of agency, social practice, and health in encampment situations. Moreover, drawing on research at three asylum centers in Serbia, I show that RSPs—mundane adjustments to life under encampment—constitute a particular biosocial niche of coping and resilience constructed through the immediacy of routine social practice and physiology.

1.3 Dissertation goals and research questions

The principal purpose of this dissertation is twofold. First, to advance and nuance our understanding of the importance of mobility journey and transitional stages of the migration process by exploring the refugees' lived experiences, mental health, and psychobiology. Second, to build on theories of practices by adding a biocultural perspective to the complex interplay between refugee agency and encampment structures through exploration and analyses of RSPs and bio-psychosocial responses to displacement in the context of ongoing precarity. To that end, I combined and drew on rich measurements of social and cultural contexts gleaned through ethnographic research and physiological information obtained from a collection of biomarkers. Specifically, I analyzed data collected via semi-structured interviews, ethnographic participant observation, and mental health surveys, as well as stress-related biomarkers collected from fingernails (cortisol), dried blood spots (Epstein-Barr virus antibody), and blood pressure.

Past studies suggest that despite the displacement-related traumatic experiences, uncertainty, and precariousness, refugees strenuously maintain daily social practices to challenge their treatment as passive, dependent clients (Kibreab, 1993; Turner, 2005) and to enhance control, normalcy, and regularity in their lives (Brun, 2010, 2015; Oka, 2011, 2014; Trapp, 2018). However, little is known about how the complex interplay between psychosocial experiences during their mobility journeys and upon arrival in a transit country affects the refugees' dynamics of everyday life that transpire in RSPs and interrelate with their mental health and psychobiology. Based on year-long fieldwork

with transient refugee populations residing in three asylum centers in Serbia between 2016 and 2020, this dissertation aims to answer the following questions:

1. How do transient refugees' decisions to seek protection outside their national borders relate to the individual differences in behavioral, psychological, and biological profiles, and how do the dynamics of transitional migratory stages impact and shape the refugees' lived experiences, everyday life, and health?
2. How do displaced individuals negotiate control and regularity over their daily lives in the context of persistent uncertainty and limited availability of critical resources?
3. How does the interplay between continuity and change intervene when previously established routines and practices are transformed and performed under new structural circumstances and do active re-establishment, engagement, and persistence of practices reproduce the RSPs' dual biocultural role of simultaneously constructing social meaning, value, and a sense of regularity and subsequently mitigating recurrent psychosocial stressors to decrease the refugees' vulnerability to adverse mental health outcomes?

Evaluating the complex interaction between the transient refugees' agency, ongoing dynamics of daily life, and lived experiences during the transit migration process in relation to their mental health and physiological profiles, I offer an integrative, biocultural perspective on the peculiarity and complexity of social and bio-psychological changes that transpire when displaced individuals vigorously defy strict mobility regulations and life in restricted, liminal spaces, while simultaneously maneuvering biopolitical structures of power and control. Further, by adding a biocultural perspective on refugee agency under structural constraints, I argue that the refugees' re-establishment, engagement, and performance of RSPs enable them to re-build meaning and values within their externally managed and often chaotic lives, and hence work to impart some routine into their transient lives. At the same time, participation in RSPs

helps refugees mitigate displacement-related stress and challenges of encampment and experience more favorable health outcomes.

Only a limited number of studies have examined how refugees, through small initiatives and activities, actively work to dispel the common discourse that labels them as passive recipients and maintain dignity and normalcy or how daily practices relate to their mental well-being (El-Shaarawi, 2015; Horn, 2009; Oka, 2011; Riley et al., 2017; Turner, 2005; Trapp, 2018;). To the best of my knowledge, no biocultural research to date has considered these issues through an integrative perspective regarding the complex social processes underlying RSPs and their biological impacts, especially among transient refugee populations in encampment situations. Therefore, the findings of this dissertation have the potential to help us begin to grasp why some transient refugees tend to develop more effective social behaviors and coping strategies to deal with everyday stressors, uncertainty, and structural limitations through which they enact resilience and experience relatively better health profiles than their peers living under the same highly restricting conditions of rigid social management.

1.4 Historical and ethnographic background on research site

The glorification of Serbia as a geographically distinctive and unique territorially bounded sovereign polity in a realm of great powers can be traced back to the first half of the nineteenth century and its rudiments of modern nationhood, finding recommenced expression within the dwindling days of the Communist-led Socialist Federal Republic of Yugoslavia– SFRY (Savic, 2014; Todorova, 2009). After WWII, the SFRY adopted a new constitution that recognized six republics - Serbia, Croatia, Macedonia, Slovenia, Montenegro, Bosnia and Herzegovina (BiH), and two autonomous provinces –

Vojvodina and Kosovo. A strong, centralized government under the control of the Communist Party controlled Yugoslavia while simultaneously recognizing the multiple nationalities, cultures, and religions (Arnold and Wiener, 2012). Although under the one political party rule, the newly established federation acknowledged and accommodated these recognized differences, aiming to refashion itself into a pluralist society (Rogic, 1985; Todorova, 2009).

However, the competition between different ethnic groups living in Yugoslavia around access to power and control of the state in the late 1980s led to the politicization of ethnicity and religion, followed by unwillingness for further accommodation of alternative political views and cessation of diversity as a public good. While many Central and Eastern European countries went through a peaceful social transition and/or nonviolent state disintegration, the former Yugoslavia experienced a violent breakdown reflected in the civil war drama of 1992–1995, first in Croatia and then in BiH. The war in Kosovo erupted, leading, in 1999, to NATO air strikes against Serbia in response to the ethnic cleansing of Albanians in this southern province. Kosovo, which declared its independence from Serbia in 2008, remains a disputed territory and partially recognized state by the international community. Dissolution of the former federal state resulted in six new, autonomous nation-states, with concomitant enormous flows of refugees and displaced people in Serbia. Ninety-three percent of the refugees who fled Croatia and Bosnia and came to Serbia were ethnic Serbs (Vujadinovic et al., 2011). Around 296,000 refugees originated primarily in Croatia and 180,000 in Bosnia, while approximately 240,000 Serb, Montenegrin, and Roma people were internally displaced from Kosovo after the violence erupted in 1999 (U.S. Committee for Refugees, 2000).

As one of the countries with the most extended protracted refugee situation globally, Serbia still copes with the refugees from Bosnia and Croatia, and internally displaced people from Kosovo of the 1990s. These displaced populations are a painful reminder and tragic epilogue of the downfall of the political and socio-economic system and the vision of the collective Yugoslav identity in the Western Balkans (Bobic, 2009; Markowitz, 2010). At the same time, Serbia, like the other Balkan nations, continues to be a source of primarily labor migrants to European Union (EU) countries and overseas. It has been and still is considered a land of emigration. Although no longer principally related to war and/or human rights abuses, emigration is driven by a deterioration of the economic life and an almost non-existent economic production over quite an extended period. Many young, educated people, especially a growing number of women, strive to move to West Europe in search of better living conditions and employment (Bobic, 2009). Thus labor migration and emigration remain a harsh reality in Serbia and one of the crucial depopulation factors on this territory.

Serbia, a country of emigration, became a node in the network of immigration, transnational migratory movements, and supranational migration regulation in the mid-2010s, when violent conflicts broke out in the Middle East and Africa. Over one million people fled their countries in search of safety, embarking on their perilous journey and passing through Serbia *en route* to EU Member States (most of them hoping to reach Germany). As one of the transit countries on the ‘Balkan route’ between July 2014 and March 2016, after which this migration route was shut down, Serbia represented a bridge state, letting the two-year refugee influx into Europe take place (Mandic, 2017).

In response to irregular and unwanted movements (Boswell, 2003), the EU has utilized a set of political measures, including stringent policies, closed borders, applied bilateral readmission provisions to discourage and curtail their movement, and outsource responsibility to regions and countries outside of the EU to keep its internal space safe (UNHCR, 2017; Weber, 2017). Specifically, in September 2015, Hungary, an EU Member State, tightened its repressive anti-refugee policy by fencing off its borders with Serbia and Croatia and adopting a set of measures illustrating a multidimensional violation of the country's national, European, and international legal obligations (UNHCR, 2017; Weber, 2017). Another EU country, Croatia, also responded to mass displacement by closing its border with Serbia and endorsing stricter policies designed to limit arrivals, aiming to outsource the problem outside the EU territory. In addition to these supranational migration regulations, in March 2016, the EU reached a refugee agreement with the Turkish government, which outlined measures to curtail the onward movement of refugees traveling from Turkey to the EU (UNHCR, 2016, 2017; Weber, 2017). These developments in the EU migration agenda trapped many refugees in transit while turning Serbia into a refugee buffer zone. Consequently, around 6000 refugees and asylum seekers remain in Serbia, distributed over 17 asylum centers with stays ranging from a couple of months to a few years (UNHCR, 2019b).

In the remaining sections of this Chapter, I provide an organization plan and an overview of the subsequent dissertation chapters.

1.5 Overview of the dissertation chapters

Using a short-term longitudinal, within-site comparisons approach, the following chapters in this dissertation nuance and expand our understanding of how the particularities and complexities of transitory migratory stages interrelate with bio-psychosocial processes and responses to offer new insights into social and biological determinants that shape ongoing dynamics of everyday life, agentic choices, lived realities, social behavior, and health in refugee populations (n=245) residing in three asylum centers in Serbia - AC Belgrade, AC Bogovadja, and AC Banja Koviljaca.

In Chapter 2, I consider the theoretical framing of the dissertation, synthesizing the literature of three major themes: migration and displacement, practice theories, and finally, social determinants of health, neuroendocrine responses, and mental health. First, I consider the migration phenomenon and its related concepts used to explain the movement of people across international borders, their decisions, and lived experiences in liminal spaces (Brettell, 2000; Castles, de Haas, and Miller 2014; Düvell, 2008, 2012; Fassin, 2011; Turton, 2003). Migration is not a straightforward and linear course, but a life-changing event, a spectrum, involving complex processes that cannot be explained or illustrated via dualistic accounts and conventional dichotomies. Next, I discuss the critical role of routinized social practices (RSPs) in making everyday life structured, normalized, and regulated, particularly in confined, stressful environments. Thus, social practices appear important in affording everyday experiences of routine and rhythm and imparting a sense of control and predictability (Highmore, 2010; Jenkins, 2013), particularly among refugee populations residing in social settings constraining their action and behavior (Bauder, 2003, 2005; Friedmann, 2002). Finally, I focus on social

determinants of health and their critical role in influencing and shaping health outcomes (Adler et al., 1999; Marmot and Bell, 2012; Miller et al., 2009), physiological responses (McEwen and Seeman, 1999; Seeman et al., 2010), and mental well-being (Chrousos and Gold, 1992; Esch et al., 2002). Collectively, these themes generated the theoretical framework upon which I built and developed the research questions and the subsequent data-driven chapters in this dissertation.

Based on ethnographic data and mental health surveys, in Chapter 3, the first of four data-based chapters, I examine the role of the migratory transit journey, lived experiences, and traumatic events *en route* in relation to the refugees' mental well-being. Informed by heuristic approaches to decision making (Arthur, 1994; Brown, 2016; Gigerenzer and Gaissmaier, 2011) along with game theory and game-theoretical terminology while utilizing the emic perspective on unauthorized journeys to Europe as a particular life-changing event and, I propose the simplified 'game'¹ model that illuminates strategies, decisions, and outcomes for two players, the refugees and the border police, whilst taking into account the role of smugglers, as enabling agents. Rare studies have considered how the lived experience of the clandestine journey characterized by ongoing trauma, stress, and danger (Arsenijevic et al., 2018; BenEzer, 2002; Collyer, 2010; Kushner, 2012) may have affected the mental health of refugee populations (Arsenijevic et al., 2017; Dolma et al., 2006; Mills et al., 2005). I consider the structural and political conditions impeding regular migratory movements and compelling refugees to embark on clandestine, dangerous routes and play the 'game' in seeking protection across international borders. I also consider the role of smugglers as enabling agents who

¹ The 'game' is the term that most of my interlocutors used to describe the journey, particularly the act of crossing borders between two states on their way to Serbia.

affect a refugees' range of hazards on the journey, the knowledge, and the perceptions underlying their decisions (Mandic and Simpson, 2017). Since the 'game' is a significant and inseparable component that impacts on the length of the journey, I used that length and other covariates to predict refugees' mental well-being. Specifically, I tested the prediction that smuggled refugees, who had experienced longer and more traumatic journeys, would exhibit poorer mental well-being, including greater psychosocial stress and PTSD-like symptoms. Then, I predicted that women would show higher levels of psychosocial stress and poorer mental well-being than men. Considering that prior studies have predominantly focused on the causes and the consequences of displacement, these data offer a novel perspective on the ways refugees conceptualize, understand, and survive the life-changing event entailing clandestine multi-national transit journeys and the 'game.'

Building on the initial findings of Chapter 3, in Chapter 4, the second of the three data-based chapters, I mainly considered how refugees' experiences of trauma and recurrent psychosocial stress during their recently completed journeys correlate with their mental well-being or physiological profiles, assessed via mental health surveys and fingernail cortisol, respectively. Once they leave their areas of origin, refugees are exposed to a wide breadth of traumatic and psychosocially stressful experiences that may lead to a number of mental and physical health consequences. Specifically, the refugees' vulnerability to mental health problems has been associated with traumatic events experienced at various stages of the migration process, prior, during, and post-displacement period (Johnson and Thompson, 2008; Porter and Haslam, 2005; Robjant et al., 2009; Steel et al., 2009). Such traumatic events accompanied by recurrent

psychosocial stress and uncertainty are likely to activate a number of physiological systems, including the hypothalamic-pituitary-adrenal (HPA) axis, which responds in part through the production of cortisol (CORT; Johnson et al., 1992; Koolhaas et al., 2011; Miller et al., 2007). CORT helps regulate a wide range of physiological processes in response to physical and social difficulties, such as enhancing energy mobilization and cardiovascular activity (Dedovic et al., 2009; Dickerson and Kemeny, 2004). While temporary activation of stress systems in response to demanding physical and social circumstances is adaptive and necessary for coping (Flinn et al., 2011), chronic exposure to psychosocial stress may result in a dysregulation of stress-responsive physiological axes, resulting in maladaptive neuroendocrine responses (Miller et al., 2007; Ursin and Olff, 1993; Ursin and Eriksen, 2004). Since refugees experience numerous physical and psychological hardships *en route*, I predicted that refugees with longer journeys or traumatic experiences during their journeys would exhibit higher CORT and poorer mental well-being, including greater psychosocial stress and PTSD-like symptoms. Then, I predicted that women would show higher chronic CORT production, greater psychosocial stress, and poorer mental well-being. I also included partnering status as an explanatory variable because social support may be linked to reductions in the physiological and mental toll of such distressing experiences. By assessing the relationship between journey-related trauma/ psychosocial stress, mental health, and neuroendocrine systems, I was able to test how exposure to chronic, highly demanding conditions might have adverse implications for the refugees' health, recovery, and resilience.

In Chapter 5, the third data-driven chapter of this dissertation, I build on the two previous data chapters to assess the dynamics of poorer social functioning and low social support in relation to mental health, neuroendocrine and immune physiological systems among transient refugee populations trapped in more intermittent stages of the migration process. Migration-related trauma and life in protracted displacement conditions tend to lead to the refugees' struggle with cultivating social support (Hirschfeld et al., 2000; Miller et al., 2002), which can feedback with feelings of loneliness and social isolation (Dolberg, Shiovitz-Ezra, and Ayalon, 2016; Gottval et al., 2019) with potential consequences on both physical and mental health (Cacioppo et al., 2006; Hawkey and Cacioppo, 2010; Steptoe et al., 2013). In general, social support has been widely recognized as a predictor of an individual's well-being and a critical protective factor concerning mental and physical health (Cohen and Wills, 1985; Cruwys et al., 2013; Ozbay et al., 2007; Uchino, 2006). Given the increasing evidence regarding associations between higher reported levels of social support and better psychological, neuroendocrine, and immune responses, I was interested in how the protective properties of support may play an important role in attenuating links between ongoing migration-related psychosocial stress/uncertainty and psychobiological processes among transient encamped refugee populations. Here, I predicted that refugees, who had experienced longer journeys, would report lower social support. I then tested whether refugees with reported lower social support would exhibit poorer mental well-being, greater psychosocial stress, and PTSD-like symptoms. Finally, I tested the prediction that refugees with reported low social support would exhibit higher CORT (measured via fingernails) and EBV antibody levels (measured via dried blood spots). These data

brought together the social, mental, and psychobiological components of understanding how social relationships and exchanges may be critical in overcoming the adverse impact of displacement-related trauma and stress, particularly highlighting the linkage between enhanced and sustained social support resources and their stress-buffering effects of psychosocial strain on the development of stress-related pathology.

In the final data-driven Chapter 6, I assess how RSPs may serve as a pathway through which refugees re-imagine their daily life, social meanings, and values, thereby mitigating the psychosocial stress of the journey and encampment situations often characterized by volatility and uncertainty. Daily habits and everyday practices that comprise people's daily lives carry high social importance (Bauder, 2003, 2005; Downey, 2010; Friedmann, 2002; Mahar, 2010; McKay, 2001; Nee and Saunders, 2001; Pink, 2012) as they afford feelings of routine and rhythm (Highmore, 2010), impart a sense of control and predictability (Jenkins, 2013), and uphold good health and well-being (Maller, 2015). Given that the complex and bi-directional interplay between the social processes underlying RSPs and their biological impacts, especially within transient encampment situations, has been understudied and poorly understood, I investigate how RSPs may impart some structure and predictability, afford perceptions of control and certainty in the refugees' daily lives and drive better health profiles. In so doing, I elaborate on the relationship between RSPs, enhanced routine, control, and predictability and take steps toward operationalizing and measuring the summary impact of RSPs and their potential role as mitigators of stress and drivers of health and well-being. I suggest that RSPs afford a sense of continuity, regularity, and normalcy to transient refugee populations in Serbia, while helping them cope and cultivate resilience to adversity as

they await resettlement or engagement in another ‘game’ to their desired destination. These data are critical for a more profound and nuanced understanding of the meaning of routinized practices on social systems, value, identity, health, and well-being. They also shed light on the complexity underlying the emergence, persistence, and endurance of RSPs in volatile and unstable conditions while contributing to knowledge about human resilience and adjustability under rigid social management circumstances.

Chapter 7 concludes the dissertation by gauging how the data I presented and discussed here helps inform our understanding of the complex processes underlying cultural and social changes in adverse structural conditions, as well as shed light on the behavioral and bio-social mechanisms through which agents enact resilience, re-claim normalcy, and create the social niches of coping and resilience. Notably, by highlighting the importance of ethnographic context for a more accurate and precise analysis of quantitative data from survey instruments and biomarker analyses, I contemplated the deeper and nuanced insights these data bring to the ideas of (transit) migration, social dynamics, and robustness of cultural practices and behaviors when considered in relation to concepts pertaining to chronic psychosocial stress, neuroendocrine responses, bio-social implications, and mental health in the transient displaced population residing in temporary, liminal spaces. Following this critical assessment of the results, I considered the questions that have emerged from data analyses, the following steps, and future research.

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CHAPTER 2:

THEORETICAL REVIEW

2.1 Introduction

It does not come as a surprise if I say that migration characterizes a complex and multifaceted phenomenon entailing not just movement of people and their bodies spatially and temporally but also their practices, meanings, and relationships. The social world of people on the move travels along with their physical bodies. So, why do people migrate? Significant global and political changes have continued to shape people's mobility, migration patterns, and humanitarian responses to mass displacement over the last few decades. While some of the core drivers, such as violence, wars, persecution, and human rights violations, are certainly not new developments in our history, human displacement and migration appear unprecedented in today's world. Along with these significant contributors to human displacement, natural disasters and adverse economic situations, including poverty, famine, or threats to their livelihoods due to general instability and disorganization, often drive people to leave their country of origin. Indeed, the numbers are higher than they have ever been since UNHCR started recording displacement trends in the 1980s. By the end of 2020, there were approximately 79.5 million forcibly displaced people worldwide, including 45.7 million internally displaced people (IDPs), 29.6 million refugees, and 4.2 million asylum seekers due to violent conflicts (UNHCR, 2020). Regardless of their causes, there is no doubt that migration

and displacement characterize one of the major challenges in the modern global world.

In this dissertation, I suggest that if we are to grasp the world of displaced people, their lived experiences, everyday life in confined liminal spaces, and health, we have to look closely at how the transitional nature of their movement, experiences of their journeys, and daily social practices influence and shape their migratory trajectories, aspirations, and hopes. In this chapter, I lay out the theoretical frameworks that have shaped my research questions and dissertation. Building on the rich body of literature about migration perspectives and how human movement and displacement represent life-changing events, I seek to evaluate how structural constraints on mobility create the conditions inducing clandestine multi-national border crossings and the exclusion and illegalization of displaced people. Migration is far from being a straightforward and linear process. Imposed restrictions on human mobility often generate the complex trajectories of people, who regularly get stuck in a transit country for months or even years before reaching their desired destination. Through a practice theory lens, I also examine the lived realities of the transitional migratory stage illuminating how displaced people express their agency and capability to act upon their own situation to challenge their depiction of ultimate victims. Briefly, I propose and analyze the idea of Routinized Social Practices (RSPs), which I conceptualize as individuals' dynamic, relational, and recursive efforts to afford a sense of continuity, control, and predictability within structural constraints shaping their everyday experiences and lived realities. I further suggest that RSPs serve as mitigators of psychosocial stresses and challenges of encampment and drivers of better health and physiological outcomes. Finally, I draw on literature illuminating social determinants of health, stress physiology, and mental health

to trace biosocial and physiological changes experienced by people traversing different liminal socio-spatial zones.

2.2 Migration

2.2.1 Theorizing movements of people

Anthropologists have long been interested in human movement across spaces, lived experiences, and social behavior. Yet, it was not until the second half of the 20th century that they started examining the human immigration-migration phenomenon more closely (Brettell, 2000). For instance, in her literature review of the main theoretical frameworks in this area, Horevitz (2009:747), posits that, during the 1950s and 1960s, migration became a top priority for anthropologists, who could not disregard the high rate of rural-to-urban migration, particularly in territories of Africa and Latin America. As of the 1960s, anthropological research has significantly contributed to the development of migration theories by explaining how, why, and where people migrate. Numerous anthropologists have authored valuable review articles summarizing approaches of migration, patterns, and impacts on sending and receiving countries (Brettell, 2000; De Genova, 2002; Fassin, 2011; Horevitz, 2009; Suárez- Orozco et al., 2011); my objective in this section is to provide a concise overview of its history.

In ascertaining trends in theory and research, Kearney (1986) was among the first to summarize anthropological concepts of migration concerning development. He describes three successive theoretical frameworks known as modernization, dependency, and articulation theory. These conceptual orientations aim to explain people's movement across and within borders. In its dualist assumptions, modernization theory postulates a polar distinction between developed urban and underdeveloped rural areas, the so-called

“folk-urban” continuum. In its attempt to model the movement of people based on ‘push’- ‘pull’ factors, modernization theory overlooks the realities of most migrant communities and the influence of external structures affecting the process, particularly in the international migration context. As a result of such shortcomings, by the late 1960s and early 1970s, anthropologists departed from individual-level analysis to macro-level consideration (Horewitz, 2009:750), thereby shifting from the modernization concept to dependency theory. Representing the other end of the “folk-urban” continuum, the dependency theory suggests that dual economies are not disconnected but rather linked by “ties of dependency serving the developmental needs not of the periphery but of the core” (Kearney, 1986:338). Growing out of Latin America, this theoretical framework has considered the “extraction” of surplus from the periphery (Horevitz, 2009). Thus, dependency theory points to capitalism and the lack of balance within the global division of labor characterized by “inequities between labor exporting, low-wage countries and labor-importing, high wage countries” (Brettell, 2000:103). By moving from the individual level of analysis, this body of theory focused on the macro-level perspective and international and national economic and political developments that influenced, displaced, or even attracted population from the periphery to the core, thereby creating particular migration flows from the countryside to the city (Brettell, 2015). This macro approach left nearly no room for human agency, as it depicted migrants as passive, not active agents, who were vulnerable to economic exploitation and blamed for problems not of their own making (Brettell, 2015; de Haas, 2021).

Focusing on the “extraction” of surplus from the periphery (Horewitz, 2009:750) while disregarding the flow in the opposite direction and the perpetuation of

underdevelopment, the dependency theory did not provide anthropologists a framework that would help them theorize “dynamics of migrants in urban labor markets and their relationships to the sending communities” (Kearney, 1986:340). Therefore, in the 1970s, two post-dependency theoretical frameworks - world-systems theory and articulation theory – emerged, shifting their focus on the community level to explain migratory movements (Kearney, 1994). Anthropologists adopted the world-systems theory framework to elucidate the role of labor migrants within the complex movement of capital and commodities across borders. Unlike the dependency theory that aimed at explaining the impact of migration flow on the receiving societies, this conceptual orientation captured the impact of migration on both the receiving and sending communities (Horevitz, 2009; Kearney, 1986). Lastly, anthropologists used articulation theory to explain migration by focusing on the communities from which labor was mined by market forces, with the household occupying this strategic position and representing the unit of analysis (Brettell, 2000; Horevitz, 2009; Kearney, 1986).

Anthropologists and other social scientists, such as sociologists and geographers, have realized that people tend to maintain strong ties with their country of origin with improved modes of transportation and telecommunication. The concept of transnationalism captures “a social process whereby migrants operate in social fields that transgress geographic, political, and cultural borders” (Basch et al., 1994; Glick Schiller et al., 1992; quoted in Brettell, 2014). The transnational approach has emerged from the field of anthropology to explain that migration does not revolve only around political and economic reasons, but is also cognizant of social, cultural, and identity processes that surpassed physical borders (Horevitz, 2009; Kearney, 1995; Levitt, DeWind, and

Vertovec, 2003). Similarly to transnationalism, the diaspora theory explains the strong ties between migrant communities and their homeland (Brubaker, 2005). These theoretical perspectives focus on examining and analyzing lived experiences, identities and realities of migrants taking into account their 'emic' accounts, circumventing the shortcomings of historical-structural theories that have portrayed displaced people as more or less passive victims of global, capitalist market forces (de Haas, 2021).

To summarize, anthropologists draw on the various migration frameworks aiming at investigating the displaced people's lives and the underlying complexity of mobility processes, while simultaneously recognizing the structural, social, and historical contexts in which they make agentic choices, decisions, and acts (Brettell, 2003; Vogt, 2018). Thus, one can argue that migration is a multifaceted, diverse, and complex phenomenon, often triggered by an amalgamation of political, economic, and cultural factors. Involving people's movement within or across national borders, places of origin and places of destination, and social networks that traverse geographical space, migration always indicates processes at both local and global levels (Brettell, 2014). But throughout literature, the broader migration phenomenon is often conceptualized and discussed in conventional dichotomies, including voluntary/forced migration, emigration/immigration, regular/irregular movements, and sending/receiving countries (Castles, de Haas, and Miller 2014; Turton, 2003). While such an approach to migration has its functional justification and policy applications in facilitating distinction and prioritization of rights of different groups of displaced people, the reality of contemporary mobility patterns is far too intricate to be grasped via such dualistic accounts.

2.2.2 The migration complexity captured in the involuntary-voluntary dichotomy

Migration studies often utilize opposing categories to explain the displacement of people across and/or within borders. The typical migration binary suggests two main categories – voluntary and forced. The economically-driven or voluntary migration framework tends to illuminate people's experiences and actions as outcomes of their choice, with free will and without compulsion (Erdal and Oeppen, 2018). In contrast, forced migration, as a relatively straightforward concept, tends to be defined by a political basis, describing coerced or involuntary people's movements as an outcome of wars, persecution, natural disasters, or development undertakings (Bartram, 2015). Thus, unlike the economic factors underpinning voluntary migration, political causes trigger migration of people left with no choice but to relocate forcibly. A number of studies have challenged this traditional approach to the broader migration phenomenon, underlining highly problematic properties of these existing dichotomies (DeWind, 2007; Fussell, 2012) and arguing that they are out of touch with contemporary realities (Koser and Martin, 2011). While scholars have long recognized the need to move beyond traditional binaries (Cohen, 1995: 5-6), these distinctions still tend to dominate academic work, the policy world, and public discourse (Erdal and Oeppen, 2018; Pratsinakis et al., 2017).

As many scholars have pointed out, the conventional dichotomy between voluntary and forced migration requires a nuanced and refined consideration. I see this as an instrumental analytical approach to contemporary human migration vital for illuminating the phenomenon in its complexity. Specifically, prior research has attempted to blur boundaries between these dualistic categories, contending that such dichotomies actually fall along a continuum/spectrum of experiences between involuntary and

voluntary people's movements (Castles, de Haas, and Miller, 2014; Fussell, 2012; Richmond, 1993). In their article on voluntariness in migration decisions, Bivand Erdala and Oeppena (2018) suggest that the forced–voluntary spectrum is characterized by a continuum of experience, not a dichotomy, as people experience a degree of volition in their choices falling somewhere in the blurry middle of this spectrum. Similarly, Richmond (1993), linking migration flows with social ones, contests the dichotomy between voluntary and involuntary migration. He further argues that the majority of international migrants and refugees fall somewhere between these two extremes, the rational choice behavior and the degree of freedom that is severely constrained. Specifically, all displaced people, regardless of their status (i.e., refugees, migrants), face a certain level of constraint on their mobility across borders. Refugees exercise their agency even in the face of terrible circumstances. In contrast, migrants, usually depicted as voluntary, may face significant restrictions on their movement. De Haas (2021) argues that all displaced people face structural constraints; thereby, instead of applying these conventional binaries, it is more appropriate to consider migration processes as a continuum running from low to high restrictions, under which people move from their country of origin to that of their final destination.

Such nuanced discernments have led to the notion of the 'migration-displacement nexus' that illustrates contemporary migratory movements in several different ways. In their edited volume focusing on the linkages and overlap between displacement and migration, Koser and Martin (2011) postulate that people move out of mixed motivation; thereby, a distinction between forced and voluntary movements is out of touch with realities. They further posit that contemporary migration is characterized by "a mixed

flow” and depicts the fluidity of categories (4). For instance, Koser (2011:142) explains the rapid increase of ‘mixed flows’ at the Afghanistan-Pakistan border since people fleeing conflict, violence, and persecution regularly move alongside those mainly moving for economic and social reasons. He further demonstrates how Afghan refugees in Pakistan, when the government revokes their status choose to stay in the country illegally out of fear of returning to Afghanistan. Similarly to the ‘migration-displacement nexus,’ other scholars have offered the idea of the ‘asylum-migration nexus’ analogously illustrating the mixed flow of people moving across space, the presence of amalgamation of their diverse motivations for migration, and the fluidity of existing labels (e.g., economic, social, cultural, and political; Black et al., 2011; de Haas, 2009; Hugo, 1996; Hunter, 2005). This analytical approach to contemporary movement within and across borders aligns closely with the framework I employ in my research, as their focus complicates a strict classification of modes of movement, decision-making processes, and motivations of fleeing individuals. This continuum of choice and coercion runs parallel to the complex interplay between agency and structure in the migration context.

2.2.3 Choice or coercion? Active agents or passive victims?

Quite often, refugees and other (forcibly) displaced people are legally, bureaucratically, and discursively distinguished from voluntary migrants in both the academic and policy worlds. Anthropologists have written about a prevailing depiction of refugees as individuals who do not choose whether or not to move, who lack agency, and who are deprived of the opportunity to decide on their destinations (Agier, 2008; Turton, 2003, 2005). In contrast, voluntary migrants relocate from the desire to pursue upward economic mobility. For instance, in his discussion on voluntary and involuntary

migration, Richmond (1993:9) posits that “human agency implies an element of choice and ensures that some degree of uncertainty is always present, even when the choices in question are severely constrained by external conditions.” Similarly, Turton (2003) argues that differentiation between categories of displaced people along a continuum of choice may lead to discounting their most crucial characteristic - their agency. Taking this as a starting point, in my research, I anthropologically engage and analyze the complex interplay between external structures and the refugees’ agency, particularly in the context of their mobility journeys and during encampment.

Migration research in this area has tended to overlook people’s agency pertinent to their flight and to focus on the role of structure in determining the feasibility of their choices and actions, wherefore it has taken a more one-dimensional and dualistic perspective of migration-related decision-making processes (Randell, 2016). Recent anthropological studies investigating human migration, mobility, or movement across physical space have evoked and considered the more ubiquitous theoretical interest with respect to the interaction between structure and agency (Brettell, 2002; Brettell and Alstatt, 2007; Korac, 2009; Turton, 2003). Anthropologists contend that it is the interplay between agency and economic, political, environmental, and social structures that shapes decisions people make about their migration (Black et al., 2011). For instance, by referring to Ortner’s (1996:12) conceptualization of agency and structure, Brettell (2014:174) suggests that “an observer’s model rooted in the interaction between structure and agency accepts the fact that migrants shape and are shaped by the context (political, economic, social, cultural) within which they operate, whether in the sending society or in the receiving society.”

By problematizing the idea of people's decisions and structures in relation to migration, anthropological studies reveal that their informed choice often falls along a continuum between movement driven by agency (voluntary) and movement driven by structure (forced; Black et al., 2011; de Haas, 2009; Hugo, 1996; Hunter, 2005; Turton, 2003). I thus take the idea of the process of migration as a continuum to examine how displaced people face and overcome some structural constraints encumbering their decisions, while simultaneously exercising a certain level of agency related to individual choices and preferences.

The idea of interaction between structure and agency particularly comes to the fore when discussed in the context of forced migration. Refugees fleeing violence, wars, human rights violations, and persecution are often perceived as devoid of agency, helpless, and victims in a state of humanitarian need and protection (Agier, 2008; Turton, 2003). Battered by external events, they lack choices and opportunities to change the course of their life and come to depend on international charity and assistance (McDowell, 2013). A number of anthropologists have emphasized the need to conceptualize refugees and forcibly displaced people as agents acting within unique social, cultural, and historical contexts (Turton, 2003; Oka, 2011). For instance, in her work with internally displaced Georgians from Abkhazia, Brun (2015) demonstrates the agentive action of people to create an everyday life within the enforced structures of the protracted displacement. I argue that we need a more nuanced understanding of how structural constraints and agency of people compelled to seek safety across international borders intersect to shape lived realities and experiences, particularly in the context of forced migration.

2.2.4 Bureaucratic and humanitarian management practices of inclusion and exclusion

During my fieldwork in asylum centers in Serbia, I observed the impracticality of qualifying an individual's decision to migrate as solely voluntary or solely forced. It was often problematic and challenging in practice to distinguish between choice and coercion. Irrespective of their background, motives, and survival mode differences, whether they escaped political violence and persecution or fled the indirect economic impacts that ensued, both refugees and economic migrants pursued protection and socio-economic livelihoods in exile from the onset of their relocation (Zimmermann, 2011). People might relocate for a range of diverse reasons and experience different vulnerability levels and needs. I also observed that migration management practices regulating people's mobility require labeling and categorization. Such bureaucratic procedures demonstrated lack of capacity or readiness to recognize this continuum of choice, agency, and reasons for movement. Rooted in the forced-voluntary approach to people's migration, the process of labeling and categorizing delineates between refugees and asylum seekers – the former are perceived as forcibly displaced and the latter as voluntary migrants.

Most recently, as seen in Europe, governments divided fleeing individuals crossing their borders into different categories in their migration management practices, including refugee, asylum seeker, and/or economic migrant. Drawing on qualitative research with individuals from Afghanistan and Pakistan coming to Europe, Bivand Erdala and Oeppena (2018:983) postulated that “whether someone is discursively presented as an economic migrant or a refugee, for instance, majorly influences their treatment by immigration authorities and humanitarian actors.” This dehumanizing effect of the bureaucratic language and regulation present in the formal institutions and

international organizations' practices had defined their response and attempts to control and manage displaced people (Turton, 2003). Therefore, such bureaucratic labels, regulatory practices, and categories can reasonably be expected to yield discursive power and impact on people's migratory experiences (Erdal and Oeppen, 2018).

The character of the displaced people's movement is often used for placing them in different categories. In particular, refugees are, most often, legally, bureaucratically, and conceptually distinguished from migrants based on the involuntary nature of their movement, prompted by political violence that commonly threatens civil and political rights (Cabot, 2014; Mountz, 2010; Korac, 2009). The involuntary character of the refugees' migration serves a critical factor for differentiating them from economic, voluntary-driven migrants. Developed nations (i.e., the Western governments) routinely employ this approach in categorizing and labeling displaced people penetrating their physical frontiers. Some scholars' assertions that such a distinction is useful for analytical and practical purpose (although it often inefficiently reflects the reality; Betts, 2009) stand in stark contrast to other scholars' arguments that a clear-cut between labels is inadequate for both empirical and analytical purposes, even if categorizing within migration management supports the practice (Carling, 2017; Crawley and Skleparis, 2017; Erdal and Oeppen, 2018).

These ubiquitous labels are particularly significant for determining displaced people's worthiness for appropriate state and humanitarian assistance and protection. It does not come as a surprise that a displaced person, who is considered a 'foreigner' and 'bogus', definitely faces a less generous reception, security, and treatment. In this context, the need to further essentialize refugees and represent them as ultimate victims,

devoid of agency, appears to be necessary for determining their deservingness for formal protection. A number of scholars point out that debates on ‘the refugee’ as a category and how they are differentiated from other migrants are longstanding and ongoing (Cabot, 2014; Korac, 2009). In this enduring, highly politicized, and often heated debate, a genuine refugee is only a person fleeing for her life, acting upon instincts rather than any other human, moral, social or political need, while the individual as a migrant makes rational choices (McDowell, 2013; Korac, 2009). For instance, Mountz (2010:113) contends that, in the late 1990s, refugees and asylum seekers in North America, Western Europe, and Australia were increasingly labeled as “illegal,” “bogus,” and “economic migrants” and thus often viewed as illegitimate refugee claimants. Drawing careful lines between different categories gives leeway to state and non-governmental agencies to efficiently evade responsibilities by referring to an institutional mandate to serve a certain population (Koser and Martin, 2011:3). If people merely strive for better lives, they are not ‘genuine’ (Korac, 2009:7).

Labeling as ‘genuine’ or ‘bogus’ matters to displaced people and receiving nations when asylum or refugee status determination is at stake. Fassin and d’Halluin (2005:606) investigate the asylum system in France and argue that the contemporary state apparatus “ethos regarding asylum is dominated by suspicion.” Unlike two decades ago, when asylum was a matter of trust and an asylum seeker was presumed to be telling the truth, asylum is now surrounded by a climate of mistrust in which the asylum seeker is seen as someone trying to take advantage of the country’s hospitality. In this climate “people’s case histories are questioned, facts are challenged, and evidence is disqualified, and the written testimony is the highest form of truth telling” (606). It is, therefore, in

light of this new moral order that the body becomes the place that shows the evidence of truth (598). According to Fassin and d'Halluin (2005), narratives are less often believed and the government requests more proof to grant protection. Consequently, the role of medical experts becomes indispensable in the production of the person's truth. The rise of this new asylum regime of truth in France has followed a profound delegitimization of asylum seekers all over Europe that began a quarter of a century ago. Fassin and d'Halluin conclude that the government's treatment of refugees in France operates through "a dual process of 'subjectification and subjection'—in other words a process of production and submission of the subject whose body is supposed to deliver the ultimate truth" (606).

In her ethnographic study of hospitality in Greece, Rozakou (2012), makes a compelling argument about how the dominant official state discourse on hospitality shapes narratives about refugees in the reception center and casts asylum seekers as "worthy guests" (563). To be recognized as "worthy guests," asylum seekers in the camp setting have to comply with the rules of hospitality and act as apolitical beings. By conceptualizing asylum seekers as guests, Rozakou shows how humanitarian, political, and social discourse places refugees in a position of the receiver of humanitarian generosity, a mere being "devoid of culture, history, and social characteristics" (569). Hence, to be authentic and to be worthy, the individual is depoliticized and disempowered. Malkki (1996) suggests that, besides being stripped of history and culture, being a refugee also requires certain kinds of social conduct and moral stances. Accordingly, Malkki discusses an example of refugees in Mishamo camp, who became angered by the behavior of those among them who engaged in commerce—those who

had become “merchant refugees” (381). Those individuals, merchant refugees, do not abide by the camp’s rule that bans economic and political activities, wherefore they are not worthy guests and cannot be recognized as genuine refugees.

Media and public discourse play a significant role in generating narratives regarding who is viewed as an economic and hence not a political or genuine refugee; these narratives are often formed and influenced by government practices of inclusion and exclusion of specific categories. Skeptical media and political entrepreneurs disparagingly “label people trying to get in as “migrants”—not “genuine refugees” with legitimate claims to enter and be protected” (FitzGerald and Arar, 2018: 388). Consequently, refugees often become associated with criminality and illegality since their motivation to leave the country of origin stems not from political persecution but rather from the desire to pursue upward economic mobility (Mountz, 2010). Media and public remarks are often involved in the production of their illegality and culpability, bolstering the ‘bogus refugee’ discourse (Mountz, 2010, 2011) by depicting their onward movements as an invasion (Cresswell, 1997) and a threat to national security (Bigo, 2002). Several anthropological studies have revealed how media representations and the dominant official state discourse tend to depict refugee claimants as apolitical beings, the potential carrier for the disease, and worthy of protection if they abide by rules (Mountz, 2011; Rozakou, 2012). De Genova (2017:8) points out that mass media news coverage “on the pervasive depiction of refugees as (mere) migrants has been a crucial discursive maneuver in the spectacle of Europe’s border crisis.” Hence, to be recognized as authentic, genuine, and worthy of protection, the individual is depoliticized and disempowered.

Zimmermann (2011) asserts that these binary categories of genuine ‘refugee’ or bogus ‘economic migrant’ are blunt and inaccurate humanitarian, political, and legal tools. Similarly, FitzGerald and Arar (2018:393) contend that the dichotomous classifications juxtaposing refugees and economic migrants are imprecise and principally inadequate for capturing the underlying complexity. By reassessing the artificial distinction between ‘bogus’ and ‘genuine’ refugees, FitzGerald and Arar (2018) show that how people may principally cross the binary categorizations that subsist in prevailing humanitarian, legal, and political discourse and framings. They say “the same person who is a “refugee” in Kenya could be a “guest” in Jordan, an “asylum seeker” in Germany, a “migrant worker” in the United Arab Emirates (UAE), or an “irregular arrival” in Canada” (*ibid*, 391). The focus of the analysis concerning migration as a process grounded in categorization, inequality, discrimination, and controlled and limited by states still appears suitable, as the idea of a borderless world has yet to be materialized (Castles, 2016).

As a result of such state regulatory practices in addressing and managing cross-border movements, people’s migratory journeys are far from straightforward and linear regardless of their mobility causes, aspirations, or motivations. It has become increasingly difficult for many individuals to migrate safely and legally. Those who dare to embark on lengthy, dangerous journeys make various attempts through different irregular channels to reach their desired destination. Due to numerous unsuccessful efforts to their anticipated endpoint, many displaced people routinely get caught in transit places between their country of origin and their final destination. Trapped or stranded in transit has become a reality for many displaced people, particularly those trying to reach

European Union (EU) countries (Düvell, 2012). The EU states' practices and regulations significantly contribute to the emergence and construction of transit migration that refers to movements involving numerous stages, journey interruptions, or even separate trajectories (Düvell, 2008). As a response to irregular and unwanted movements (Boswell, 2003), transit migration designates a reaction to the changing character of control and management regimes and the complex interaction between the displaced people's autonomy and the states' sovereignty (Düvell, 2006, 2012).

2.2.5 Transit migration

The concept of transit migration is relatively new and only entered the political and academic discourse during the early 1990s (Düvell, 2008). It refers to the result of processes identified with the internationalization and/or externalization of EU migration policies aimed to stop a politically designated state of 'unwanted migration' (Boswell, 2003; Düvell, 2008, 2012; McKeever et al., 2005). While a standard definition does not exist, various international establishments, such as the Council of Europe, the International Organization for Migration (IOM), and numerous UN agencies have utilized the idea of transit migration within their agenda (Düvell, 2006; Papadopoulou-Kourkoula, 2008). Düvell (2006, 2012) notes that transit migration, often blurred and confused with other forms such as irregular and circular migration, signifies movement of people from a country of origin across various states until they reach a final destination. More specifically, transit migration suggests a phase in the process of migration occurring between relocation and settlement. Regardless of their status, legal or illegal, displaced people may stay indefinitely in transit or move further afield to a new transit

destination, which often highly depends on “a series of structural and individual factors” (Papadopoulou-Kourkoula, 2008:4). Making up a considerable part of today’s world migration flows, the transient displaced population may thus often get trapped in the vicious cycle of numerous attempts to reach their desired destination without losing sight in their minds of the final point of their journey.

As Düvell (2012) notes, the emerging phenomenon of transit migration, which is often negatively connoted and highly politicized, centers on Europe since it is found rarely in other parts of the world (e.g., South-East Asia, South Africa, and Latin America). Düvell (2006) suggests that the notion of transit migration, as a political code for undesirable and often unauthorized migration into the EU, intends to explain movement of a large number of people across multiple borders on their way to the desired destination. This movement primarily occurs across the EU’s Eastern external physical frontiers (Wallace, Chmouliar, and Sidorenko, 1996) and may differ between countries due to policies, sociocultural affinity, and the role of migrant networks (Cassarino and Fargues, 2006; Sorensen, 2006).

Numerous studies have used the transit migration framework to consider the migrants’ intentions in the context of globalization and the relations between center and periphery (Içduygu, 2003, 2005), human, economic, social, and security dimensions of this phenomenon (Ivakhniouk, 2004), and the role of restrictive policies and class (Düvell, 2006). In her book, Papadopoulou-Kourkoula (2008) employs a top-down and a bottom-up perspective to discuss how political developments and policies create and sustain transit migration outside and inside European borders, alongside vacillations occurring in people’s intentions, aspirations, and social networks. Similarly, Ivakhniouk’s

(2004) study of transit migration from Asian and African countries via Russia to the EU reveals that well-organized, technically equipped, and highly secured borders along with strict policies prevent people's onward movements while simultaneously placing them in an irregular situation and contributing to their feelings of being 'stuck.'

This research has substantially contributed to the understanding of transit migration as an indicator of significant changes in international migration systems in and around Europe while simultaneously highlighting a nonlinear, unstructured process that entails many stops and/or movements through different routes for an extended period. By linking transit migration to the broader contemporary migration processes, we can avoid falling into the trap of developing new binaries (i.e., transit and non-transit movement; Papadopoulou-Kourkoula, 2008) and discerning people's different motivations to migrate. In this way, the limitations of the traditional conceptualization of migration as a linear and structured process not capturing the complexity and contingency of the transit realities and journey-related experiences of displaced people can be surmounted (Collyer et al., 2014; Papadopoulou-Kourkoula, 2008; Vogt, 2018).

2.2.6 Migratory journeys and border crossings

Migratory journeys and multiple border crossings represent an inextricable part of the migration process, nevertheless particularly pertinent to the transit stages of people's movements. Research in this area has predominately focused on pre-and post-displacement migration periods (Johnson and Thompson, 2008; Porter and Haslam, 2005; Robjant et al., 2009; Steel et al., 2009), rarely recognizing the journey as an experience that deserves careful consideration and analysis (BenEzer and Zetter, 2014). A few recent

anthropological studies centered on the journey itself investigated what happens in-between two static locations (Belloni, 2019; Khosravi, 2010; Schapendonk, 2012a, 2012b; Vogt, 2018). However, there is still a significant gap in migration and refugee research of this critical period since it carries a particular meaning and weight for the rest of the displaced people's lives (BenEzer, 2002; BenEzer and Zetter, 2014).

Migratory journey routinely treated as a linear and anticipated temporary route from the country of origin to that of destination is often far from a well-defined movement from one point to another (Brigden and Mainwaring, 2016; Collyer, 2007; Triulzi and McKenzie, 2013). Conversely, people's movements across international physical frontiers are often fragmented, long, and uncertain multiple-stop attempts and undertakings characterized by complex decisions, actions, and encounters with policy restrictions and official structures at borders and host societies. Once they leave their homeland and embark on risky, clandestine, and lengthy journeys, refugees routinely suffer from physical hardships, prolonged psychosocial stress, and/ or sexual abuse (Arsenijevic et al., 2017; Dolma et al., 2006; Hsu et al., 2004; Sandalio, 2018; UNHCR, 2019). Such circumstances substantially contribute to a formative and transformative aspect of the migratory journey that deserves our keener consideration, particularly the questions 'how' and 'why' it constitutes a critical period in displaced people's lives.

What compels many refugees to embark on clandestine and risky migratory routes in search of protection across international borders as they suffer tremendous uncertainty, trauma, and hardships? Deterring government policies, tighter control, and regulations often compel fleeing individuals to resort increasingly to precarious and dangerous routes in seeking safety outside their national borders (Gerard and Pickering, 2013; Mandic and

Simpson, 2017; UNHCR, 2019; Weber, 2017). Moreover, their decision to undergo this difficult process of pursuing protection farther afield is often contingent upon smugglers, who affect their range of hazards on the journey, the knowledge, and the perception in which their decisions are grounded (Mandic and Simpson, 2017). Smuggling networks regularly facilitate unauthorized, clandestine movements across borders. They provide services, such as transportation, logistical support, and information on the best route(s) necessary for the victorious crossing of multi-national borders (Belloni, 2019; Mandic and Simpson, 2017). Several anthropologists and other social scientists have given particular salience to the significance of the migratory journey, highlighting international concerns about unauthorized border crossings and the role of human smuggling and trafficking networks along with casualties that take place mainly at Europe's Mediterranean shores (Albahari, 2015, 2016; Belloni, 2019; Kuschminder and Triandafyllidou, 2020; Mandic and Simpson, 2017). Despite the rise of increasingly restrictive policies designed to discourage and curtail the refugees' movements, the danger, casualties, and the refugees' inhumane, exploitative, and violent treatment at the hands of smugglers, the practice of irregular journeys and border crossing have been a norm for many people coming to Europe (Arsenijevic et al., 2018; Gerard and Pickering, 2013; Kuschminder and Triandafyllidou, 2020; Mallett and Hagen-Zanker, 2018; Mandic and Simpson, 2017; Mountz, 2010; Weber, 2017).

Political elites deem borders, territorial limits that define states, crucial to creating, producing, and regulating contemporary human migration (Hansen, 2014). Kearney (2004: 131) asserts that borders are more than just geographical markers, that they are considered a "composite geographic, legal, institutional, and sociocultural

structure and process” in the anthropological discourse. States utilize various technologies, such as enhanced surveillance, deterring migration policies, and increased border control – appearing as ‘natural order of things’ (Malkki, 1995a) – to protect their borders against ‘unwanted’ individuals – refugees and asylum seekers. In this way, government actions to seal the borders, control the movement of ‘undesirables,’ and other social technologies become a way of disciplining space and people on the move (Malkki, 1995b, 2002; Mountz, 2010, 2011). This emerging politico-legal national ‘order of things’ forces us to consider how and why specific mobility modes are authorized, supported, and allowed, while others are, conversely, halted, controlled, and policed? When is it allowable to let someone die in the name and on behalf of territory, population, or values that need to be protected?

Fleeing individuals, who managed to cross multi-national borders, face another structural obstacle - that of boundaries of structural practices of exclusion, distinction, and differential management (Fassin and d’Halluin, 2005; Fassin, 2011) enacted by state and non-state actors. Alongside the host states’ practices of managing displaced people, humanitarian aid is widely recognized as a critical actor on the global political scene, articulating the need to help “suffering strangers” (Malkki, 2015a: 7), “suffering bodies” (Rozakou, 2012: 564), and “suffering victims” (Ticktin, 2014: 282). Alleviation of human suffering and saving people’s lives ways not involving or contributing to structural change and/or taking direct actions against causes of political and social injustice is the guiding ethical principle of all humanitarian and government actions. Such narrowness of the host nations’ obligations toward refugees and their total dependence on aid assistance reproduce structures of power in which refugees they assist regularly

remain caught in the dynamics of exclusion and marginalization (Ticktin, 2011).

Moreover, these institutional, discursive, and administrative mechanisms simultaneously justify the refugees' containment within the walls of temporary settlements, such as camps and asylum centers where they can take the role of passive beneficiaries.

Many anthropologists and ethnographers have often drawn on the refugee camps' setting to explain the biopolitical dimension of state and humanitarian practices (Agier, 2008, 2011; Fassin, 2011; Malkki, 1996, 2015; Rozakou, 2012). Perceived as a transitional "safe and apolitical environment" (Oka, 2011:230), reflecting the temporary nature of the refugee phenomenon (Montclos et al., 2000), camps and asylum centers are spaces that are often transformed into "humanitarian sanctuaries" (Agier, 2008: 43) and "standard equipment" (Malkki, 2002:355) for governing and controlling refugees. Not merely a physical infrastructure abounding with people who need protection, but rather a "technology of 'care and control'" (Malkki, 1992:34) and "technology of power" (Malkki, 1995a: 498), these temporary spaces are "a site of humanitarian assistance and a place where asylum seekers and refugees are monitored, supervised, and subjected to biopolitical power by state and non-state actors" (Rozakou, 2012:568). Refugee camps and asylum centers are a prototypical 20th century solution to immediate anthropogenic disasters such as conflicts and violence (Lischer, 2005; Oka, 2011) and "the structure in which the state of exception is permanently realized" (Agamben, 1998:170). At the same time, these liminal spaces exemplify the most standardized, planned, and formal response for containing people who managed to cross international borders to reach Western countries.

2.2.7 On the other side of the border

Encampment settings are characterized by a standard technology of power and a prominent formal means to manage people's massive displacement (Agier, 2008; Malkki, 1995a, 2002). Built on the margins of cities, refugee camps stand as "authentic desert(s)" (Agier, 2008:39) in inhospitable areas, usually far from urban spaces where compulsory idleness and a destructive cycle of dependency lead to a life placed on hold (Oka, 2014). As Agier (2011) notes, these restricted, liminal spaces generally exemplify a hybrid formation, not replicating any existing socio-spatial form. In these 'zones of exceptions' (Agier, 2008; Biehl, 2015; Farzana, 2017), the host governments and humanitarian agencies impose and implement a set of special rules, regulations, and restrictions on the displaced people. Intended as a temporary solution to the refugee issue, camps and asylum centers often evolve into permanent settlements characterized by permanent temporariness (Brun, 2015), in which refugees remain and continue living for years under stringent conditions, surviving on aid relief until resettlement or (in) voluntary repatriation occurs. Warehousing and relegating refugees to humanitarian and state assistance often deprive them their right to freedom of movement (Smith, 2004), while exacerbating their near-total disempowerment and depoliticization and constraining "their ability to act and challenge rules and power structures" (Jacobsen, 2014:101; Rozakou, 2012). In this way, keeping refugees in protracted encampment conditions reinforces some of the central characteristics of their experiences, such as victimization, loss, and disempowerment (Korac, 2009).

As unique objects of knowledge, state control, and humanitarian management, refugees are not simply held in various types of encampment settings. Displaced people

are subject to biopolitical and bureaucratic processes; while these holding facilities provide people food and shelter, but they also get fingerprinted, identified, confined, and deported (Albahari, 2015). Rozakou (2012) argues that encamped refugees are considered something in-between, a human rather than a citizen, and a body rather than a political being. More precisely, neither merely a “bare life” (Agamben, 1998) nor a complete political being, encamped refugees are produced as the receivers of humanitarian and state generosity, devoid of agency, culture, and history (Rozakou, 2012), which justifies the practice of warehousing them. In this context, refugees are robbed of freedom and mobility, precluding them from pursuing everyday lives.

The palpable refugeeeness of people occupying a liminal political space includes the characterization of refugees as people, who are battered by external events, entirely dependent on international charity and assistance, and who simultaneously lack choices and prospects to change the course of their lives (McDowell, 2013). Each refugee undergoes the experience of being undesirable and placeless (Agier, 2008) while simultaneously being perceived as an individual who lacks power, autonomy, and dignity (McDowell, 2013). In his ethnographic study of everyday life in refugee camps in Tanzania, Turner (2005) notes that government and aid officials consider refugees a *tabula rasa* and cast as a marginal life, routinely displacing them out of their national background, traditional norms, and culture. Indeed, the institutional and discursive mechanisms contribute to the production of universalized understanding of refugees as people who have suffered trauma and loss and subjected to rootlessness, homelessness, and statelessness (Brun, 2015; Malkki, 1992). These ideological and political mechanisms, in turn, tend to both subsume all refugees under a single population, a

homogenous one, and to serve as a means of depoliticizing and decontextualizing the processes that led to their displacement (Agier, 2008, 2011; Brun, 2015; Malkki, 1992, 1995).

Refugees' lives are characterized by in-betweenness - as they are positioned between a previous social setting and a host society - which contributes to their feelings of being stuck in the present full of unpredictability and uncertainty they do not want to be in while awaiting a future that often lies too far ahead. These feelings of stuckness in the present remain reasonably strong, and, as Zion (2013:199) notes, can undermine the refugees' sense of their own identity, their sense of self-worth, as well as their self-trust, thereby significantly impairing their capacities for self-determination. Brun's (2015:23) study among internally displaced individuals in Georgia reveals that encamped people exercise "agency-in-waiting" by which people actively strive to challenge their status, control their future, structure and cope with the experience of protracted uncertainty. These refugees' capabilities to act in the present, expressed as waiting and hope, even under the circumstances of 'permanent impermanence' shows that not only does everyday life in refugee camps continue to flow, but refugees also aspire to defy the imagined boundary of camps and transform their lived reality (Brun, 2015:19).

Das (2000) suggests that an essential strategy for recovery is to get on with one's everyday life. While camps and centers are to stay in an isolated space, keeping a safe distance from the urban areas, and are monitored by the appointed authority (Oka, 2014), they are not "spaces to be filled with interchangeable individuals, but social venues where integration and quality of life need to be built and maintained" (Albahari, 2015). These liminal, transient spaces remain an essential social, economic, and political setting where

moments of refugees' resistance to inappropriate management to transform their existence are still feasible (Hassan and Hanafi, 2010). Through small initiatives and activities, refugees strive to defy structural constraints, challenge a representation of themselves as passive recipients of aid subsistence and transform into active agents contemplating ways and means to meet their strategic and practical needs (Kibreab, 1993; Oka, 2011; Turner, 2005). They cope with the enforced circumstances and live through them, moving on with what they have (Farzana, 2017). Daily practices and dispositions refugees re-establish and maintain in restricted, liminal spaces of a camp or asylum center create a habitus (Bourdieu, 1977) that allows them to challenge structures and taken-for-granted rules and act in the present while anticipating the future. In the next section, I provide an overview of Bourdieu's and other scholars' theories of practice and engage more thoroughly with the idea of social practices in the realm of a different kind of ordinary.

2.3 Social practices, daily life, and routines in confined socio-ecologies

2.3.1 Theories of social practice

Anthropologists have long addressed the social importance of rituals and rites of passage, the social significance of daily routines and everyday practices that comprise people's daily lives. In order to understand how the agentive mundane practices encamped refugees engage in to structure their daily life, challenge legal and administrative structures of the camp, and cope with uncertainty, it is critical to outline the logic of social practices comprised of competencies, meanings, and materials. Recent research in anthropology and other social sciences has utilized Bourdieu's (1977,1984)

theory of practice to investigate the salience of everyday, routine activities and interactions that occur via daily habits and everyday social practices (Bauder, 2003, 2005; Downey, 2010; Friedmann, 2002; Mahar, 2010; McKay, 2001; Nee and Saunders, 2001; Pink, 2012). These mundane practices that encompass the minutiae of everyday life unite what is customary and routinized (Fajans, 2015) and give rise to everyday experiences of routine and rhythm (Highmore, 2010), while simultaneously imparting a sense of control and predictability (Jenkins, 2013). Participation in and performance of such practices generate social meaning and value that motivate further meaningful participation in sociocultural settings (Fajans, 2015). Several studies have documented the benefits of individuals' daily routines and their partaking in a set of mundane practices that comprise their daily lives for good health and well-being among people in non-conflict or non-displaced societies (Gupta and Sullivan, 2013; Koome et al., 2012; Maller, 2015).

In numerous publications, Bourdieu (1977, 1984, 1986, 1990) has developed the theory of practice based on the idea that people act in the context of structured frameworks and expectations principal to the conscious prioritizing of individual dispositions and practices. Although some scholars argue that Bourdieu's reasoning of social practices is somewhat discordant due to his focus on the idea of habitus rather than practices *per se* (Schatzki, 1996; Shove, Pantzar, and Watson, 2012), in "*Outline of a Theory of Practice*" (1977:78) Bourdieu states that "in practice, it is the habitus, history turned into nature...which accomplishes practically the relating of these two systems of relations." In "*The Logic of Practice*," he continues:

"The theory of practice as practice insists ... that the objects of knowledge are constructed, not passively recorded, and, contrary to intellectualist idealism, that the principle of this construction is the system of structured, structuring dispositions, the habitus, which is constituted in practice and is always oriented towards practical functions" (1990:52).

The habitus and the concepts of doxa and body hexis represent the lynchpin notions of Bourdieu's entire corpus (Throop and Murphy, 2002). Bourdieu (1990) defines habitus as the relationship between external constraints and internal dispositions structured by an individual's past and present circumstances that determine his/her ways of being, acting, and thinking. In other words, the habitus represents innate predisposition gained through a relationship to a particular field that reflects the internal structure of the external field; concurrently, habitus and the field react with each other in producing practices. *Body hexis* denotes the motor function and various socially instilled ways individuals' bodies are conditioned to stand, speak, walk, and navigate culturally constructed/informed spatial configurations (Bourdieu, 1977:87, 1990: 70). Finally, *doxa*, established in practice between habitus and the field, is defined as the process through which socio-culturally constituted ways of perceiving, evaluating, and behaving become accepted as unquestioned, self-evident, and taken-for-granted – i.e. 'natural' realities/rules of the field (Bourdieu, 1977: 164, 1990: 68).

For anthropologists struggling to reconcile structure and individual agency (e.g., Ortner, 1984), Bourdieu's concepts of habitus and doxa have offered an alternative way for operationalizing structures, taken-for-granted rules, and activities to suggest that everyday practices are both strategic and emerge from an individual's past and present conditions (Downey, 2010). Like other theorists of practice (i.e., Giddens' theory of structuration, 1991), Bourdieu aims to account for the interplay between the agents' mundane social practices and the objective structures that simultaneously limit their practices yet remain predisposed to change through practice. Moreover, Bourdieu (1977, 1990) often employs the analogy of a game to portray that within the field, agents aware

of the self-evident rules navigate them strategically in their pursuit of maximizing the positions within that field. Schatzki (1997: 287) asserts that the habitus and field are reflexive in constructing practices that “are the interwoven activities (or games) carried out in a specific domain of practice, or field.” Yet, how do actors carry out those taken-for-granted rules of the field established in the relationship between habitus and external structure via habitual, daily social practices?

The contemporary practice-oriented framework understands social practices as routinized activities that can change over time (Fajans, 2015). These recent developments of social practice theories attempt to surpass the mere acts of daily life to investigate cultural traditions, social meanings, and values that dialectically create both the actors and the sociocultural networks in which they live and act (Fajans, 2015:782). Moreover, they investigate “the integration of social organization, social action, and the production of meaning – how social processes are turned by practical activity into cultural forms and in turn inform the improvisation of social practices” (Calhoun and Sennett, 2007:5; Mahar, 2010).

In their research of consumption and sustainability in everyday life, a number of social scientists (i.e., Shove et al., 2007; Shove, Pantzar, and Watson 2012; Warde, 2005) have utilized the contemporary practice theory perspective developed principally by Schatzki (1996, 2002) and Reckwitz (2002) to build on and extend Giddens and Bourdieu’s work, and have nuanced our understanding of “why people do what they do” (Maller, 2012:3, 2015). Reckwitz (2002) defines practices as routinized behavior, a block or patterned activities, consisting of several interconnected elements, including bodily movements, mental undertakings, practical knowledge, objects, motivation, and

emotional state, while Schatzki (1996: 89) describes practice as “a temporally and spatially dispersed nexus of doings and sayings.” Moreover, an important distinction is drawn in this recent work between practice-as-entity and practice-as-performance that offers a means of conceptualizing both stability and change of social practices across space-time (Schatzki, 1996; Shove, Pantzar, and Watson, 2012). Specifically, it elucidates how social practices in different locations intersect and change through past and present bodily memories, cultural expectations, and beliefs (Maller and Strengers, 2013), while recognizing the multiple ways of ‘doing’ practice (Shove, Pantzar, and Watson, 2012).

While Bourdieu considers variations in performance that can be the source of change and adaptation to new practices, Fajans (2015) asserts that “he gives little evidence of how variations emerge or whether they can affect practice change” (783). This distinction between practices as entity and performance enables researchers to understand how through performance and inclusion of new elements into practice, daily routines may change over time under different social circumstances and cultural schema (Maller, 2015; Pink, 2012; Shove, Pantzar, and Watson 2012). Moreover, this contemporary practice theory framework allows us to scrutinize the social world through daily life practices and conceptualize the body as the critical intermediary in acquiring and reproducing social practices (Rouse, 2007), while taking into account the material, experiential, and social dimensions (Shove, Pantzar, and Watson, 2012)

Building on the ideas of daily routines (Highmore, 2010; Pink, 2012), practices as entity and performance (Schatzki, 1996; Shove, Pantzar, and Watson, 2012) and Bourdieu’s (1977, 1990) concepts of habitus, doxa, and bodily hexis in this dissertation, I

coin the notion of Routinized Social Practices (RSPs) and define it as “a set of mundane, day-to-day activities that can be understood as experiential, affective, and embodied, as well as occurring within complex biosocial ecologies that impart agency and afford perception of control and certainty. Constituted between individuals and objects in movement, RSPs have routine and contingent elements while simultaneously encompassing innovations designed to navigate and negotiate the wider socio-ecologies. Their relational aspect involves other sociocultural practices, objects, and individuals and reflects an ongoing and dynamic phenomenon intertwined in the constitution of a person’s understanding of the world.” Using these elements, I illustrate, in Figure 1, the cycle of the everyday routinized activities. Therefore, daily practices - a way of cooking, of consuming, of working, of taking care of oneself are seen as coordinated activities by webs of various significant and interconnected dynamics (Reckwitz, 2002; Schatzki, 2002), that make everyday life structured, normalized, and regulated in different domains, such as professional, social, and personal (Smart, 2007; Shove et al., 2012). This seems particularly significant for encampment situations where social practices, day-to-day routine, and bodily movements of agents – refugees – might be constrained by humanitarian spaces and management, such as camps and asylum centers. In the following subsection, I elaborate anthropological research on everyday life in confined spaces, showing how refugees engage in various social practices to promote regularity, normalcy, and control, while simultaneously mitigating the expected negative impact of unfavorable and stressful conditions of encampment on the refugees’ mental and physical health.

Routinized Social Practices – RSPs

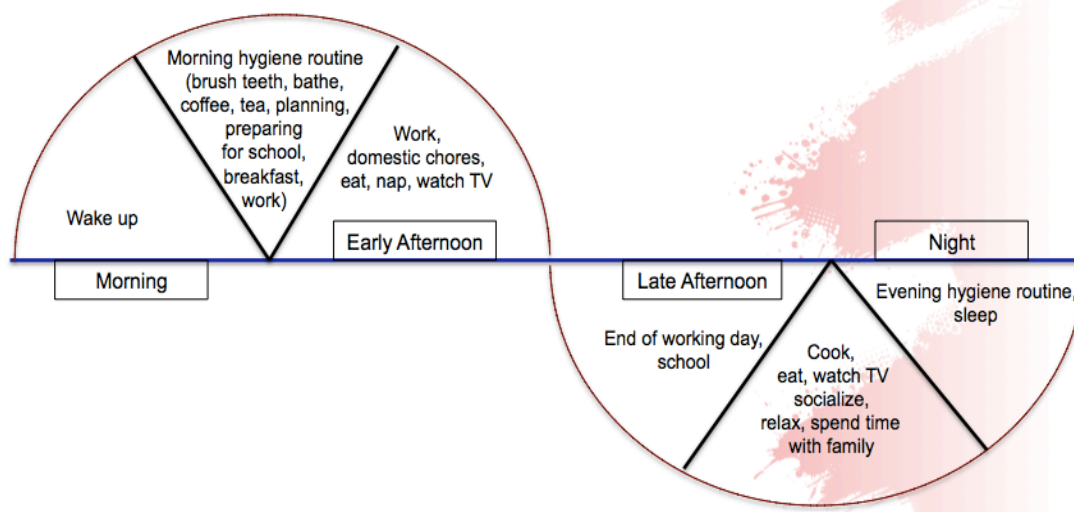


Figure 2.1 The cycle of the everyday routinized practices

2.3.2 Social practices and everyday life in temporary settlements

Past studies relying on practice theory perspectives have suggested that refugees are social agents who have goals and intentions, but who live in confined, liminal spaces that constrain their action and behavior (Bauder, 2003, 2005; Friedmann, 2002; McKay, 2001; Nee and Saunders, 2001). In their mundane and routine lives, the government and NGOs working in the camps expect of refugees to behave in a certain way, specifically, to act as genuine victims suffering from a “dependency syndrome” (Turner, 2005:260) or “relief mentality” (Kibreab, 1993:323), in order to portray helplessness and passiveness (Farzana, 2017; Hassan and Hanafi, 2010; Turner, 2005). They are not expected to be political, economic, or strategic of their own accord, but individuals who lack choices and prospects to change the course of their lives (McDowell, 2013). Despite these aspects

restricting their agency, practices, and behavior, refugees engage in daily routinized activities, including agentive participation in local political life, commercial economies, social consumption of food and drink, and maintaining and visiting friends and family (Betts, 2014; Brees, 2008; Oka, 2011, 2014; Shara and Klau-Panhans, 2018; Werker, 2007).

Turner's (2005) ethnographic study of everyday life in refugee camps in Tanzania demonstrates that refugees themselves actively seek to defy and maneuver these temporary and liminal spaces by establishing pockets of sovereign political power beyond of either the reach of the camp superior's restrictions or aid agencies' control. Refugees persistently work on making their own political subjectivities and realities while simultaneously generating their own sovereign decisions. Although relief agencies and the Tanzanian authorities encourage the refugees' engagement and participation, any political activity in the camps is strictly banned. State and aid officials promote this state of affairs not only because life during encampment is professed to be passive and apolitical, but it also serves as a strategy for denying the refugees' political identities that are not easily erased by the fact of forced displacement. Similarly, a prohibition of any form of political activities, negotiation on rights, and attempts to influence the authorities is a manner to govern and control refugees living in the camps in Bangladesh (Farzana, 2017).

Besides politics, refugees equally participate in informal economies, another prominent feature of mundane life in a camp. Although they receive various forms of aid, the limited supply of necessities often leaves refugees discontented. In an attempt to make themselves less reliant on humanitarian assistance, refugees initiate and take part in

economic activities inside and outside the camps not only to meet their immediate practical needs of everyday life but also to fight against images depicting them as vulnerable and passive aid recipients (Farzana, 2017; Oka, 2011, 2014). While work in or outside the camp is erased and rendered invisible, economic activities do occur, and refugees perform work (Trapp, 2018). In his ethnographic study of economic everyday life in a refugee camp in Ghana, Trapp (2018) reveals that refugees had a greater responsibility for meeting their own basic needs since the food rations covered only a portion of their diet. In a setting where resources are perpetually scarce, social relationships play a critical role, and an ability to give and receive turns out to be vital to refugee livelihoods. Both the social relationships and exchanges among refugees become a way of obtaining resources, having more control over their lives, and mitigating the encumbrance of long-term encampment.

While Trapp (2018) explores the material daily lives of refugees, Oka (2011, 2014) examines in his study the informal food economy as a mechanism for maintaining dignity and normalcy of refugees living in Kakuma camp. He argues that informal economies are considered an imperative since, via them, refugees obtain goods and services they cannot find in relief packages. More importantly, informal commercial economies are critical in “generating a sense of ‘normal’ for refugees in their transient lives” (224). While being an instrument for regaining a sense of normalcy through an act of consumption, informal economies also generate the feeling of agency even under conditions of statelessness and long-term wait. Oka (2011) indicates that the refugees’ engagement in these economic undertakings makes them feel empowered “through the act of ‘normal’ behavior and through the continuous formation of community and

solidarity through food sharing and feasting” (259). Hence, the underlying structure created by informal economies is equally crucial since it enables livable lives for refugees and sustainability for aid relief missions.

Another important feeling stimulated through social acts of consumption is that of dignity. Among refugees, “dignity is the desired condition—one in which the refugee can actively be normal while diminishing the enforced passivity of receiving aid and relief” (Oka, 2014:33). Thus, dignity and normalcy become expected outcomes of consumption that connect people to their pasts, while simultaneously enabling them to have self-respecting lives in the present and envisioning and hoping for brighter futures. As we can see, even during the wait, people try to move on with their lives; they indulge in economic and political activities, they still need to sleep, take care of children, and socialize in order to regain control over their lives and reclaim a sense of belonging and normalcy necessary for their survival, resilience, and well-being. Nearly every refugee that I met during my fieldwork in three asylum centers in Serbia actively engages in RSPs to dispel everyday discourse labeling them as passive recipients, challenge formal structures, and afford a sense of regularity and certainty in their everyday lives.

In their daily lives inside the camp, refugees are relentlessly involved in negotiating various terms with different agencies and authorities and struggling to establish their rights. Farzana’s (2017:186) study of refugees in the camps in Bangladesh reveals that they regularly commute between the camp and the outside world, highlighting the fact that they can challenge the administration and its enforced constraints on freedom of movement. Furthermore, Hassan and Hanafi (2010) suggest that refugees residing in a Palestinian camp in Lebanon challenge the most common

stereotypes, such as marginalization and containment of able bodies, through their ongoing entrepreneurial spirit that turned the camp into a vital regional commercial hub. Even during the wait, pending permanent resettlement, people try to move on with their lives; they indulge in economic and political activities, they still need to sleep, take care of children, and socialize to regain control over their lives and reclaim a sense of belonging and normalcy necessary for their survival, resilience, and well-being.

The refugees' aspiration to earn an income and preserve their previous lifestyle and relative autonomy is a way for them to fight against the apathy, boredom, and lethargy inherent in camp life as they await permanent resolution of their difficulties (Kibreab, 1993:340). However, access to working opportunities and livelihood assets is frequently impeded by "social and political exclusion processes that arise within both the host population and the various refugee communities" (Jacobsen, 2014:103). Indeed, social and political exclusion reduces the refugees' rights and abilities to pursue economic and other activities. Denied permission to work renders refugees unable to utilize their human capital obtained in their home countries within or outside restricted zones in which life is secluded, heavily controlled and monitored (Farzana, 2017; Turner, 2005; Smith, 2004). Conversely, as Farzana (2017: 184) notes, this top-down discourse and approach to the refugees' daily life and social realities during encampment tend to obscure the other side's perception at the site, how they themselves perceive their camp life. As I have noted and observed in my research, refugees relentlessly fight against these images by engaging in economic, political, and other activities that generate a sense of control, normalcy, and dignity, while simultaneously enabling them to live in the present and envision and hope for brighter futures. Since I intend to unpack the

complexity underlying the emergence, persistence, and endurance of RSPs in conditions of volatility and instability that help account for health and physiology, I provide an overview in the following section of social determinants of health and draw connections to neuroendocrine and other biological system responses to psychosocial stress.

2.4. Stress-related physiology and health

2.4.1 Neuroendocrine system and psychosocial stress

Here, I discuss three particular physiological systems related to exposure to psychosocial stress that can offer a more profound understanding of traumatic experiences of the refugees' migratory journey, transient nature of their movement, and their daily social practices. Because these systems are highly responsive to social and economic conditions, particularly to the experiences of differences in these domains, their consideration can help us understand how destitute social and material conditions may impair the refugees' ability to engage in social practices and contribute to their poorer psychological and physical health. Generally, social determinants of health, including inequity, limited opportunities, insecurity, and social segregation, may meaningfully impact on people's health (Raphael, 2009). This perspective is particularly salient for refugee populations during encampment, as they often experience socio-economic disadvantages, poverty, loss of social support, and suffering in all migratory stages (Burnett and Peel, 2001; Porter and Haslam, 2005). These various social circumstances and experiences of disparities that persist over an extended period produce ongoing psychosocial stress and uncertainty that can activate the neuroendocrine stress response, with long-term implications for overall health (Sapolsky, 2004).

Our bodies have evolved to react automatically to short-term external or internal adverse disturbing forces and potentially life-threatening, stressful events that threaten homeostasis or inner equilibrium in many biological systems (Johnson et al., 1992; McClure et al., 2015). Stressors that constantly challenge this optimal equilibrium can be physical (i.e., injury or pain) and/or psychological (i.e., perceived risk of harm, uncertainty, or unfamiliar situations: Dedovic et al., 2009; Lovallo and Thomas, 2000). The concept of homeostasis dates back to Claude Bernard, who said that, as organisms become more independent from the external environment, they develop more complex ways of stabilizing their internal environment to counter the forces in their external environment, and to Walter Cannon, who expanded Bernard's theory and coined the term 'homeostasis' (Johnson et al., 1992; Lovallo and Thomas, 2000). While the homeostasis model implies stability through constancy, the alternative concept of regulation, allostasis, suggests the opposite view, referring to stability through change (Sterling, 2004; McEwen and Wingfield, 2010). This alternative model, according to Sterling (2004:2), infers that the goal is not constancy but rather "fitness under natural selection." Two key points underlie the allostasis model: parameters vary and variation anticipates demand (5). Unlike the homeostasis model, in which each parameter is a 'set point' protected from errors by the feedback system, the allostasis model suggests coordinated variations to optimize performance at the least cost (Sterling, 2004).

Following a stress signal, in order to restore and maintain the optimal balance and neutralize the stressors' effects (general adaptive stress response; Johnson et al., 1992; Lovallo and Thomas, 2000; Shirtcliff et al., 2014), our body responds via a complex and interconnected repertoire of neuroendocrine, cellular, and molecular changes that activate

a cascade of stress hormones, affecting downstream systems, such as the immune and cardiovascular systems (Brunner and Marmot, 2005; Sapolsky, 1994). This concoction of physiological along with behavioral and cognitive reactions to psychosocial or physical stress is also known as the ‘fight-or-flight’ response that enables people to react fast to demanding and threatening circumstances (Cannon, 1929; Johnson et al., 1992; Sapolsky, 1994).

Two mechanisms of the fight-or-flight response to an acute stressful situation activate two neuroendocrine pathways that together coordinate an array of metabolic and physiological changes (Johnson et al., 1992; Koolhaas et al., 2011; Lovallo and Thomas, 2000). The first wave of the body’s response to immediate stress-related demands involves activation of the sympatho-adrenomedullary (SAM) axis through release of epinephrine from the sympathetic nerve endings in the adrenal medulla (chromaffin cells) and norepinephrine from all other sympathetic nerve endings, which occurs rapidly and is coupled with the immediate activation of cellular processes through their receptors in target tissues (Koolhaas et al., 2011; Sapolsky, 1994). The combined effects of SAM axis activation on the peripheral body and the brain involve psychological arousal and mobilization of energy, while simultaneously inhibiting functions irrelevant to immediate survival (Brunner and Marmot, 2005). Specifically, epinephrine and norepinephrine activate organism-level responses within seconds of detecting a stressor, including decreasing visceral activity and shutting down digestion, increasing gas exchange efficiency in the lungs, visual acuity, brain blood flow, and arousal, breaking down glycogen to release glucose stores, and increasing heart rate (Romero and Butler, 2007).

The second wave involves activation of the HPA axis, a slow-acting component of the stress response systems (Johnson et al., 1992; Dedovic et al., 2009; Koolhaas et al., 2011; Miller et al., 2007; Shirtcliff et al., 2014). Within minutes from perceiving acute stress, HPA axis activation occurs with the release of the corticotropin-releasing hormone (CRH) from the paraventricular nucleus of the hypothalamus (Dickerson and Kemeny, 2004). This hormone travels through the hypophyseal portal circulation to the anterior pituitary gland, which responds to its presence by releasing the adrenocorticotropin hormone (ACTH; Dedovic et al., 2009; Dickerson and Kemeny, 2004). The ACTH impulse is carried through peripheral circulation to the adrenal glands, which synthesize and release glucocorticoids - cortisol (CORT) from the adrenal cortex (Miller et al., 2007). In healthy organisms, glucocorticoid secretion is regulated by the negative feedback loop system at the pituitary and the hypothalamus, as well as the hippocampus, which is considered the primary point of negative feedback regulation of CORT during both regular activity and periods of stress (Johnson et al., 1992; Lovallo and Thomas, 2000).

Both stress axes have a crucial function in the body's cognitive, metabolic, and cardiovascular preparation to perform the behavior (Sapolsky et al., 2000). These two systems are considered "integrated communication systems, aiming to coordinate and synchronize the peripheral physiology at the level of cells, tissues, and organs in interaction with the environment" (Koolhaas et al., 2011:1292), which serve to maintain and/or reinstate homeostasis in a carefully timed cascade of responses during stressful circumstances (Flinn et al., 2011; Johnson et al., 1992). While the SAM axis is a fast-acting system that allows individuals to respond to the immediate demands of the stress

situation by activating and increasing psychological arousal and energy mobilization, the HPA axis is a slower-acting system that prolongs the aroused state and metabolic processes, and plays a role in bodily recovery in preparation for the next challenge, through its slower acting profile (Gunnar and Quevedo, 2007). This becomes significant when considering how glucocorticoids like CORT play a critical role in regulating responses to prolonged stressful and demanding conditions.

CORT has a wide array of effects on our entire system, regulating metabolic, cardiovascular, immune, reproductive, and central nervous system activity in response to physical and psychosocial challenges (Cacioppo et al., 2015; Dedovic et al., 2009; Dickerson and Kemeny, 2004; Koolhaas et al., 2011; Sapolsky et al., 2000). This hormone is released in a pulsatile fashion and has a circadian rhythm tied to the sleep-wake cycle; the pronounced diurnal pattern is followed by the peak beginning prior to awakening, followed by a sharp spike, 30–45 minutes after waking, which is known as the cortisol awakening response (CAR), with the lowest levels in the late evening and early morning, and with further rises during the day related to mealtimes (Dubois et al., 2017; Cacioppo et al., 2015; Garcia et al. 2017; Johnson et al., 1992; Lovallo and Thomas, 2000). Under demanding and stressful conditions, functions, such as energy mobilization and cardiovascular activity, are accentuated through rapid rises in circulating CORT, which likewise has neuroendocrine effects on the brain, influencing anxiety, attention to stimuli, and memory (Cacioppo et al., 2015; Dedovic et al., 2009; Dickerson and Kemeny, 2004; Erickson et al., 2003). Given the critical regulating role of glucocorticoids on systems in the body, both reduced and elevated levels may result in a dysregulation of physiological axes that are responsive to the effects of glucocorticoids,

potentially leading to a number of adverse physiological and health outcomes, including suppression of aspects of the immune system and the development of certain chronic diseases, such as diabetes and hypertension (Dickerson and Kemeny, 2004; Johnson et al., 1992; Miller et al., 2007; McDade, 2000; Ursin and Olff, 1993; Ursin and Eriksen, 2004).

Moreover, the repeated activation of stress response systems elicits changes at the physiological level and involves changes in an individual's behavioral, cognitive, and emotional state (Cohen, 2000). People may express an array of emotions under stressful circumstances, including anxiety, depression, anger, apathy, and/or alienation (Levi, 1996). On the cognitive and behavioral level, during an acute stress event, through enhanced and focused attention and increased vigilance and alertness, stress response systems prepare a person to fight or take a flight (Cohen, 2000; Tsigos and Chrousos, 1996). However, suppose the duration of stress persists over a prolonged period. In that case, patterns of irrational and self-defeating thoughts can be present and accompanied by an individual's impaired memory due to neuronal loss in the hippocampus caused by high glucocorticoid levels (Beech, Burns, and Sheffield, 1982; McEwen and Sapolsky, 1995). Stress-induced changes in the hippocampus may have clinical consequences for mental illnesses, such as depression and posttraumatic stress disorder (PTSD; McEwen, 2000). This is particularly relevant for refugee populations since they experience higher rates of mental illnesses, particularly depression, PTSD, and other anxiety disorders, than the non-war affected general population (Fazel et al., 2005; Schweitzer et al., 2011; Tempany, 2009).

Excessive stress response pathways, measured via higher CORT levels, are likely to produce the multi-component pathophysiology linked to increased vulnerability to mental disorders, such as depression and anxiety (Chrousos and Gold, 1992; Esch et al., 2002; Meyer, Chrousos, and Gold, 2001; McCarty and Gold, 1996). Exposure to chronic extreme stress and ordeal, including war-related trauma (Rohleder et al., 2004) and physical or sexual violence (Roth et al., 1997), may also lead to hypoactivity of the HPA axis and blunted CORT production (Rohleder et al., 2004; Yehuda, 2002; Yehuda et al., 1996; Wessa et al., 2006), which has been associated with an elevated risk for PTSD symptomatology (Rohleder et al., 2004; Olff et al., 2007). Thus, the severity of traumatic events outside the range of regular human experience, including various unfavorable socio-economic and psychological conditions, may lead to repeated activation of the fight-or-flight responses. Consequently, this triggered over-activation may upset the homeostatic equilibrium and be responsible for health inequalities in neuroendocrine, physiological, metabolic functioning, and mental well-being that are the precursors of adverse health and disease (Brunner and Marmot, 2005).

Most biocultural research has examined changes in physiology and health in the face of stressful experiences, uncertainty, and uncontrollability (Decker et al., 2003; Dressler, 2005; Dressler and Bindon, 2000; McDade, 2002; Miller et al., 2007), aiming to understand the role of challenging, social, environmental contexts in shaping health and physiology (Cohen et al., 1998; Dressler and Bindon, 2000; DuBois et al., 2017; Gravlee et al., 2005; Thayer, 2017). Physical and social environments with continuous uncontrollable and/or unpredictable conditions, in which demands are perceived to exceed one's resources, can result in biological alterations of the neuroendocrine system,

particularly the HPA axis (Koolhaas et al., 2011). This becomes particularly relevant since most refugees are likely to experience a variety of severe and persisting psychosocial stressful stimuli (i.e., loss of social support, resource deprivation), which, coupled with lack of control in their everyday lives, may increase their vulnerability to adverse health outcomes (Miller et al., 2007; Koolhas et al., 2011). Given that biocultural studies have acknowledged the importance of considering the effects of social processes on biological functions, this dissertation also aims to approach the known physiological changes as profoundly entangled with the participants' realm of everyday social and material lives, while also recognizing the possibility that these biological changes may influence the refugees' social world.

2.4.2 Immune system and psychosocial stress

The HPA axis, together with the sympathetic nervous system, is the major pathway implicated in the crosstalk between the brain and the immune system (Marino and Cosentin, 2011:56). Glucocorticoids like CORT and catecholamines, like epinephrine and norepinephrine, generally exert immunosuppressive and anti-inflammatory effects (Johnson et al., 1992; Padgett and Glaser, 2003). During an acute demanding situation, this is a necessary effect; however, chronic exposure to stressors may result in a dysregulation of stress-responsive physiological axes, resulting in maladaptive neuroendocrine responses (Miller et al., 2007; Ursin and Olff, 1993; Ursin and Eriksen, 2004), contributing to downstream dysregulation of a range of cellular immune responses. Specifically, stress-induced changes in acquired cell-mediated immunity may occur and are associated with alterations in a subset of T-helper lymphocytes called Th1

and Th2 cells (Elenkov et al., 1999; Marshall et al., 1998), mounted against intracellular pathogens like viruses (Segerstrom and Miller, 2004:603). Components of adaptive (acquired) immunity, Th1 and Th2 cells secrete a different set of cytokines that promote cellular and humoral immunity (Elenkov, 2004; Mosmann and Sad, 1996). Mutually inhibitory Th1 and Th2 cytokines ideally uphold a homeostatic balance between cell-mediated and humoral responses (Heffner, 2011). It follows that chronic stressful conditions contribute to a decline in this harmony and may shift the balance of the immune responses (Elenkov, 2004; Segerstrom and Miller, 2004). Recent evidence indicates that cortisol may have a role in systemically suppressing Th1 cellular-mediated immune responses, which may lead to a Th2 shift and upregulation of Th2-mediated humoral immune responses (Elenkov, 2004; Elenkov and Chrousos, 1999). In particular, Th1 cytokines that activate cellular immunity to provide defense against viral infections are suppressed, which may increase an individual's susceptibility to infectious disease; this has permissive effects on the production of Th2 cytokines and the activation of humoral immunity, increasing vulnerability to autoimmune and allergic diseases (Segerstrom and Miller, 2004:605). Thus, this shift toward Th2 responses leads to the cells' reduced capacity to respond anti-inflammatory, allowing an increase in the proinflammatory cytokines' circulating levels (Segerstrom and Miller, 2004).

This disruption in cellular immunity homeostasis can trigger reactivation of latent viruses, such as the Epstein-Barr virus (EBV; Glaser and Kiecolt-Glaser, 2005). EBV antibodies are another generally used marker of physiological and psychosocial stress in biocultural studies. More than 90% of adults are infected with this ubiquitous herpes virus worldwide, and after this initial infection, which most often occurs in early

childhood, the virus is present for the duration of a person's life (McDade, 2002; Sorensen et al., 2009; Yang and Glaser, 2002). In healthy individuals, the immune system can effectively suppress the virus. However, recurrent exposure to psychosocial stressors can lead to dysregulation of stress-responsive systems that may increase the production of EBV antibodies (McDade, 2002; Sorensen et al., 2009), indicating a compromised immune function (Yang and Glaser, 2002). A number of biocultural studies have utilized the measurement of antibodies against EBV to show the effects of prolonged psychosocial stress on cell-mediated immunity (Herbert and Cohen, 1993; McDade 2002, 2007; McDade et al., 2000; McDade et al., 2007; Panter-Brick et al., 2008; Sorensen et al., 2009).

In their community-based study, McDade and colleagues (2000) examined the traumatic events and immune function in children and teenagers from North Carolina. The results revealed that girls, who had experienced traumatic events in their lifespan, had increased levels of EBV, suggesting lower levels of the cell-mediated immune function. Yet, they found no such connection between life events and life strain for boys, indicating sex differences in sensitivity to social stress in late childhood and adolescence. In another study, McDade (2002) has investigated cultural change, stress, and the immune function in Samoan youth by using the status incongruity to capture exposure to ongoing stress and its implications for physical and mental health consequences. He suggests that the status incongruity is significantly associated with increased EBV antibodies compared to congruent individuals, indicating lower levels of the cell-mediated immune function and a higher encumbrance of psychosocial stress (141).

However, as with CORT, there is no simple association between psychosocial stress and compromised cellular immunocompetence, measured via EBV antibody titers because, as McDade (2009) notes, other factors, such as infections, can exert influence on the immune function. If carefully considered in social contexts, EBV titers can be a convenient biomarker that can offer insights into social and psychological experience (McDade, Williams, and Snodgrass, 2007). Refugee populations are likely to experience ongoing psychosocial stress, uncertainty, and a lack of control in their migratory trajectories and daily lives. Such adverse experiences have the ability to compromise cell-mediated immune responses, which may result in increased EBV antibody production. Therefore, this biological marker of chronic psychosocial stress is particularly relevant to this dissertation project as it can offer insights into lived experiences (i.e., downstream effects) of the refugee population residing in regulated and managed transitional spaces.

2.4.3 Cardiovascular system and psychosocial stress

Mechanisms by which psychosocial stressors can increase the risk for development of cardiovascular diseases are numerous and complex (Lucini et al., 2002, 2005:1201). Thayer (2017) asserts that the over-activation of stress response systems, particularly the HPA axis, can adversely impact on the downstream systems they affect, such as the cardiovascular system. Research in this area has shown that chronic psychosocial stress has been associated with signs of impaired autonomic dysregulation of the cardiovascular system (Dressler and Bindon, 2000; Gravlee et al., 2005; Lucini et al., 2005; Sweet, 2010). Specifically, stress-mediated sympathetic over-activation, acting directly or in combination with inflammation, and increased CORT levels, might

predispose individuals to a higher risk of cardiovascular dysregulation, including tachycardia, hypertension, and reduced heart rate variability (Krantz and McCeney, 2002; Lucini et al., 2005).

Cardiovascular dysregulation, indexed by high blood pressure, greatly contributes to diminished life expectancy, more than any other primary cause of death, including cancer, diabetes, and stroke (Gravlee et al., 2005). Several studies have demonstrated the connection between chronic psychosocial stress and signs of autonomic dysregulation of the cardiovascular system (Dressler and Bindon, 2000; Gravlee et al., 2005; Lucini et al., 2005; Sweet, 2010). For example, Sweet's (2010) study has tested the link between symbolic and material dimensions of social status and blood pressure for African American adolescents in Illinois. By using the cultural consensus and consonance approach, Sweet utilized these biocultural anthropological approaches to qualify and quantify cultural models of widely shared beliefs in a specific community, along with blood pressure measures. The findings showed a strong association between adolescent material status consumption and higher blood pressure, moderated by parental socioeconomic status.

Gravlee and colleagues (2005) examined the connection between skin color and predisposition for high blood pressure in populations of Puerto Rico. Researchers have pointed out that skin color is associated with cultural rather than biological significance since it is considered a social classification criterion and a marker of exposure to social stressors. Their findings show that culturally ascribed color, not skin pigmentation, is linked to elevated blood pressure. Specifically, being culturally defined as a negro links to high systolic and diastolic blood pressure independent of skin pigmentation. On the

contrary, individuals perceived to be lighter (trigueno and blanco) experienced lower blood pressure. Additionally, they have found that skin color and socio-economic status were positively correlated, meaning that color was insignificant in low-SES context but highly significant in the middle and upper social classes.

Collectively, biomarkers can provide information on the physiological pathways that link social environments, stress, and health, allowing us to capture how social contexts “get under the skin” to shape health and well-being (McDade, 2009). This inference is particularly salient for the refugee populations caught in transitional migratory stages. Biomarkers, accompanied by ethnography that I have utilized in this dissertation project, helped me understand how recurrent psychosocial stress and adversity refugees are likely to experience in their migratory trajectories might have meaningful consequences for their short- and long-term health and well-being. In the next section, I consider how these various life domains interrelate with health and physiology.

2.5 Social determinants of health

2.5.1 Social and economic factors

Social factors have a critical role in influencing and shaping health across various geographies, social sites, and populations (Adler et al., 1999; Braveman, Egerter, and Williams, 2011; Marmot and Bell, 2012; WHO, 2008). Still, the link between social factors and health is not simple; instead, it is characterized by a more complex and multifactorial mechanism by which these determinants may lead to poor health and detrimental biopsychosocial processes (Miller et al., 2009; Nguyen and Peschard, 2003). Many epidemiological studies have over the past 30 years investigated the impact of

various determinants on health and widely observed associations between a broad array of indicators (e.g., socio-economic resources and status, social position and role, educational attainment, race/ethnicity and/or social support) and health outcomes (Adler et al., 1999; Braveman and Gottlieb, 2014; Braveman, Egerter, and Williams, 2011; Marmot and Bell, 2012).

Specifically, socio-economic conditions have been widely recognized as factors significantly influencing people's health. As of the mid-1980s, research has been examining socio-economic factors above and beyond the poverty threshold model that assumed relationships between higher income and better health (Adler and Ostrove, 1999; Bunker, Gomby, and Kehrer, 1989). A graded association between socio-economic factors and health has been recognized and utilized to explain how destitute conditions affect not only individuals in poverty but people at all levels of socio-economic strata (Adler and Ostrove, 1999; Berkman and Kawachi, 2000; Brunner and Marmot, 2005; Kawachi et al., 1999; Marmot, 2004). As a widespread phenomenon, this socio-economic gradient approach elucidates health inequalities among groups that run from top to bottom of society, with poorer health at each step down the social hierarchy (Marmot, 2004).

The first extensive, longitudinal studies examining the social gradient concerning health outcomes included the Whitehall studies of British civil servants (Marmot et al., 1984, 1991; Marmot, 1994). This research showed that the social gradient ran across the social hierarchy within occupational grades, with better health and lower mortality at each higher occupational rank step. Higher social status afforded people a sense of greater autonomy and livable lives they value. In contrast, such a sense was not offered

by lower social levels, resulting in chronic stress and a higher risk of disease (Marmot, 2004). In particular, the findings of the Whitehall studies substantially contributed to a nuanced understanding of links between socio-economic conditions and health. While the Whitehall I study revealed an inverse association between occupational grade and mortality, it included only male civil servants. In addition to including female civil servants, the Whitehall II study widened the focus of the original Whitehall I study by investigating the degree and causes of the social gradient in morbidity and mortality, with particular emphasis on psychosocial factors that might influence health and increase risks of cardiovascular diseases, including stressful work environments and lack of social support (Marmot et al., 1991). The study found that people in lower occupational positions tended to report lower social support, less control, less use of skills, and less variety at work, along with higher psychosocial stress compared to those in higher status jobs. All these psychosocial factors meaningfully contributed to health inequalities, as the study confirmed the inverse links between socio-economic status and validated cardiovascular diseases, diabetes, and metabolic syndrome (Marmot and Brunner, 2005).

Some researchers have assessed the role of material factors to explain the observed gradient effect on poor health (Nguyen and Peschard, 2003). This traditional, materialist approach to examining the relationship between socio-economic status and health focused on the individual and household-level and involved three interrelated indicators: education, income, and occupation that may capture both resource and rank components (Matthews and Gallo, 2011; Ostrove and Adler, 1998; Winkleby et al., 1992). In this framework, these indicators are seen as objective living conditions shaping and influencing people's health status (Bartley, 2003). It follows that economically

disadvantaged groups (e.g., poor education, lower-status jobs, unemployment, and low or no income) typically experience higher mortality and morbidity rates and are at greater risk for adverse health profiles than their advantaged counterparts (Bobak and Marmot, 1996; Matthews and Gallo, 2011; Syme and Berkman, 1977; Kaplan and Keil, 1993). Studies in this area have also examined how these three interconnected indicators shape socio-economic contexts to influence health and drive higher mortality rates (Adler and Ostrove, 1999; Matthews and Gallo, 2011). Specifically, the socio-economic characteristics of disadvantaged areas and/or neighborhoods, with more significant inequalities (e.g., lack of access to healthy food and exercise, suboptimal housing, crime) may be more predictive of health than the impact of individual socio-economic status (Diez-Roux et al., 1997; Dressler, Balieiro, and Dos Santos, 1998; Pickett and Pearl, 2001).

To account for the relationship between access to material resources and social policy, some anthropologists have expanded upon this materialist approach to consider how societal forces determine living conditions to shape health (Coburn, 2000; Kim et al., 2000; Navarro, 2000). In general, this neo-material perspective sees people as better off in egalitarian societies, in which wealth is more equitably distributed and investments in infrastructure and social services are greater than in less egalitarian societies (Navarro and Shi, 2001; Raphael, 2009). Therefore, more critical societal investment in social structure implies better access to health and care services, education, employment, and other forms of support to help protect people at low socio-economic strata from a broad range of risks that may otherwise impact on their health (Galea et al., 2002; Nguyen and Peschard, 2003; Wilkinson et al., 1998).

Going beyond the neo-materialist framework, some researchers have argued that people's perceptions of their position in the social hierarchy, rather than material living conditions, shape their feelings of worth and health (Marmot, 2004; Wilkinson, 2001; Wilkinson and Pickett, 2007; Wilkinson and Pickett, 2009). Specifically, they emphasize a psychosocial stress approach to argue that people in disadvantaged groups cannot meaningfully participate in the broader society; thus, the stress associated with that inability accounts for health disparities (Dressler et al., 2014). People's position in the social hierarchy takes precedence over material and social conditions of life as more extrapolative regarding health inequalities (Raphael, 2009). It follows that people's subjective views of their standing in social hierarchy may powerfully shape and influence their health status (Kawachi and Kennedy, 2002). Social and economic factors are thus a critical lens for understanding the refugees' mental and physical health since most of them feel the encumbrance of objective and subjective experiences of socio-economic disadvantages across multiple stages of migration processes. Moreover, refugees are likely to experience disrupted social support systems, feelings of loneliness, and poorer social interactions. Such experiences, dynamics of losses, and interruptions in social functioning may impair the refugees' abilities to generate and maintain social support, as well as dwindle their psychological and behavioral responses to ongoing psychosocial stress, meaningfully contributing to their poorer health outcomes.

2.5.2 Social support

Social support has been considered a critical protective factor concerning both mental and physical health (Cohen and Wills, 1985; Cruwys et al., 2013; Ozbay et al.,

2007; Uchino, 2006). In general, social support has been and is widely recognized as beneficial to health, yet specific mechanisms by which social support may positively impact on health remain somewhat vague, as do its definitions that somewhat vary across literature (Pahl, 2003). Social support has been usually conceptualized as ‘resources provided by other persons’ (Cohen and Syme, 1985) or as available or provided social resources afforded by formal and informal encouraging relationships (Cohen et al., 2000; Seeman, 1996). Despite the variability in its definitions, research has recognized two contexts in which social support promotes health - perceived and received support (Barrera, 1986, 2000; Uchino, 2004; Wills and Shinar, 2000). While perceived support relates to an individual’s possible access to social support, received support indicates the actual utilization of support resources (Uchino, 2009:238). In assessing the impact of support on health, it is also essential to acknowledge its four different types: emotional, instrumental, informational, and appraisal support (House, 1981; Barrera, 1986; Tilden and Weinert, 1987). Informational support includes the provision of information during stressful times, instrumental support entails the concrete services and/or help delivered, appraisal support involves the provision of information relevant to self-evaluation, while emotional support is related to the provision of care, empathy, love, and trust (Barrera, 1986; House, 1981; Krause, 1987; Weinert, 1987).

Researchers have utilized two competing, rather than mutually exclusive, models to explain how social support can be considered beneficial and might influence health via multiple pathways (Kawachi and Berkman, 2001). The main-effect model explains social support as generally beneficial to mental and physical health irrespective of non-stressful or stressful periods (Cohen and Wills, 1985). On the other hand, the stress-buffering

effect argues that social support may be protective to health during periods of intense stress, thereby buffering concerning psychophysiological responses affecting health, but that it can be less beneficial to mental and physical health in non- or less stressful situations (Cohen and Wills, 1985; Gunnar and Hostinar, 2015; Hostinar, 2015). Specifically, social support can directly influence health by encouraging healthier behaviors (e.g., exercise, healthy diet, smoking cessation; Uchino, Cacioppo, and Kiecolt-Glaser, 1996; Uchino et al., 2012) and affording a sense of control over the situation and enhancing self-worth (Bisconti and Bergeman, 1999). The buffering effects of social support act by improving psychological processes associated with appraisals of the threat, emotions, and feelings of control (Cohen et al., 2000; Uchino, Cacioppo, and Kiecolt-Glaser, 1996; Uchino, 2004, 2009). It may, therefore, be concluded that social support plays a significant role in maintaining and promoting good health by attenuating behavioral and psychological responses to stress-related events and health-promoting biological responses.

In particular, social support's protective properties may play a critical role in mitigating relationships between recurrent psychosocial stress and biological processes, especially among vulnerable populations such as refugees. Recent evidence indicates that higher reported levels of social support may result in better neuroendocrine responses (e.g., lower levels of HPA axis responses to stress and/or faster recovery from the physiological effects of stress; Seeman and McEwen, 1996) and immune functioning (Dickerson and Zoccola, 2009; Dixon et al., 2001; Esterling et al., 1996). Specifically, higher social support may increase an individual's coping abilities or lead to the appraisal of stimuli as less stressful, thereby enhancing the HPA axis and ultimately immune

system responses to challenging events and reducing health risks (Eisenberger et al., 2007; Uchino, Cacioppo, and Kiecolt-Glaser, 1996). In addition, different types of social support have been linked to lower morbidity and mortality across a range of mental and physical diseases, including lower risk for the development of cardiovascular disease (Uchino, 2006, 2009). In Chapter 5, I examine the effect of social support in relation to mental health, neuroendocrine, and immune physiological systems responses among transient refugee populations in Serbia.

2.5.3 Social determinants of health in the state of migration

Overall patterns of health inequities are embedded in social, political, and economic conditions constructed and reconstructed by societal infrastructures and policies. Such conditions, including employment, housing situations, access to food and social services, and social support systems, are consequential for an individual's well-being (Castaneda et al., 2014). Migration, as a process, exemplifies an outcome of a mixture of these societal, political, and economic circumstances and inequalities that powerfully shape and impact on the health of people across various stages of their displacement. Castaneda and colleagues (2014) suggest that social, economic, and political disparities fundamentally determine migration. As migratory movements intensify worldwide, the social determinants of health affect people moving across international borders either voluntarily or involuntarily, since migration often entails realignment of all facets of life, social, economic, and health-wise, which can have significant implications (Castaneda et al., 2014; Quesada et al., 2014). As the debate continues to unfold around migration policies, a record number of people are undergoing

migration and displacement due to numerous reasons resulting from wars, violence, persecution, economic deprivation, and environmental disasters (UNHCR, 2018, 2019).

In this preflight phase, deteriorating economic, social, and political circumstances routinely expose refugees to stress and various traumatic experiences, including human rights violations, imprisonment, gender-based violence, torture, and systematic violence (Lindert et al., 2016; Schweitzer et al., 2006; Silove et al., 1991; Shook et al., 2018), which significantly affect and shape their life and health status. Such pre-migration societal determinants, along with traumatic experiences, may have profound impact on the fleeing individuals' mental and physical health (Fazel et al., 2005; Lie et al., 2001; Lindencrona et al., 2008; Porter and Haslam, 2005). Various scholars have pointed out that these preflight challenges are often compounded by trauma and stress refugees experience during the flight itself (Lindert et al., 2016; Zimmerman et al., 2011).

Dangerous and difficult conditions surrounding often irregular, dangerous, and risky migratory journeys across international borders may increase the fleeing refugees' vulnerability to adverse health outcomes. At this stage of the migration process, whether the refugees' decision to leave their homeland was involuntary or voluntary makes little difference. For those individuals left with no legal means at their disposal to travel across international borders, journey-related experiences are contingent upon their financial resources rather than upon their more or less coerced or deliberate decisions (Erdal and Oeppen, 2018). Often disrupted along the way, the migratory journey involves movement and stasis, illustrating the state of mobility and immobility (Collyer, 2007; Crawley et al., 2016a, 2016b). As they cannot travel and enter another country legally, the refugees' journey becomes a precarious and dangerous attempt to seek protection outside the

country of origin (Koser, 2008). More importantly, hazardous conditions during the migratory journey routinely expose refugees to various ordeals and life-threatening experiences, physical trauma, and recurrent psychosocial stress (Davis and Davis, 2006; Dolma et al., 2006; Hsu et al., 2004; Sandalio, 2018), with potentially adverse effects on their short- and long-term physical and mental health (Fazel et al., 2005; Tempany, 2009; Zimmerman et al., 2011).

Despite physical and psychosocial health hazards, refugees may repeat the journey numerous times until they reach a safe third country or their desired destination. In the post-migration context, refugees encounter new social, economic, and political conditions that influence and shape their lives and health (WHO, 2014). Once refugees find themselves on the other side of the international border, they are usually sheltered in high-stress, confined liminal spaces, such as refugee camps and asylum centers. These spaces essentially put social, economic, and structural constraints on their behavior and choices. Notably, lack of opportunities to improve their financial situation, lack of food, lack of freedom of movement, concerns about safety and security, the indignities of prolonged wait amidst bureaucratic regulations (Riley et al., 2017; Miller and Rasmussen, 2014; Horn, 2010) may drive and explain poor health outcomes among refugee populations in the encampment context. In these circumstances, the refugees' disadvantaged socio-economic position intensifies due to lack of income-generating opportunities. Therefore, these highly stressful living conditions mark refugees as a socio-economically disadvantaged group, while simultaneously increasing the risk for their adverse health profiles.

The refugees' inability to improve their socio-economic status is further exacerbated by their loss of standing in the social hierarchy they had held prior to displacement (Horn, 2009). Specifically, the refugees' loss of social role and social status can be particularly stressful with emotional and psychological debilitating effects on health (Biehl, 2015; Brun, 2015; Horn, 2009; Smith, 2004). In her study among encamped Sudanese refugees in Uganda, Horn (2009) has revealed that, while women have been able to maintain, to some extent, their traditional social status, roles, and responsibilities, such as fetching water, cleaning, and cooking, men had lost most of their previous activities, social status and roles they held before displacement. Such circumstances render everyday life difficult indeed, with implications for physical health and mental well-being.

Settled on the outskirts of cities in designated confined spaces and kept at a safe social and economic distance from the local community, refugees are restricted from full participation in the host society (Agier, 2008). Such state practices of regulation and control of displaced populations contribute to refugee experiences of significant inequalities as they become excluded from resources available to other host society inhabitants. As socially and politically marked groups confined to narrow living conditions and opportunities, refugees' loss of social status in the hierarchy is often accompanied by lack of choices and prospects to change the course of their lives and of a sense of security in navigating everyday life (Castaneda et al., 2014; McDowell, 2013; Quesada et al., 2014). Lack of control over the present and alternative futures can further undermine the refugees' subjective perceptions of their position in the new social hierarchy and their sense of self-worth, while simultaneously exposing them to various

disadvantages that have the potential to adversely influence their health in both the short and the long term.

Along with the loss of status and shaken sense of self-worth, refugees often experience disruptions of their social relationships and systems of social support. These challenging conditions, in which encamped refugees find themselves, may put them at risk of suffering from social isolation and loneliness, further intensifying their difficulties in cultivating social support in host countries (Gottvall et al., 2020). Social isolation may have harmful effects and undermine health (Cacioppo et al., 2006; Hawkley and Cacioppo, 2010; Steptoe et al., 2013). Therefore, lack of interactions and relationships with other people and diminished social support's protective effects are salient stressors that typically mark life in legally and administratively confined political spaces (Horn, 2010; Miller and Rasco, 2004). Such demanding psychosocial conditions may have harmful effects on the refugees' health (Cacioppo et al., 2006; Hawkley and Cacioppo, 2010; Steptoe et al., 2013).

Studies have examined links between life in confined physical and social spaces and endemic exposure to chronic stress, persistent feelings of uncertainty, and lack of control (Agier, 2008; Brun, 2015; Horn, 2010, 2009). Biocultural research, in turn, has disclosed associations between chronic psychosocial stress and uncertainty, on the one hand, and poor well-being and adverse health, on the other (Dressler and Bindon, 2000; Decker et al., 2003; McClure et al., 2015). This is especially true in vulnerable groups, such as migrant and immigrant populations, where individuals experiencing significant stress related to uncertainty, violence, and discrimination have high rates of distress, depression, and anxiety (McClure et al., 2015). At the extreme, these dynamics may lead

to the embodiment of trauma and stress (Brik et al., 1988; Horn, 2010, 2009; Kamau et al., 2004), thereby increasing the refugees' vulnerability to poor mental and physical health outcomes. It follows that stress, uncertainty, differential access to resources, living conditions, low economic prospects, low social support, and subjective feelings of loss stand as powerful determinants of the refugees' health inequalities.

2.6. Conclusion

Humans as biological and social beings are in constant relationship to their ever-changing environments (McElroy, 1990). This complex and bi-directional interplay shapes people's everyday lives, decisions, social practices, and health. Moreover, these various pathways interconnecting life domains are critical in deliberations of the migration process and its sociocultural, political, economic, and health-related ramifications. Migration brings about complex and multifaceted changes in people across various stages of their displacement, while simultaneously revealing an ongoing and dynamic interaction between biological and cultural processes. People confined in liminal political spaces routinely lack choices, prospects, and control over their lives and experience recurrent psychosocial stress, uncertainty, and insecurity. These unfavorable conditions often lead to over-activation of the stress response systems, which can have various physiological, mental, and behavioral consequences, such as HPA axis dysregulation, depression, anxiety that affect the well-being and health of an individual.

However, despite the challenges and indignities of such physical and social environments, people in constrained spaces attempt to establish day-to-day routines and practices to regain control over their lives, a sense of normalcy, and mitigate stressors.

The practice theory framework considered in relation to the literature on migration, socio-economic determinants, and health I adopt in this dissertation allows me to scrutinize the social world through daily life activities and conceptualize the body as the key intermediary in the acquisition and reproduction of routines and social routines. Given that I recognize the social domain as critical in human development, resilience, and adaptability to highly demanding settings, it is also important to acknowledge how various social factors play the role of important determinants of an individual's physical and mental health. Some anthropologists suggest that integrative anthropological thinking, in which human biological and cultural processes are considered intertwined and integrated rather than distinct (Goodman and Leatherman, 1998; Gravlee, 2009; Gravlee et al., 2005; Dressler, 1991, 2005; Fuentes, 2017; McDade, 2002), allowing us to bridge this gap in order to capture the biological and cultural peculiarities of diverse (vulnerable) human populations. Providing insights into the real world of lived experience replete with its own contingency, in this dissertation, I advance integrative research in line with the anthropologists' call by generating the knowledge that offers a more measurable and nuanced understanding of how social contexts shape biological responses.

2.7 References

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CHAPTER 3:

THE ‘GAME:’ DANGEROUS JOURNEYS, TRAUMATIC EXPERIENCES, AND MENTAL HEALTH AMONG TRANSIENT REFUGEES IN SERBIA

3.1 Introduction

In the jungle, as many of my interlocutors referred to the woods, in the dead of night Maya,² a young Afghani girl, probably in her early twenties, her older sister, and their parents were trying to cross the border irregularly, standing between Bulgaria and Serbia. They spent four days in the jungle in the Bulgarian mountains, sleeping on the soggy grass, freezing, and surviving with almost no food or water, but hoping they would see the other side of the border, cross into Serbia, and continue their clandestine journey to Germany. Helpless, hungry, and scared for each other, as they were the first three times when they tried to cross into Serbia, her entire family was heavily holding on to the instructions given by their smugglers, anticipating that this attempt would be the successful one. “It was very hard physically to walk for days with only short stops to the next border, hide in the jungle, with little food or water, trust smugglers whom you practically do not know, and avoid the border police. My father hurt his leg on our third attempt to cross into Serbia. I was scared for him and my entire family. It was tough,

² All names mentioned in this chapter are pseudonyms.

Jelena,” Maya was telling me her story about the journey, the ‘game’ (the term used by my interlocutors in reference to the act of crossing from one state to another), struggles, suffering, and traumatic experiences she and her family had to endure when they decided to leave home and seek protection outside Afghanistan. They paid € 70000 to smugglers to take them across international borders from their home country to Germany, their desired destination. Many refugees,³ like Maya and her family, who came to Serbia did not take the legal migration routes; their journeys across numerous borders proved to be a dangerous game of life and death fraught with extreme trauma and psychosocial stress, played between fleeing individuals and border authorities, and enabled by smuggling networks.

Borders, as external territorial frontiers, are often seen as physical boundaries between nation-states. Borders, serving as a way of defining and regulating the physical space, are commonly understood as more static with their principal purpose of separating different states and protecting their sovereignty (Longo, 2017; Sendhardt, 2014). In the last three decades, there has been a shift in border studies, from their consideration as mere geographical lines to a perspective that highlights the different types of borders with distinctive functions, the fluidity of borders, and borders as a social construct (Johnson et al., 2011; Newman, 2003c; Sendhardt, 2014). Specifically, various scholars attempted to move beyond understanding borders as mere territorial demarcation lines that appear on maps, suggesting two other types - functional and symbolic borders (Ferrer-Gallardo, 2008; Haselsberger, 2014). Functional borders indicate separation between different operating systems, including politics, economy, and science (Ferrer-Gallardo, 2008),

³ In this dissertation, refugees denote aliens who have fled their country of origin and are living in Serbia, regardless of their status.

whereas symbolic borders are seen as an expression of collective identities based on the distinction between ‘self’ and ‘other’ (Bonacker, 2006; Sendhardt, 2014; Stetter, 2005). Moreover, this reconceptualization meant a shift from considering borders as fixed and impermanent entities to the more permeable, fluid, and performed aggregate of sociocultural and political processes that intersect in multiple lived realities (Johnson et al., 2011; Longo, 2017; Parker and Vaughan-Williams, 2012).

Although the turn from what borders are to how they function happened in the recent decades, it is nonetheless still critical to consider the reality of border regimes and control in global politics and public discourse simultaneously operating to limit or allow movement and regulate mobility, belonging, and citizenship (Parker and Vaughan-Williams, 2009). Thus, professed as “walls” that use logics, technologies, and techniques to generate differentiated forms of access and rights (Casas-Cortes et al., 2015:57), borders and bordering practices continue to serve as a mechanism of division and exclusion enacted by sovereign power (Johnson et al., 2011; Parker and Vaughan-Williams, 2012). As a site of the exercise of sovereignty and territoriality, borders maintain a distinct and categorical function for the regulation, control, and management of contemporary human migration (Casas-Cortes et al., 2015). Thus, physical limits appear crucial to creating, producing, and responding to such movements, particularly those pertinent to forced relocation and mass displacement (Hansen, 2014).

A mere glance at the US-Mexico border or the outer frontiers of EU territory keeps reminding us of the significance of contemporary territorial edges where states exercise their sovereignty, control, and power through their rules, policies and actions (Johnson et al., 2011) to push farther away the ones perceived as the ‘Other’ and the

threat they carry (Longo, 2017). The widespread discourse of “invasion waves” in European border and migration management practices (Casas-Cortes et al., 2015:59) drive states to erect the “wall around the West,” leading to the massive production of “illegal aliens,” the ones who manage to breach their sovereignty by crossing their territorial and symbolic borders (Fassin 2011: 214). Thus, highly secured borders accompanied by states’ restrictive policies and heightened regulations reproduced the complex migratory trajectories of many people seeking protection outside their homeland. In light of this new ‘order of things,’ actions such as sealing of borders, control of the mobility of ‘undesirables,’ and other social technologies have become a way of disciplining space and human movement (Malkki, 1995a, 1995b, 2002; Mountz, 2010, 2011).

The proliferation of such state practices and technologies of border enforcement, surveillance, and control in response to the migration of those labels as the ‘Other’ are best seen in the most recent refugee crisis that commenced in 2015 when millions of forcibly displaced people embarked on dangerous journeys in their attempt to reach European Union countries (EU; UNHCR, 2016, 2017). By fencing and closing their borders and supporting stricter policies designed to impede arrivals and outsource responsibilities to regions and the non-EU states, this strategic positioning of its member states aimed at regulating the mobility of ‘undesirable’ bodies to protect their sovereignty (UNHCR 2017; Weber 2017). The EU has, indeed, utilized a set of political measures, from applying recognized bilateral readmission provisions and border surveillance to the immediate returning of refugees, which served not only to discourage and curtail their movement, but also to keep its internal space safe. Such ‘securitization of migration’

(Gerard and Pickering, 2013) uses many ‘techniques of governmentality’ (Foucault, 1991) to outplay and govern those deemed unlawful.

To overcome and circumvent these structural constraints that significantly hinder regular migration, many refugees and migrants decided to undertake more clandestine and dangerous migratory routes in seeking protection outside their country of origin. Numerous anthropologists illustrated dangers, high risks, and fatalities of people trying to cross the maritime borders of Europe in makeshift boats (Albahari, 2016; De Genova, 2017; Belloni, 2019) or defy the US-Mexico border and repressive policies (De León, 2015; Vogt, 2018). Thus, people seeking protection outside their homeland are routinely compelled to embark on fragmented, unauthorized international border crossings and play the ‘game,’ which represents an integral part of these journeys. Occurring at territorial lines between two states heavily protected by border police forces, this ‘game’ is played in precarious conditions characterized by various physical and psychological hardships. Moreover, the refugees’ decision to undergo this highly risky process of fleeing farther afield is often contingent upon smugglers - non-state agents who affect the refugees’ range of hazards on the journey, the knowledge, and perception underlying their decisions (Mandic and Simpson, 2017). Refugees typically spend prolonged periods in challenging conditions during their arduous journeys, while being continuously subjected to severe threats, violence, and stress (Freedman 2016; Mandic and Simpson, 2017; Sandalio, 2018). Thus, clandestine journeys and playing the ‘game’ – as a refugee’s way of defying multi-national territorial frontiers and restrictive policies – while seeking security has become a matter of survival for many refugees. But those lengthy, dangerous journeys during which refugees must play the ‘game’ may have

severe mental and physical health consequences for fleeing individuals. Prior research in this area has revealed that the refugees' increased vulnerability to adverse mental health profiles is associated with traumatic experiences, uncertainty, and recurrent psychosocial stress at all stages of their migration (Fazel et al., 2005; Lindert et al., 2016; Mills et al., 2005; Tempny, 2009; Zimmerman et al., 2011).

It is the clandestine, unauthorized journey and the 'game,' as its inextricable part, that refugees play at the border or on their way to it that I examine here; these particular experiences paved by stress, risks, and trauma may be a life-changing event for those who survive it and a distinct part of their migratory stories that may carry unique painful memories and particular significance for the rest of their lives. There are a limited number of studies that have investigated the role and lived experiences of the journey (Belloni, 2020; Benezer, 2002; Collyer, 2010; Kushner, 2012; Vogt, 2018), particularly in relation to their impact on mental health (Arsenijevic et al., 2017; Dolma et al., 2006; Mills et al., 2005). Building upon these findings, I suggest that by unpacking the particularities and complexities underlying clandestine transit journeys to Europe, with focus on the 'game,' from an emic perspective, we can develop a deeper understanding of the ways refugees conceptualize, understand, survive, and cope with this life-changing event. To show meaningful health implications of the journey and the 'game' for transient refugee populations living in asylum centers in Serbia, in this chapter, I use journey length, personal accounts of traumatic events, and self-reported mental health measures to examine how journey-related experiences and recurrent stress may have implications for the refugees' mental well-being. In the next chapter, I discuss these

associations in greater detail, while considering their physical health and psychobiology along with their mental well-being.

In this ethnographically contextualized chapter, I propose a simplified illustration of the ‘game’ model elucidating the refugees’ fragmented journeys, their set of strategies, and decisions to go through multi-step scenarios while moving towards the border or at the physical territorial frontier itself. Next, I analyze mental health surveys, and in doing so, I ask whether unauthorized journeys and playing the ‘game’ as their integral part have significant consequences for refugee health. In these quantitative analyses, as I have mentioned, playing the ‘game’ represents a substantial and indivisible component that impacts the length of the journey; therefore, I used journey length and other covariates to predict the refugees’ mental health. I drew on data collected from a population of transient refugees living in the asylum center “Krnjaca” in Belgrade ($n = 71$; female 29.5%) to investigate how the refugees’ narratives of traumatic and stressful experiences during their journeys and the ‘game’ correlate with their mental health profiles. In particular, I predicted that smuggled refugees, who have experienced longer and more traumatic journeys, would exhibit poorer mental well-being, including greater psychosocial stress and PTSD-like symptoms. Past studies, which considered the gender difference in civilian response to war traumas, revealed that women were at a substantially higher risk of developing mental illnesses, such as depression and PTSD, due to their greater exposure to specific traumatic incidents (i.e., sexual violence, stronger perceptions of threat, and loss of control; Alpak, 2015; Eytan et al., 2004; Mollica et al., 2001; Potts, 1994). In light of prior findings and potential sex differences in experiences of trauma during the ‘game’ on their clandestine journey to Serbia, I predicted that

women would exhibit greater psychosocial stress and poorer mental well-being than men. While an ethnographic perspective allowed me to develop the ‘game’ model as it cast light on what often tends to remain invisible in mainstream accounts of migratory journeys, trauma, and violence, quantitative measures enabled me to show that unauthorized movements across borders may have health consequences for transient refugee populations.

3.2 The ‘game’ - the refugees’ way of defying borders on their clandestine and dangerous journeys

“Border crossing is like the game that you play with the help of smugglers against the border police. You either win or lose. It’s simple as that. You’re either caught, beaten, and deported or you reach your place. There is no third outcome.”

These and similar statements most of my interlocutors kept reiterating when I asked them about their migratory journeys, experiences, and decisions to leave their homeland. Ahmed and I met in one of the sparsely equipped rooms in the barracks reserved for the offices of the Commissariat for Refugees and Migration. We were sitting at the table across from each other and conversing, a few additional chairs that looked like the Commissariat borrowed them from an elementary school standing next to the wall on the right side of the room and across a big empty closet. I asked Ahmed to tell me about his decision to leave his home, the journey from Afghanistan to Serbia, and the ‘game’ he had played at each border until he reached Serbia. “I left Afghanistan because of the war with the Taliban. I was not feeling safe in my own country. I had to leave. I can tell you that the entire journey feels like the game you play until you reach your

destination. I came to Turkey by foot, and I stayed there for approximately three months, contemplating my next steps, my next transit country, my next game. I tried to cross from Turkey to Bulgaria seven times, but the police caught me and sent me back each time. I played the same number of games when I tried to cross from Bulgaria to Serbia. Every time, the Serbian police caught me and deported me back to Bulgaria. The last time I tried, I spent 30 hours hiding in the jungle with no food or water, waiting for smugglers to give me and my group the signal to start running across the border. Now, I am here and feel much safer than in the Bulgarian closed camp where the government tends to keep us.” As I was listening to Ahmed and his story about the quest for a new, peaceful life far away from his country, I could see in his eyes and hear in his voice the pain, suffering, and anguish while he was talking about his home country, war, and his journey.

An absolute majority of refugees who reached Serbia came either through Bulgaria from Turkey or through Macedonia from Greece (Bjertrup et al., 2018). Facing various state bureaucratic and legal mechanisms and restrictive policies, including lack of valid documents, visa requirements, and international asylum regulations, my interlocutors felt geographically, socially, and politically immobilized; their attempts to circumvent and defy borders irregularly thus represented an expression of their right to escape violence and wars and live in peace. The practice of unauthorized border crossing to Europe and playing the ‘game’ required them to navigate rugged terrain, police patrols, and smuggling networks to reach protection farther afield. Like Ahmed, most of my interlocutors did not succeed in their first attempt to cross international borders.

Mohamed was another young man in his early twenties who left Iraq because of the war, uncertainty, and insecurity he was experiencing on a daily basis. He could not

live anymore in his country. “We could not go to school, not even to the market to buy groceries. It was tough to keep living under those circumstances, which is why I decided to come to Europe,” Mohamed was explaining to me his reasons behind the decision to leave his home. “I first went to Turkey, where I spent seven days, waiting on smugglers to tell me about my next move. I paid them € 5000 to help me cross multiple borders on my way to Europe. I played the game three times between Turkey and Bulgaria and twice on the Bulgarian-Serbian border. The last time when the Bulgarian police caught me, they threatened me with jail and deportation back to Iraq. God willing, my third attempt was successful, and I reached Serbia,” Mohamed also tells me that he does not want to stay in Serbia. “I want to go to Europe. Serbia is a good place, people are nice, but it is a poor country,” Mohamed utters something that I have heard from my other interlocutors who see my country as just another stop and who are willing to continue their journey and keep playing the ‘game’ until they reach their desired destination.

Most of the refugees arriving in Serbia from their country of origin crossed international borders illegally due to their inability to obtain proper travel documents and inability to apply for asylum in most other countries they had crossed irregularly (Group 484, 2017). Such circumstances usually left refugees helpless and dependent on smugglers’ services, with little choice but to embark on a dangerous journey and play the ‘game’ until they reached a West European country, their final destination. Feelings of powerlessness, hopelessness, and desperation in their numerous attempts to reach Serbia, and eventually, their desired destination permeated my interlocutors’ stories. They were telling me about precarious conditions, and physical and psychological difficulties, of ‘waiting’ to cross the border, and the risks of being caught, beaten, arrested, and deported

while they played the ‘game’ on their transit routes, on the journey to life with no bombs, rockets, or killings. Compelled to play the ‘game’ and hire smugglers to facilitate their movement on dangerous migratory routes, marked and underpinned the refugees’ risky, nonlinear, and fragmented journeys across international borders. Moreover, my interlocutors’ mental and physical health may have been immensely affected by their inability to migrate legally, their ongoing traumatic experiences and a sense of entrapment in spaces, from which it is hard to move either ahead or back.

Amir was a soldier in Afghanistan. He joined the army when he was 18 years old. He served one year and six months when he decided it was time to leave the army.

“Once, I did not sleep for four days because I was patrolling to keep our villages safe from the Taliban attacks. Every day I would see people dying and coffins in front of houses in my village... I would go to bed with the gun under my pillow, but I couldn’t sleep out of fear that someone would come to my house and kill me since I was in the national army,” Amir continues. “I couldn’t stay in the army or my country. Witnessing suffering every day was unbearable. I want to live in peace, not fear and uncertainty.”

Amir left Afghanistan and went to Iran. He spent seven days in one of the stash houses in Iran, waiting for smugglers to tell him when he would be able to continue his journey. “I was in a group of 41 people. We were heading to Turkey on foot. It was December when we tried to cross from Iran to Turkey. It was so cold, and we had to walk for 10 hours. On our way to the border, I saw two dead bodies, a mother and a child. Their bodies were lying on the ground, green and frozen. With the smugglers’ help, my group and I managed to cross into Turkey. I spent a year there and then decided to continue my journey and play the ‘game’ one more time. I paid the smugglers to take me to Greece. I

was on a small boat designed probably for four people, but there were 12 of us. We were on the sea when the boat capsized because of the weather and the number of people on it,” Amir continues to talk about his journey with a visible excruciating expression on his face, “The Turkish coast guard saved us and took us back to Turkey. The second time I tried to cross into Greece, the Italian coast guard saved us because the boat capsized again. They took us to the Greek island of Kos. The Greek police gave me a piece of paper saying I had to leave the country in 30 days. They did not give me a chance to apply for asylum. The smugglers in Greece put us on a train; actually, I was hanging on the train for two days with no food or water until we reached Macedonia. My group and I continued our journey to Serbia on foot. I paid smugglers € 6000 to come to Serbia,” Amir exhales, shakes his head, takes a pack of cigarettes lying on the table, and lights one.

Like Ahmed, Mohamed, and Amir, most of my interlocutors narrated their experiences of uncertainty, lack of control, and fear of being caught, assaulted, and extorted by border police while they played the ‘game’ on their way to Serbia. All but one had to use the help of smugglers, whom they typically distrusted and had no relationship with. Their stories revealed that, in order to defy more restrictive border controls and migration policies, they had paid smugglers who had the knowledge of the territory and were in a position to facilitate their clandestine journeys. Increasingly deterrent policies and availability of smuggling services reshaped the everyday realities of refugees undertaking the clandestine, risky journey.

3.2.1 Smugglers as enabling agents and violence perpetrators

Smugglers have become essential to many refugees for their crossing strategies and a crucial source of guidance on their migratory journeys. To navigate the uncertainty and danger while crossing borders and playing the ‘game,’ refugees have had to pay for costly human smuggling’ services and rely on the smugglers’ information on the safest routes. As I noted, all of my interlocutors but one reported paying smugglers for ‘assistance’ in reaching safety outside their national borders and eventually their desired destination.

Samir and I were sitting in the same room where I talked to Ahmed about his journey and experiences three days ago. He came with his wife and four kids from Afghanistan to Serbia. He tells me that the Taliban had kidnapped him twice and that his wife paid the ransom both times with the help of their families. After his second capture by the Taliban and release, his family was terrified that he would not survive another abduction. They decided to hire a smuggler and try to reach Europe. “You know someone in your village whose family member already left the country with the help of smugglers. You practically know who to go to if you want to leave. When you find a smuggler, he usually takes you to a ‘shopkeeper.’ A shopkeeper is a person with whom you deposit the entire amount for the journey. It varies and depends on your final destination and the route you want to take. Everything has a price; the question becomes what you can afford and pay. We paid € 60000, € 10000 per person since we wanted to go to Germany. Once you deposit the money, the smugglers tell you where the meeting point is and when your journey will begin. You wait for their call. Once the smugglers give you the info about the meeting point, your journey can start. With every successful crossing to a new transit

country on your way to the final destination, you will text the shopkeeper to release a certain amount to the chief smuggler, so that you can meet new local smugglers who will take you to the next stop,” Samir explains.

“There is a “Grand” café next to the main bus station here in Belgrade, where you can find smugglers who can take you to Hungary or Croatia,” Merced tells me. His assertion caught me by surprise. While I was interested in learning more about the refugees’ journeys to Serbia, I was utterly oblivious to the fact that the same ‘business’ was taking place in my own country. Otherwise, how would people continue playing the ‘game’ and their journey? “Yes, Jelena. There are smugglers here in Krnjaca; we (refugees in the asylum center) know who they are. But if you want to suffer less at the hands of a smuggler, you go to someone who has already successfully taken many people across before you. Those who are more successful sit in Grand. Of course, the shopkeeper is sitting there too. You deposit the money and wait. Typically, the meeting point is at the bus station, and from there, you will either go by bus or car to Subotica (north Serbian city at the border with Hungary). Then, you wait for night to fall and rely on smugglers to take you to the other side. Basically, the game begins,” Merced explained.

As a business, smuggling networks have become a fundamental part of fleeing refugees’ perilous migratory journeys (Triandafyllidou and Maroukis, 2012; UNODC Report 2011). Smugglers are a critical enabling agent in facilitating the journey and the ‘game’ across borders, particularly when refugees lack migration and legal asylum-seeking alternatives. Most of my interlocutors expressed their disapproval of the smuggling business due to its financially exploitative and violent character.

“I spent eight days in the jungle between Bulgaria and Serbia after the smugglers abandoned me. I did not know what to do or where to go. I tried to cross into Serbia alone, but the Bulgarian police caught me and sent me back to the closed camp,” Azeem told me. Like Azeem, smugglers abandoned Nazra, her husband, and three children in the jungle at the Turkish border. They spent 24 hours in the woods before the Turkish police caught them. “Smugglers beat up my eight-year-old son because he was slow. They told me that the police would catch us because of him,” Samara explains her family experiences with smugglers on the Bulgarian-Serbia border. “I was in a group of 20 when we tried to cross into Turkey from Iran with the smugglers. One person was sick and slow, and he could not run. The smugglers beat him up and left him in the woods,” Abdul tells me about how smugglers can turn violent during the ‘game’ if they think that the crossing is at risk and that they may be caught.

Despite these extremely stressful and traumatic experiences with smugglers, refugees heavily rely on them during their journey, particularly during the ‘game’. My interlocutors told me that they were, to some extent, well aware of the potential risks involved in irregular border crossing and dealing with smugglers. As they described, smugglers did not hesitate to use violence and abandon slow walkers or even the entire group if they were at risk of being caught and detained. Yet, smugglers were a ‘necessary evil,’ and without the assistance of these ‘professionals,’ my interlocutors felt they had no other ways to overcome the legal and physical obstacles to their movement across international borders.

3.2.2 Physical and psychological hardships

To an extent, my interlocutors seem to perceive and accept the physical and psychological hardships related to extreme material deprivations and poor physical living conditions as normal, inevitable features of violent, fragmented, and uncertain routes. Most of them reported suffering from severe exhaustion, food/water deprivation, as well as physical pain and injuries on their hazardous multi-national journeys to Serbia, mainly while they played the ‘game.’ “We didn’t eat 3-4 days or drink any water two days in the forest,” Mani tells me. I kept hearing about these and similar physical and psychological challenges from my interlocutors, who had to suffer and face extreme stress while crossing borders and playing the ‘game.’

Aina left Afghanistan with her five children to flee her violent husband. “I could not divorce him because I am Pashto. That is against my religion and tradition,” she tells me. We were in a different room in the Commissariat’s barracks, which did not differ much from the one where I talked with Ahmed and Samir. Aina had a black hijab with a colorful flower over her head. She is a petite woman, yet her physical appearance does not disguise the fortitude and strength I hear in her voice and see in her stance. “I want my children to have a better, peaceful life,” she utters. “I knew that it would be really hard to embark on a journey with five kids. But I had to do it. My mother helped me pay the smugglers. We first went to Iran. It was freezing. My youngest child was turning blue. I was afraid she would die. On our way to the Turkish border, we reached a house where the people helped me. They heated the water, and I tried to warm my daughter with it. I thought she was dead because she was unresponsive. It took me one and a half hours to bring her back,” Aina speaks with a shaky voice. She is on the verge of crying,

but she is not letting herself shed a tear. She wants to stay strong; she must remain strong for her kids. They want to continue their journey to Canada, but not irregularly. She has an uncle there. Aina is done playing the ‘game.’

“I left Iraq with my wife and three kids. I told my family that it would be hard, but I couldn’t imagine that the police would beat my autistic child. In Bulgaria, the police beat me and my family. That was the worst moment in my life when I saw the police beating my three children. I couldn’t stop them from beating my kids,” Ali could barely refrain from crying as he was telling me about his most traumatic experience during one of the ‘games’ he and his family had to play on their journey to Serbia. Given that the journey and the outcome of the ‘game’ were highly unpredictable, most of my interlocutors recounted that they had been poorly ‘equipped’ for long risk-fraught travel, and unprepared for the psychosocial stress, elicited by the constant fear of deportation, family separation, and hopelessness. “My family and I spent so many nights in the jungle, barely surviving with little food and water, as we tried to cross into the next country on our journey. My mother was exhausted. I was in constant fear for my family, and that I’d be caught, beaten, and deported back to Afghanistan,” Zahra, a girl of 20 or so, sadly related the fear and stress she and her endured before reaching Serbia. The accumulation of such harrowing adversities that accompanied my interlocutors’ migratory journeys is an additional layer to their ongoing suffering and distress that may adversely impact on their mental well-being.

3.3 Experiences with border police

“The Bulgarian police beat me. They are the worst!”

“The Bulgarian police robbed me. They took my money and my cell phone!”

Despite the EU's humanitarian and legal obligations to treat refugees with dignity, provide safety, and respect their human rights, its Member-States instituted restrictive migration policies often characterized by building of razor-wire border fences and border closures (Arsenijevic et al., 2017). The closure of Balkan borders was accompanied by violent events, including physical brutality, carried out by border police against refugees who decided to embark on the clandestine journey and play the 'game.' Bibi is a twenty-something young man, who came with his family to Serbia from Afghanistan. He embarked on a clandestine journey with his parents and two younger siblings, a sister, and a brother. His father paid the smugglers € 10000 to take them across multiple borders, or, he at least thought so. They took the bus to Iran. From there, they tried to cross into Turkey twice. Their fourth 'game' was successful and they made it to Bulgaria. "The Bulgarian police caught us the first time we tried to cross into Serbia. They beat us, took our money, and sent us to the closed camp," Bibi continues, "It was hard, we tried to cross into Serbia two more times, but, each time, the police caught us, beat us and sent us to camp again. We succeed in crossing to the other side of the border the fourth time." During our conversation, Bibi struck me as someone who had had to grow up very quickly and become a man who would, together with his father, take care of his mother and younger siblings. After all, he was a young man who had survived and experienced so much for his young age.

Like Bibi, approximately half of my interlocutors encountered or became engaged in altercations with border police inside a country or after crossing its border. Most of these encounters resulted in physical abuse, extortion, and threats of *refoulement*. "The Bulgarian police took my money and my phone. The Bulgarian police are brutal to

refugees. They attacked and beat me when I tried to cross into Serbia,” Gul said. “On my attempt to cross from Turkey to Bulgaria, the Bulgarian police started beating up the group I was in with my wife and three kids. They also took our money and phones and then opened fire to push us back to Turkey. It was almost unreal,” Sayed tells me visibly shaken, disbelieving that the police can treat refugees in such a horrific manner.

The vulnerability to physical and psychological abuse at the hands of border police - the agents in the ‘game’ - underlining many of my interlocutors’ journeys stemmed from their undocumented status, desperation, fear, and lack of legal migration opportunities. Border police agents were at the actual center of violence that my interlocutors had to navigate while crossing international borders, like many other refugees playing the ‘game’ on their unauthorized, nonlinear journeys. Human rights abuses, negative experiences with the border police forces, fear, and uncertainty my fleeing interlocutors experienced during and after these encounters demonstrated several essential characteristics of clandestine crossings towards safe refuge in Europe.

3.4 Traumatic events

Dana is from Iran. In her early thirties, she is divorced with one daughter whom she had to leave in her home country. Dana could not bring her daughter to Serbia. Custody was granted to her father after Dana separated from him. “I couldn’t take his abuse any longer. I put up with it for two years. But I didn’t want to suffer any more. The court did not want to listen to my side of the story. That’s why my daughter is with my ex now. That is the law in Iran,” Dana explains one of the most painful moments in her life. We were in her room in the barracks across the one used by the Commissariat. She had a

pink cover over her bed and pink curtains on the window. A small table stood to the right side of the door, across the closet. Dana was on her bed, and I was sitting on a chair next to the table. Before we started talking, she made us herbal tea with saffron. Her room felt cozy and warm, as if it were not located in an asylum center but in any other apartment in Belgrade.

I asked Dana about her journey from Iran to Serbia. “It is extremely hard to journey as a woman. It is unsafe for a woman to travel alone. I took a plane from Iran to Turkey. I paid smugglers to take me from Turkey to Greece. I was on a small boat with 20 other people, but we managed to cross the Mediterranean and reach a Greek island. In the two months that I spent in Greece, I tried twice to cross from there to Macedonia with smugglers. But both ‘games’ were unsuccessful. I tried the third time with a smuggler I did not know, but I had heard that he was successful in taking people across the border. I was in a group of maybe 20 people. The group was a mix of families and single men. I was the only single woman. We crossed from Greece to Macedonia and walked to the border with Serbia. We were in the forest relatively close to the border after walking all day when the smuggler told us that we would rest and spend the night there. He wanted us to cross in the early morning hours, when the border police changed shift. That night he raped me while two other men from my group were holding me by my hands,” Dana shares her story with me with profound, noticeable pain and suffering in her voice, keeping her head down and looking at the floor. I sat next to her and held her hand. I wanted Dana to feel that she was not alone at that moment.

Given minimal, if any, likelihood of migrating in a regular fashion, my interlocutors had embarked on journeys full of precarious circumstances and the traumas

they experienced as a result of their plight from home, which unquestionably marked the lives of many of them. Caught in a vicious cycle of numerous attempts to cross international borders, my interlocutors were often subjected to various torments, including extreme physical and mental trauma of substantial intensity, frequency, and length.

Armin is a young father of three. He left Afghanistan with his wife and children. His wife was pregnant when they set out for France. They had to make multiple stops and cross multiple borders on their way there. They first went to Pakistan and then to Iran, on foot and by car. From Iran, they went to Turkey. His wife was riding a horse the first time they tried to cross from Turkey to Bulgaria. She could not walk for long because of her pregnancy. “We were in the jungle walking to the border in a group with the smugglers, while my wife was riding a horse. At one moment, the horse went crazy and started running away from the group. I saw my petrified wife falling off the horse. I told my kids to wait for me. I started running toward my wife to save her. At that moment, I didn’t care if the police caught us. I only cared about my wife and my unborn child. She was lying on the cold ground and crying. She thought that we had lost our baby. Thank God, she was not seriously hurt physically, but emotionally she was not doing well. I took her in my arms, hugged her really tight, and told her everything would be fine. I had to stay strong for my family. Still, I was falling apart inside,” Armin explains one of the most traumatic experiences he and his family survived on their journey to Serbia, while they were playing the ‘game’ between Turkey and Bulgaria.

Restrictive migration policies and regulations created social, political, and structural circumstances in which trauma and uncertainty are deemed anticipated, an

inevitable feature of the journey, of the ‘game,’ and even embodied realities for many refugees. Most of my interlocutors recounted experiencing not just one instance of trauma, but also numerous incidences of extreme ongoing stress and uncertainty on their fragmented, unauthorized journeys to Serbia. Once they leave their countries of origin, fleeing refugees face numerous risks and dangers while crossing international borders. Such adverse events, indicative of distressing, unpredictable, and potentially life-threatening experiences, might have had severe negative implications for my interlocutors’ mental well-being. Indeed, the recurring character of such anticipatory stressors, associated with uncertainty, has been generally considered a critical factor in developing stress-related pathology (Decker et al., 2003; Dressler and Bindon, 2000; McClure et al., 2015).

3.5 The ‘game’ model

As my interlocutors described, migratory journeys are not linear; instead, they include refugees’ internal movements (e.g., from an asylum center to the state border), migration along the route, and lateral mobility to other transit countries perceived as more permissive before reaching their desired destination (Mandic and Simpson, 2017). Informed by heuristic approaches to decision making (Arthur, 1994; Brown, 2016; Gigerenzer and Gaissmaier, 2011) along with game theory and game-theoretical terminology while utilizing my interlocutors’ emic accounts, I explain how the refugees’ non-linear journeys require a set of strategies to move through multi-step scenarios on their way to the border (internal movements) or at the physical border itself. The game theory framework provides a way of modeling, formalizing, and analyzing two or more

players' encounters and their plans of action (Binmore, 1992; Parsons and Wooldridge, 2002; Prisner, 2014). There are several elements commonly used in the study of game theory. The first set refers to players or strategic decision-makers. Each player has a set of strategies - a complete plan of action – from which to choose (Prisner, 2014). In the game context, the combination of strategies chosen by all players determines the outcome and payoff (Muggy and Heier Stamm, 2013). In the 'game,' played between refugees and border police and enabled by smugglers, each player's strategy critically depends on the other players' choices and the given set of circumstances to optimize his/her payoffs. Thus, a border police's plan of action depends on their government's political measures and anti-migration policies. In contrast, the refugees' set of strategies is highly contingent on the information and knowledge obtained from enabling agents, their smugglers, about often risky migratory journey scenarios. In addition, the refugees' payoffs in the game context may include border crossed, a continuation of the journey, and reaching the final destination, whereas payoffs of the border police may encompass deportation, forced return, deception and forced separation, and imprisonment.

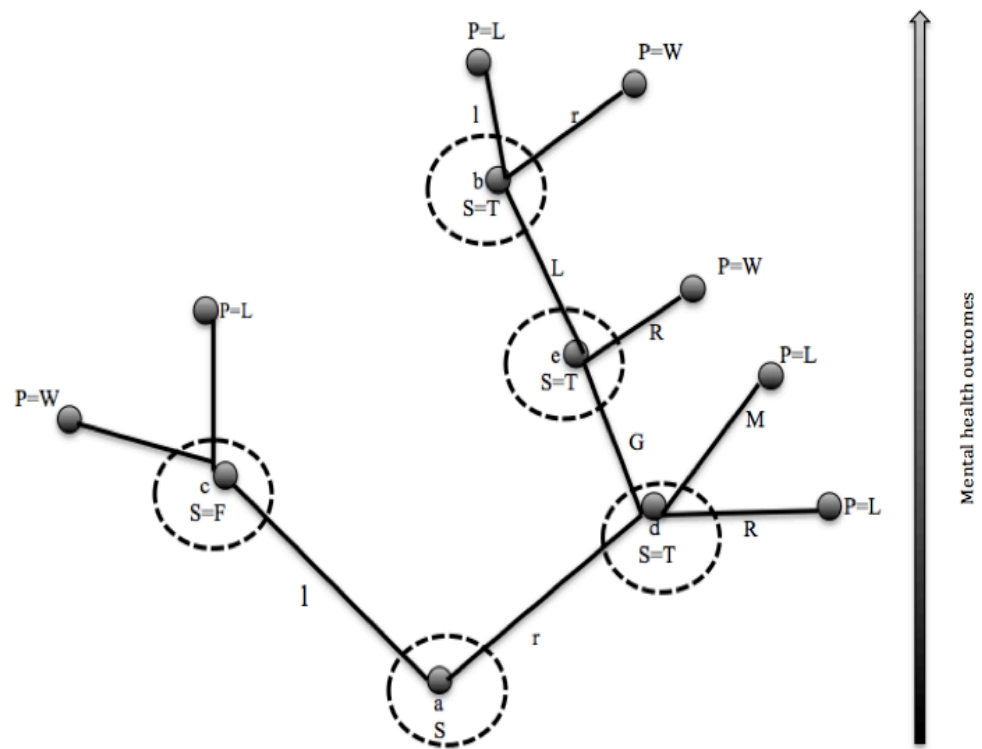
The game is extensive and asymmetrical while also being a non-cooperative/cooperative game of imperfect information. In particular, my interlocutors' decision to cross multi-national borders involves a sequence of their decisions dependent on the smugglers' information and guidance and reliant on the contemplation of the border police actions before deciding on their own. Not all players have the same set of strategies available to them; therefore, each player's payoff depends not only on the combination of strategies played, making this game asymmetrical. In this game of imperfect information, none of the players know the availability of actions to other

players, their payoffs, or decisions. Thus, any gains by my interlocutors meant loss for the border police and vice versa. Multiple losses of the game by the border police may be perceived as the governments' failure to prevent smuggling efforts and abide by treaties that proclaim an international commitment to protection. Lastly, border crossing illustrates a non-cooperative game, in which the players choose actions independently to optimize their own payoffs.

The figure below provides a simplified illustration of the 'game' explained by the decision-making tree. This decision tree represents a sequential model, which describes a series of events depending on the decision condition resulting in a payoff function that takes the values of a win (W) or loss (L), and aims to describe the border crossing between two countries. A far more complicated model would require representation of the entire journey from the refugees' home country to their final destination. While this decision tree represents a simplified sequential model, it is a faithful example of the 'game' that occurs on the refugees' way to the border and at the border between two states.

Figure 3.1 Decision tree model of the ‘game:’

The starting point of this game is at node ‘a’, where the value of variable S (smugglers) is yet to be determined. At this starting point in the border crossing game, refugees have to decide whether or not they will use the services of smugglers. If refugees choose not to pay smugglers to cross the border, then variable S takes the value of false (F), leading to node ‘c’ in the decision tree. For this particular node, two outcomes are possible and correspond to the payoff function of a win (W) or loss (L). This path represents the shortest route of crossing the border in the decision tree that carries the highest risk and may often lead to the payoff function equal to the loss of the game (L). Most refugees are willing to pay smugglers to reach their final destination, relying on the smugglers’ information, guidance, and knowledge about the weakest crossing points between two states and their ability to navigate the terrain and border police movements along the border itself. If, at node ‘a’, refugees decide to use smugglers, the value of variable S is equal to true (T), leading to node ‘d’. At this point in the game, there are three possible values of the payoff function for this particular node, encoded on branches M, R, and G. Branch R describes a situation where smugglers either have not appeared at the meeting point or have abandoned refugees on their way from the meeting point to the actual border. This state of affairs leaves refugees at a higher risk of apprehension by the police or forces them to try and cross the border. Branch M describes the situation where the police have apprehended both the smugglers and they refugees attempting to reach the actual border/crossing point. Branch G describes an event in which both the refugees and the smugglers continue the journey to the border crossing point. Node ‘e’ corresponds to reaching one side of the border, where the border police of one state control the crossing. There are two possible outcomes at this point in this game. The payoff function is equal to the loss of the game (L), as border police have apprehended both refugees and smugglers. The other outcome corresponds to the win of the game (W), since refugees have crossed one side of the state border and reached node ‘b.’ Two possible values of the payoff function exist for this node. The first payoff function corresponds to the win of the game (W), allowing refugees to repeat the process at the next border crossing point until they reach their final destination. The other outcome corresponds to the payoff function of losing the game (L), as the border police on the other side of the border have apprehended refugees. Consequently, captured refugees often experience physical and mental abuse, detention, pushbacks, forced separations, and deportation inflicted by the police forces that caught them. Such traumatic experiences may have adverse effects on the refugees’ mental health and well-being, as indicated by research that has found links between forced migration and higher incidences of mental disorders among refugee populations (Bhugra, 2004; Porter and Haslam, 2005; Steel et al., 2009).



The decision tree consists of nodes and branches. Branches in the decision tree connect the nodes, and each node can have multiple branches connecting to the other nodes. Each node carries a decision condition leading to the evaluation of the payoff function. There are two values of the payoff function – a win (W) or loss (L) – evaluated for each branch leading to a node. Another element of the figure is related to the definition of players. In this sequential model, there are two players, the refugees and the border police. Simultaneously, smugglers (S) represent independent actors, as they take the central role of enabling agents that influence the set of strategies, decision processes, and outcomes in this game. Playing this game might have various substantial mental health implications for fleeing refugees due to recurrent journey-related trauma, distress, and violence they face *en route* to safety, often inflicted by the border police and/or smugglers. In the next section, I analyze whether lengthy, dangerous journeys and playing the ‘game’ – which is a substantial and indivisible component impacting on the length of the journey - have meaningful consequences for refugee health. In doing so, I discuss quantitative methods, analyses, and results, indicating that playing the ‘game’ during lengthy traumatic journeys is associated with poorer mental health outcomes in this population of transient refugees, particularly women.

3.6 Methods

3.6.1 Study population

The sample consisted of 71 participants (50 males; 21 females). The mean age of the participants was 27.6 yrs \pm 9.0 SD (range: 18-55). The mean ages of both sexes were similar (males: 27.4 \pm 9.4 and females: 28.2 \pm 8.3). The unbalanced sex ratio of the

sample (~70% male) reflects the characteristics of the overall sex ratio among refugees in the asylum center in Belgrade, Serbia. In terms of partnering status, 37 participants said they were single, 28 married, two separated, two divorced, and two reported “a long-term relationship.” The mean number of children within the families was 1.2 ± 1.8 SD. The average length of the journey was 10.2 months ± 10.0 SD (range: 12 days to 48 months). Most respondents (~67%) identified Afghanistan as their home country. Descriptive statistics for the sample are provided in Table 3.1.

3.6.2 Semi-structured interviews

A semi-structured interview was conducted with each participant. Given that study participants speak different languages (e.g., Farsi, Pashtu, Urdu), interviews and other interactions were conducted with the assistance of a trained interpreter. Participants fluent in English preferred to be interviewed in English. A demographic survey was administered. In addition to basic demographic information, with a view to gaining an in-depth understanding of their journeys and participation in the ‘game,’ the participants were asked to elaborate on their experiences (e.g., How many times have you tried to cross the border to reach Serbia? What was your journey like? How long did it take you to reach Serbia?), experiences with smugglers (Have you been smuggled to Serbia? How much have you paid the smugglers?), and the types of trauma (physical, psychological, or both) they faced during their flight to safety (e.g., Have you experienced any traumatic event on your journey?). The participants were also asked whether they had traveled alone or with family/friends and whether they had lost someone on their way to Serbia. In this study, physical trauma is defined as bodily injury and/or pain caused by physical

TABLE 3.1.
DESCRIPTIVE STATISTICS (N=71)

	Participants	
	Mean	SD
Sociodemographic data		
Age	27.66	9.07
Number of children	1.25	1.81
Journey length	10.27	10.07
Time in Serbia	10.54	7.30
Health survey data		
RHS-15 Total Score ^a	39.09	12.97
IES-R Total Score ^b	54.00	19.16
PSS Neg. Total Score ^c	14.39	4.86
	(%)	
Partnering Status		
Partnered	39.44	
Not partnered	60.56	
Country of Origin		
Afghanistan	67.60	
Iraq	11.26	
Iran	4.22	
Pakistan	4.22	
Ghana	4.22	
Other	<1.41	
Education		
<High school	46.47	
High school	21.13	
>High school	32.40	
Trauma		
No trauma	15.49	
Physical	15.49	
Psychological	2.82	
Both	66.20	

^aRHS-15 Total Score = Refugee Health Screener 15.

^bIES-R Total Score = Impact of Event Scale-Revised.

^cPSS Neg. Total Score = Cohen Perceived Stress Scale - negatively worded items.

violence, deprivation, or exhaustion. In contrast, psychological trauma denotes emotional or psychological fear or threat resulting from a highly stressful or life-threatening situation.

Qualitative data collected on border crossings, smuggler-related experiences, and journey-related trauma were evaluated and coded by the author in the following manner: a score of “1” was assigned if a refugee reported s/he had been being smuggled/attempted to cross borders irregularly and experienced one or more physical and/or psychological traumatic events; otherwise, a score of “0” was given. The dichotomized data were then entered into the Stata dataset, alongside the other variables.

3.6.3 Survey measures of mental well-being

The 22-item Impact of Event Scale-Revised (IES-R; Weiss and Marmar, 1997) was used to measure subjective distress caused by traumatic events. The participants were asked to identify one traumatic event and rate each IES-R item with respect to the identified distressing experience on a 5-point scale ranging from 0 (not at all) and 4 (extremely). This 5-point scale reflected the degree to which a particular symptom was a problem for respondents during the past week in relation to an identified past distressing/traumatic event (Weiss and Marmar, 1997). This instrument is considered a valid measure of self-reported PTSD symptomology (Weiss and Marmar, 1997; Weiss, 2004), aiming to capture the degree of an individual’s distress rather than the frequency of the symptoms (Motlagh, 2010). The questionnaire is a widely used self-report instrument/tool within trauma literature, and it is compatible with the DSM

conceptualization of PTSD (e.g., Joseph, 2000; Weiss and Marmar, 1997). Cronbach's alpha, a measure of internal consistency, for the total IES-R was 0.92.

The 15-item Refugee Health Screener 15 (RHS-15; Hollifield et al., 2013) survey was also used to screen individuals for both trauma-related mental and physical health problems. The RHS-15 was developed by the *Pathways to Wellness: Integrating Community Health and Well-Being* program as a validated screening instrument for common mental disorders and physical ailments in refugees, including anxiety, depression, and posttraumatic stress disorder, and it stands in contrast to other instruments developed for detecting single mental illnesses in refugees (Hollifield et al., 2013; Pathways to Wellness, 2011; Stingl et al., 2017). Items 1–14 ask participants to rate the frequency of psychological and somatic symptoms on a 5-point Likert scale scored 0 ('not at all') to 4 ('extremely') and diagrammatically annotated with a beaker filled to varying degrees corresponding to the 0 to 4 scaling. Item fifteen is a 10-point distress thermometer (from 0 - 'no distress' to 10 - 'extreme distress') that asks participants to rate their level of distress. A total score of ≥ 12 on items 1–14 and/or a score of ≥ 5 on the distress thermometer is considered a positive screen for emotional and physical distress (Hollifield et al., 2013). Cronbach's alpha was 0.81.

Finally, the widely-used 10-item Cohen Perceived Stress Scale (PSS; Cohen et al., 1983) was administered to measure more recent psychosocial stress (i.e., in the past four weeks). Each of the items on the PSS- 10 is rated on a 5-point Likert scale (1=never to 5=very often). The scores are obtained by reversing responses to the four positively stated items (items 4, 5, 7, & 8) and then summing across all scale items (Cohen et al., 1994). The 10 items in the scale inquire about feelings and thoughts related to the degree to

which respondents find their life situation unpredictable, uncontrollable and stressful. Respondents indicate how often they have felt or thought a certain way in the past month on a 5-point Likert scale (Cohen et al., 1983). After reverse scoring, it was found that the four positively stated items correlated with the summary score in the wrong direction. In cross-cultural research, it is not uncommon for reverse-worded items from the U.S.- and European-validated scales to cause problems when the surveys are used in other cultural settings (Wong et al., 2003). Although the PSS is commonly used as a unidimensional measure of perceived stress, past studies applying factor analysis to the PSS suggest that it also reflects a two-factor construct, comprised of perceived stress (negatively worded items) and perceived self-efficacy (positively worded items) (Jovanovic and Gavrilov-Jerkovic, 2015; Perera et al., 2017). Based on this past work and the reliability analyses for the sample, the negatively worded items in the current study were retained and referred to the sub-scale as measuring “perceived stress.” As with the IES-R and RHS scales (above), I used Stata’s ‘alpha’ and ‘item detail’ commands to assess the internal consistency of the PSS for this sample. These six retained items had a Cronbach’s alpha of 0.73.

3.6.4 Statistical analyses

All statistical analyses were conducted using version 14 of Stata, and tests of statistical significance were evaluated at $p < 0.05$. I treated journey length, age, and measures of mental well-being (perceived stress; IES-R; RHS-15) as continuous variables, and sex, being smuggled, and trauma as categorical variables in all analyses. I used ordinary least squares (OLS) regression with standard errors in all of the analyses.

First, I tested for journey length and male-female differences for three measures of mental well-being (perceived stress; IES-R; RHS-15) in separate models for each outcome (Model 1). In subsequent models, I included covariates related to trauma and smuggling (Model 2), and relevant sociodemographics (Model 3) that I predicted might help explain sex differences and mental health outcomes. In Models 2 and 3, I also tested whether individuals had poorer mental well-being if they were smuggled and if their journeys to Serbia were more traumatic. Thus, for these analyses, Model 1 included the participants' sex, age, and journey length. Model 2 included the participants' sex, age, smuggling, and experiences of trauma. In Model 3, I included all variables from Models 1 and 2 and the relevant sociodemographic covariates.

3.6.5 Results

In Model 1 predicting the refugees' mental well-being (RHS-15 scores), including age, sex, and journey length, women had scores indicating poorer well-being compared to men, as did those who had experienced longer journeys ($p's < 0.05$). With the addition of trauma and smuggling covariates in Model 2, women had scores indicating poorer well-being than men, as did those who had experienced trauma ($p's < 0.05$). In full Model 3, women's scores indicated poorer well-being compared to men, as did those who had experienced longer journeys ($p's < 0.05$). Individuals who reported trauma during their journeys tended to report higher scores although the finding did not reach statistical significance ($p=0.057$). No other predictors were statistically significantly linked to the refugees' RHS-15 scores (see Table 3.2 for full results).

TABLE 3.2

MODELS PREDICTING REFUGEES' MENTAL HEALTH (RHS-15 SCORES)

(N=71)

	model 1			model 2			model 3		
	<i>b</i>	<i>SE</i>	<i>p</i>	<i>b</i>	<i>SE</i>	<i>p</i>	<i>b</i>	<i>SE</i>	<i>p</i>
female ^a	8.50	(3.03)	0.007	6.73	(3.32)	0.047	7.14	(3.06)	0.023
age	0.01	(0.15)	0.943	0.01	(0.16)	0.928	0.04	(0.15)	0.793
journey length to Serbia	0.50	(0.13)	0.001				0.46	(0.14)	0.002
trauma ^a				9.26	(4.29)	0.035	8.25	(4.25)	0.057
smuggled				-12.12	(13.31)	0.366	-15.94	(12.35)	0.201
model R2		0.24			0.14			0.28	

^aComparison groups for categorical variables: males; trauma and no trauma.

In models following a progression for post-traumatic stress-related symptomology (IES-R scores), men and women did not significantly differ ($p > 0.5$). In Models 1 and 3, the participants who had experienced longer journeys reported higher post-traumatic stress scores compared to participants whose journeys had been shorter (p 's < 0.05). No other predictors were statistically significantly linked to refugees' IES-R scores (see Table 3.3 for full results).

TABLE 3.3

MODELS PREDICTING REFUGEES' POST-TRAUMATIC STRESS-RELATED
SYMPTOMOLOGY (IES-R SCORES) (N=71)

	model 1			model 2			model 3		
	<i>b</i>	<i>SE</i>	<i>p</i>	<i>b</i>	<i>SE</i>	<i>p</i>	<i>b</i>	<i>SE</i>	<i>p</i>
female ^a	2.98	(4.83)	0.539	0.88	(5.21)	0.866	1.41	(4.97)	0.777
age	-0.02	(0.24)	0.915	-0.03	(0.25)	0.882	0.005	(0.24)	0.982
journey length to Serbia	0.59	(0.22)	0.009				0.54	(0.22)	0.020
trauma ^a				9.44	(6.74)	0.166	9.13	(6.90)	0.191
smuggled				-13.64	(20.88)	0.516	-18.99	(20.02)	0.346
model R2		0.10			0.03			0.13	

^aComparison groups for categorical variables: males; trauma and no trauma.

In Model 1 for recent perceived stress (PSS negative sub-scale), women reported higher scores compared to men (p 's < 0.05). In addition, individuals who had experienced longer journeys tended to have higher scores although the finding was not statistically significant ($p=0.067$). Likewise, in Model 2, women tended to report higher scores although the finding did not reach statistical significance ($p=0.060$). In the full Model 3, the finding for sex differences vis-à-vis the length of journey remained significant ($p=0.051$). Individuals who reported longer journeys tended to report higher scores although the finding did not reach statistical significance ($p=0.070$). No other predictors were significantly correlated with recent perceived stress (see Table 3.4 for full results).

TABLE 3.4

MODELS PREDICTING REFUGEES' RECENT PERCEIVED STRESS (PSS
NEGATIVE SUBSCALE SCORES) (N=71)

	model 1			model 2			model 3		
	<i>b</i>	<i>SE</i>	<i>p</i>	<i>b</i>	<i>SE</i>	<i>p</i>	<i>b</i>	<i>SE</i>	<i>p</i>
female ^a	3.17	(1.31)	0.019	2.60	(1.36)	0.060	2.69	(1.34)	0.051
age	-0.03	(0.06)	0.592	-0.03	(0.06)	0.615	-0.03	(0.06)	0.618
journey length to Serbia	0.11	(0.06)	0.067				0.11	(0.06)	0.070
trauma ^a				1.80	(1.76)	0.308	1.17	(1.87)	0.531
smuggled				-7.88	(5.46)	0.154	-8.47	(5.43)	0.123
model R2		0.12			0.11			0.15	

^aComparison groups for categorical variables: males; trauma and no trauma.

3.7 Discussion

Refugees fleeing conflict, violence, and human rights violations in various countries, including Afghanistan, Syria and Iraq, are willing to take huge risks to seek protection outside their national borders, embark on perilous journeys, and play the 'game' across multiple borders to reach Europe. Increasingly tightened EU migration policies, enhanced control, and regulations adopted to keep refugees out of EU territory have apparently not discouraged the refugee flow (Belloni, 2019). Quite the contrary, many refugees facing conflicts, violence, and lack of freedom every day were compelled to take their chances and cross the border illicitly despite constraints on their regular mobility imposed by various EU governments (Mangrio et al., 2018; UNHCR 2019;

Weber, 2017). Similarly, unable to achieve their most fundamental aspirations regarding freedom and to escape economic deprivation and violence, tens of thousands of people from countries in Central America have embarked on hazardous journeys across Mexico in search of protection in the U.S. (Vogt, 2018).

Once they leave their country of origin, ongoing physical hardships and prolonged psychosocial stress are among the core adversities refugees face every step of their fragmented and unsafe migratory routes (Dolma et al., 2006; Arsenijevic et al., 2017; UNHCR, 2019). Specifically, research has revealed that fleeing people, refugees, and migrants, routinely experience threats and persecution when crossing borders, violence, abuse, injury, physical fatigue, and family separation during their numerous attempts to reach their desired destination (Belloni, 2019; De León, 2015; Sandalio, 2018; Vogt, 2018). Aligning with this perspective, I found that most of my interlocutors residing in the “Krnjaca” asylum center in Belgrade, Serbia reported experiencing extreme physical and psychosocial traumas while playing the ‘game’ during their transit, nonlinear journeys that rendered them vulnerable to adverse mental health profiles.

Notably, the qualitative dimensions of the study revealed that refugees had routinely suffered violence and grave abuses at the hands of border police and smugglers while playing the ‘game’ on the dangerous routes. Their journeys to Serbia, as refugees described, were treacherous, fraught with physical and psychological adversities, recurrent stress, uncertainty, and egregious violations of their human rights. These patterns complement past research showing that the closure of borders, surveillance, and strict EU migration policies legitimized police brutality against those deemed ‘irregular’ - migrant and refugee populations (Mandic, 2017; Nyers, 2003; Weber, 2017). Similarly,

along migrant routes in Mexico, the consequences of U.S. state border crossing policies crossing systematically produced and sustained violence and hardships in people's lives and lived realities (Vogt, 2018). Thus, advancing our understanding of the refugees' journey, its components, and their individual experiences is of vital importance for grasping (transit) migration as a broader phenomenon, as it has been recently stressed (Benezer and Zetter, 2015), particularly in relation to the states' bordering practices and migration policies serving as means of exclusion and violence (Casas-Cortes et al., 2015).

The repressive political, material, and social structures shape clandestine migration by compelling refugees to use expensive smuggling networks needed for unauthorized border crossing, putting their safety and security at further risk. For example, De León's (2015) study revealed that irregular border crossers attempting to enter the U.S. often relied on *coyotes* (smugglers) to guide them through treacherous terrain and help them cross over, although they might also abandon, mistreat and/or harm them. Similarly, a study of Eritrean refugees trying to reach Italy showed that "pilots" were crucial in facilitating the journey, although they were seen as exploiters who might resort to violence (Belloni, 2019:106). This study suggests that refugees were likely to use the smugglers' services and 'shopkeepers' to facilitate their journey to Europe. They were also likely to suffer from physical and psychological violence perpetrated by other game players in power (smugglers and border police), with consequences for their mental well-being. Thus, the findings suggest that the role of smugglers as enabling agents warrants further investigation, as it may be critical for understanding the smuggler-refugee dynamics and the effects of smuggling networks in relation to the variability in the refugees' distressing experiences and their mental health outcomes.

Clandestine migratory movements are not linear; rather, they are sequential, extensive, and asymmetrical journeys that entail numerous negotiations, disruptions, and uncertainty. Refugees' unauthorized migration was full of impediments and danger, which often led to their slower and lengthier journeys characterized by an extended state of insecurity. Moreover, irregular border crossings, the act of playing the 'game,' required my interlocutors to navigate multi-step scenarios on their way to the border, which inevitably rendered them vulnerable to various torments, recurrent trauma, and violent events. The quantitative dimension of the study revealed that refugees, whose journeys had been longer, tended to exhibit poorer mental well-being and higher PTSD symptoms than those, whose journeys had been shorter. Prior research in this area has suggested that exposure to prolonged trauma and stress is associated with the refugees' increased susceptibility to psychosocial distress and poor mental health profiles (Al-Obaidi and Atallah, 2009; Bhugra, 2004; Li et al., 2016; Porter and Haslam, 2005; Tempny, 2009). In particular, a recent study of Syrian refugees living in Turkey and Sweden found a high prevalence rate of PTSD (43%) and significantly elevated levels of psychiatric co-morbid symptoms (anxiety, depression, and somatic problems; Cheung Chung et al., 2018). In another study of recently resettled Syrian refugees in Sweden, Tinghög and colleagues (2017) found that 40.2% of the participants had depression, while roughly a third had an anxiety disorder or PTSD. Given the similarity in patterns between the study findings and past research, this work lays the groundwork for further investigation of the impact of ongoing trauma in relation to individual differences in mental health profiles, particularly among refugees in migratory transit stages, for

assisting the healing and recovery of these populations as they contemplate their next steps or await permanent resettlement.

Both sexes encountered traumatic events and violence to a similar degree on their long traumatic journeys (Arsenijevic et al., 2017; Freedman, 2016; Gerard and Pickering, 2013; Nagai et al., 2008), particularly while playing the ‘game.’ As the refugees’ narratives disclosed, the results of this study indicate that both sexes had been exposed to similar physical and psychological hardships on their journeys. Still, the quantitative dimensions of the study indicate that women tend to report higher recent perceived stress and poorer well-being and physical health than men. Past studies, which investigated differences in civilian responses to war among sexes, suggest that women experience a higher risk of depression and PTSD following traumatic incidents, such as rape, sexual abuse, and physical violence, than men (Alpak et al., 2015; Arsenijevic et al., 2017; Eytan et al., 2004; Mollica et al., 1987; Potts, 1994). In particular, Freedman’s (2016) study of refugees in various stages of migration living in three research sites, Greece, Serbia, and France, showed that women attempting to reach Europe to find protection were particularly vulnerable to multiple forms of insecurity and violence at the hands of smugglers, border police, and security forces. Their increased vulnerability to specific traumas, including physical and sexual violence, may drive variability between the sexes and explain sex differences in susceptibility to and the prevalence of adverse mental health issues (Mohwinkel et al., 2018; Stein et al., 2000). While the same pattern was not observed for the IES-R scale, these findings warrant further research on sex differences in mental health, particularly among transient refugee populations, with potential

implications for establishing interventions towards attenuating journey-related mental illnesses.

Migratory journeys, particularly the act of irregular border crossing, remain a relatively under-researched theme in refugee and migration studies (Benezer and Zetter, 2015). The main strength of this mixed-method study is its focus on the clandestine journey itself and the ‘game,’ as its integral component, and the experienced vulnerabilities and mental well-being of transient refugee populations living in Serbia. By analyzing the refugees’ narratives and self-reported mental health while utilizing game-theoretical terminology, I aimed to explain what transpires when refugees embark on lengthy, hazardous journeys and play the ‘game,’ and the impacts journey-related trauma and stress have on the refugees’ mental health.

Lastly, a limitation of this study is the unbalanced sex ratio of the sample, comprising 50 males and 21 females. While the sex ratio is characteristic of the overall male-female ratio among refugees in 18 asylum centers across Serbia, these results may represent a somewhat specific and primarily Afghani male-centric perspective on the journey, the ‘game,’ and traumatic experiences. Another limitation refers to the cross-sectional nature of the analyses, preventing me from discerning the direction of the observed relationships between mental health variables in the key quantitative results. These potential limitations of the current sample do not compromise the validity of the findings, but mean that we should beware of overgeneralizing from the data. Thus, further quantitative inquiry and in-depth analyses of social and mental health determinants of unauthorized border crossings – of playing the ‘game’ - and traumatic experiences are needed to shed new light on how the lived and embodied realities of the

journey in their entirety interrelate with individual differences in health outcomes among transient refugee populations.

3.8 Conclusion

The EU response to the unprecedented refugee crisis failed to protect the fleeing people's rights and lives and provide adequate support to those who had been victims of violence in their home countries or on their migratory journeys. Due to border closures and stricter policies, the enduring dire conditions obstructed the refugees' ability to migrate legally and forced them to undertake dangerous journeys and engage in the 'game' across borders enabled by human smuggling networks (Arsenijevic et al., 2017; Bjertrup et al., 2018; Mandic and Simpson, 2017). As my interlocutors' narratives explained, their journeys along the Balkan route had been full of physical and psychosocial challenges and egregious violations of their human rights that put their mental health at risk. Quantitative indicators of mental health, when examined in relation to the refugees' personal accounts, suggest that violent and distressing events, as an inextricable element of the journey and the 'game,' substantially affected the mental well-being of women and those refugees whose journeys had been longer and more traumatic. The receiving states, both EU and non-EU countries, have to realize that the violence, stress, and trauma fleeing individuals face on their journeys and during the 'game' cannot be ascribed merely to the existing smuggling networks, rather, that they are generated at the nexus of state regulations and structural constraints permeating their everyday lives and lived realities. Therefore, it is critical to tackle the various sources of the refugees' vulnerability to trauma, psychosocial stress, and violence, particularly

among those in transitional migratory processes, to understand their world better and provide appropriate support programs to reduce the harmful effects of their ordeal as they await permanent settlement.

3.9 References

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CHAPTER 4:

FORCED MIGRATION EXPERIENCES, MENTAL WELL-BEING, AND NAIL CORTISOL AMONG RECENTLY SETTLED REFUGEES IN SERBIA

4.1 Introduction

Globally, nearly one person is forcibly displaced every two seconds as a result of conflict, violence, or persecution (UNHCR, 2018). A state of open, prolonged conflict destroys social, economic, and physical infrastructure, often requiring residents to leave their homes and to attempt to relocate elsewhere (Carballo and Nerukar, 2001). By the end of 2017, the global refugee population (25.4 million) stood at its highest level since recording began in the 1980s (UNHCR, 2018). While the Syrian conflict contributed significantly to this recent peak, other conflicts in the Middle East, parts of sub-Saharan Africa, and Asia have also driven this historic surge in the refugee population (UNHCR, 2019a). Most refugees seek security and protection in neighboring countries or elsewhere in the immediate region, not moving far from their home countries (UNHCR 2018). Yet some do move farther afield in search of safety and protection.

Once refugees leave their areas of origin, they generally face a range of difficulties, risks, and dangers as they pursue safety in their final destinations. During the journey, typically in debt and under the control of smugglers, many refugees spend long periods in harsh conditions and are routinely subjected to threats, violence, and fear

(Sandalio, 2018). Their journeys often entail various traumas, including physical hardships (e.g. severe bodily exhaustion, injuries, hunger, violence), prolonged psychosocial stress (e.g. fear, unpredictability, family separation), and/or sexual abuse (e.g. sexual assault, rape) (Arsenijevic et al., 2017; Dolma et al., 2006; UNHCR, 2019b). While both sexes are exposed to stressful events to a similar degree on their harrowing journeys, women are potentially more vulnerable to specific traumas, such as physical violence and sexual assault (Arsenijevic et al., 2017; Freedman, 2016). They may also be at greater risk of suffering from mental health problems (e.g., depression, PTSD) and physiological stress following trauma than men (Cortina and Kubiak, 2006; Friedman et al., 2007; Johnson and Thompson, 2008; Meewisse et al., 2007; Olff et al., 2007; Tolin and Foa, 2006).

As a consequence of these experiences and also because of the threat of their occurrence (or recurrence), refugees' lengthy travels to safety often involve ongoing feelings of uncertainty and lack of control (IOM, 2018; UNHCR, 2019b). Psychosocial stress resulting from such feelings and potentially life-threatening experiences likely activates a number of physiological systems, including the hypothalamic-pituitary-adrenal (HPA) axis, which responds in part through the production of cortisol (CORT) (Johnson et al., 1992; Koolhaas et al., 2011; Miller et al., 2007). CORT helps regulate a wide range of physiological processes in response to physical and social challenge, such as enhancing energy mobilization and cardiovascular activity (Cacioppo et al., 2015; Dedovic et al., 2009; Dickerson and Kemeny, 2004). Under "stressful" conditions perceived as threats, these functions are accentuated through rapid rises in circulating

CORT, which likewise has neuroendocrine effects on the brain, influencing anxiety, attention to stimuli, and memory (Erickson et al., 2003).

Temporary activation of stress systems in response to unpredictable and uncertain physical and social conditions is adaptive and necessary for coping (Flinn et al., 2011). However, chronic exposure to such circumstances may result in a dysregulation of stress responsive physiological axes, resulting in maladaptive neuroendocrine responses (Miller et al., 2007; Ursin and Olff, 1993; Ursin and Eriksen, 2004). For example, prior research has found that exposure to extremely traumatic events is linked to reduced HPA activity and blunted CORT production (Rohleder et al., 2004; Yehuda et al., 1996; Wessa et al., 2006). Such hypo activity of the HPA axis may be associated with an elevated risk for posttraumatic stress disorder (PTSD) symptomatology (Olff et al., 2007) in the aftermath of life-threatening accidents (Yehuda et al. 2015), war-related trauma (Rohleder et al., 2004), and physical or sexual violence (Roth et al., 1997). However, the research linking blunted CORT production to PTSD is somewhat inconsistent. Specifically, some studies have suggested hypocortisolism in individuals with PTSD (Rohleder et al., 2004; Yehuda et al., 1996; Yehuda et al., 2005). Meanwhile, other neuroendocrine studies have revealed that exposure to severe trauma can result in CORT levels that are either elevated (Dekel et al., 2017; Elzinga et al., 2003; Steudte et al. 2011) or are not significantly different in those suffering from PTSD, relative to control groups (Baker et al., 1999; Young and Breslau, 2004; Young et al., 2004).

Moreover, previous research has reported sex differences in responses to stress with regard to the HPA axis and PTSD symptomatology (Olff et al., 2007). Most studies on PTSD have found that women are more prone to develop this condition throughout the

lifespan, compared to men (Breslau et al., 1997; Breslau, 2009; Olff et al., 2007; Olff, 2017). Specifically, research that explored sex difference in civilian responses to war have found that women experience heightened risk of PTSD following traumatic incidents, such as rape, sexual abuse, and physical violence (Alpak, 2015; Arsenijevic et al., 2017; Eytan et al., 2004; Mollica et al., 1987; Potts, 1994). It is possible that this may reflect sex-differences in altered physiological stress responses to these extreme exposures, but this is relatively understudied (Meewisse et al., 2007).

There are a limited number of studies that have examined mental health, including PTSD symptomology and physiological stress among refugees who have recently completed their migratory journeys that may elucidate short- and long-term implications for their health and resilience. Past research on settled refugees' mental health has shown a high occurrence of mental disorders, including PTSD, depression, and anxiety that may be associated with the exposure to migration-related traumatic experiences and psychosocial stress induced by post-migration hardships in host countries (Bogic et al., 2012; Guarch-Rubio and Manzanero, 2017; Ssenyonga et al., 2013). However, earlier studies in this area tended to focus on long-settled refugees, rather than those in more intermittent transitional stages, which may be a period that shapes long-term health and resilience. Little prior work has modeled how refugees' mental health during these transitions relates to the journeys that they recently completed (Arsenijevic et al., 2017; Dolma et al., 2006; Mills et al., 2005) or how psychobiology correlates with these dynamics (Bauer et al., 1994; Panter-Brick et al., 2019).

To help begin to address these existing gaps in knowledge regarding refugees' journeys of forced displacement, physiology, and mental well-being, we drew on data

collected from adults (N = 111; 35% female) residing in transitional refugee settlements in Serbia. In light of potential sex differences in experiences of trauma and threat on their journeys to Serbia, we first tested whether men and women differed for chronic CORT production (measured via fingernails), psychosocial stress, and mental well-being. We then tested whether refugees with longer journeys or trauma experience, respectively, exhibited higher CORT and poorer mental well-being, including PTSD-like symptoms. Because sources of social support may be linked to reductions in the physiological and mental toll of these types of challenging experiences, we also included partnering status as an explanatory variable.

4.2 Methods

4.2.1 Study population

This mixed-method study was conducted in two waves of data collection from December 2017 to January 2018 and from May to June 2018 in two asylum centers in Serbia. The asylum center “Krnjaca” is located in Belgrade, Serbia, while the other asylum center is located in Bogovadja, around 70 km away from Belgrade. Both centers are predominately populated by refugees coming from Afghanistan and (very few) from Iraq, Iran, Pakistan, or Syria, and other North African countries (UNHCR 2016, 2017). For the purpose of the study, a refugee is defined as a person living in Serbia who has fled his/her country of origin, regardless of the political status given to that individual.

A total of 111 participants aged 18-55 had full data to be included in the present study. Twenty individuals participated in both waves of data collection. Participants were recruited with the assistance of local “mobilizers.” In all cases, participants were

informed about the project and its purpose, as well as about our team's permits to work in the area before any data were collected. Verbal consent was obtained from each participant prior to data collection. Accompanied and unaccompanied minors were excluded from the sample. Individuals who self-reported as having any clinically diagnosed psychiatric illnesses were likewise excluded. This study was approved by the Institutional Review Board of the University of Notre Dame and permission was granted by the Commissariat for Refugees and Migration of the Republic of Serbia.

4.2.2 Context and study setting

In the past five years, Europe has experienced one of the most significant influxes of people from the Middle East and northern Africa in its history (IOM 2018; UNHCR 2016, 2017). During 2015, over one million people primarily from Syria, Afghanistan, and Iraq passed through Serbia en route to Hungary and Croatia in seeking refuge and protection. Being one of the transit countries in the so-called 'Balkan route' between July 2014 and March 2016, after which this migration passage was shut down, Serbia represented a bridge state letting the two-year refugee influx into Europe to take place (Mandic, 2017). The EU countries' repressive approach against refugees (e.g., Hungary and Croatia in this context) included fencing their borders and endorsing stricter policies designed to limit arrivals and outsource the problem outside the EU territory. In addition to these supranational migration regulations, in March 2016, the EU reached an agreement with the Turkish government, outlining measures to curtail the onward movement of refugees traveling from Turkey to the EU (UNHCR, 2016, 2017; Weber, 2017). These political developments and the breakdown of the EU's external border -

along with its failure to agree on the joint crisis, collaborative actions, and asylum policy - contributed to positioning Serbia as a refugee buffer zone. Thus Serbia, often seen as a country of emigration, finds itself as a node in the network of immigration, transnational migratory movements, and supranational migration regulation. Consequently, some 4,000 new refugees and asylum seekers remain in Serbia distributed over 18 asylum centers with stays ranging from six to eighteen months (UNHCR, 2016, 2017).

4.2.3 Sample characteristics

The sample consisted of 111 participants (72 males; 39 females). A small proportion of the sample ($n = 20$) had repeated sampling. Mean age of the participants was $28.5 \text{ years} \pm 8.5 \text{ SD}$ (range = 18-55 years). Men and women were similar in terms of mean ages (males: 28.2 ± 9.0 and females: 29.1 ± 7.6). The unbalanced sex ratio of the sample (~65% male) is characteristic of the overall sex ratio among refugees in these two asylum centers in Serbia. In terms of partnering status, 51 participants were single, 51 married, two separated, four divorced, two widowed, and one reported “a long term relationship.” The mean number of children within the families was $1.3 \pm 1.7 \text{ SD}$. The average length of the journey was $8.7 \text{ months} \pm 6.9 \text{ SD}$ (range: 12 days to 24 months). The majority of the individuals (~60%) identified Afghanistan as their home country. We report descriptive statistics for the sample in Table 4.1.

TABLE 4.1
DESCRIPTIVE STATISTICS (N=111)

	Men (n=72)		Women (n=39)	
	Mean	SD	Mean	SD
Sociodemographic data				
Age	28.31	9.16	29.31	7.65
Number of children	1.11	1.76	1.66	1.69
Journey length	9.06	7.28	8.12	6.34
Time in Serbia	12.03	8.63	10.56	4.76
Nail Cortisol (pg/mg) ^{a b}	3.25	4.08	2.51	3.08
RHS-15 Total Score ^c	36.63	13.74	42.64	10.56
IES-R Total Score ^d	52.84	18.34	56.71	15.79
PSS Neg. Total Score ^e	13.68	5.29	14.94	4.82
	(%)		(%)	
Partnering Status				
Partnered	40.30		59.00	
Not partnered	59.70		41.00	
Country of Origin				
Afghanistan	61.11		58.97	
Pakistan	5.56			
Iraq	8.33		2.56	
Iran	8.33		25.64	
Other	<2		<2	
Education				
<High school	38.89		48.71	
High school	20.83		20.51	
>High school	40.29		30.76	
Trauma				
No trauma	16.67		5.13	
Physical	9.72		20.51	
Psychological	1.38		5.13	
Both	72.22		69.23	

^a We present raw values for nail CORT but used log-transformed values in all the analyses.

^b n = 38; one women did not have CORT data.

^c RHS-15 Total Score = Refugee Health Screener 15.

^d IES-R Total Score = Impact of Event Scale-Revised.

^e PSS Neg. Total Score = Cohen Perceived Stress Scale - negatively worded items.

4.2.4 Semi-structured interviews

Participants were met in the asylum centers and engaged in interviews, which lasted approximately 45 minutes. Most participants were interviewed in their native language (e.g., Farsi, Pashtu, Urdu) by the first author with the assistance of a trained translator. In this sample, participants who were fluent in English preferred to be interviewed in English. Participants were administered a demographic survey, described below, and were encouraged to elaborate on the questions asked in the demographic survey, leading to a semi-structured interview format.

To gain an in-depth understanding of refugees' traumatic experiences during the journey, they were asked to elaborate on whether they traveled alone or with family/friend, what particular traumatic events they experienced (physical trauma, psychological trauma, or both), and whether they lost someone during war (at home) and on their way to Serbia.

4.2.5 Sociodemographic data

Our research team developed the demographic survey used in this study, which included questions about the following, participant's: age, country of origin, sex, religion, partnering status, number of children, duration of the journey, duration of refugee status, occupation, education, and trauma and loss they experienced during war (at home) and during their journey to Serbia. We categorized individuals as partnered if they reported being married or in long-term committed relationship and as not partnered if they reported being single or divorced/separated. We categorized individuals' education status according to whether they reported having obtained less than a high school diploma, a

high school diploma, or a higher degree. Eighteen participants who otherwise had full data for these analyses were excluded because of extreme values regarding their journey lengths. The experiences of these individuals deviated markedly from other observations in the sample. Thirteen individuals traveled to Serbia for a week or less and their journeys involved direct commercial flights to Serbia or commercial flights and personal use of a car. Meanwhile, five other individuals journeyed three to four years because they stopped and settled in Bulgaria to work for prolonged periods, and thus their journeys were not continuous.

4.2.6 Survey measures of mental well-being and psychosocial stress

The 22-item Impact of Event Scale-Revised (IES-R; Weiss and Marmar, 1997) was used to measure subjective distress caused by traumatic events. Participants were asked to identify one traumatic event and rate each IES-R item with respect to the identified distressing experience. This instrument is considered a valid measure of self-reported PTSD symptomology (Weiss and Marmar, 1997; Weiss, 2004), aiming to capture the degree of an individual's distress rather than the frequency of the symptoms (Motlagh, 2010). The IES-R survey contains seven additional items related to the hyperarousal symptoms of PTSD, which were missing in the original IES (Weiss and Marmar, 1997). This questionnaire is a widely used self-report instrument tool within the trauma literature and it is compatible with the DSM conceptualization of PTSD (e.g., Joseph, 2000; Weiss and Marmar, 1997). The Cronbach's alpha was 0.91.

The 15-item Refugee Health Screener 15 (RHS-15; Hollifield et al., 2013) survey was also used to screen individuals for both trauma-related mental and physical health

problems. The RHS-15 was developed by the *Pathways to: Integrating Community Health and Well-Being* program as a validated screening instrument for common mental disorders and physical ailments in refugees, including anxiety, depression, and posttraumatic stress disorder, and it stands in contrast to other instruments developed for detecting single mental illnesses in refugees (Hollifield et al., 2013; Pathways to Wellness, 2011; Stingl et al., 2017). Items 1–14 ask participants to rate the frequency of psychological and somatic symptoms on a 5-point Likert scale scored 0 (‘not at all’) to 4 (‘extremely’) and diagrammatically annotated with a beaker filled to varying degrees corresponding to the 0 to 4 scaling. Item fifteen is a 10-point distress thermometer (from 0 - ‘no distress’ to 10 - ‘extreme distress’) that asks participants to rate their level of distress. The Cronbach’s alpha, a measure of internal consistency, was 0.90.

Finally, the widely-used 10-item Cohen Perceived Stress Scale (PSS; Cohen, Kamarack, and Mermelstein, 1983) was administered to measure more recent psychosocial stress (i.e. in the past four weeks). Each of the items on the PSS-10 are rated on a 5-point Likert scale (1 = never to 5 = very often). The scores are obtained by reversing responses to the four positively stated items (items 4, 5, 7, and 8) and then summing across all scale items (Cohen, Kamarack, and Mermelstein, 1994). As with the IES-R and RHS scales (above), we used Stata’s ‘alpha’ and ‘item detail’ commands to assess the internal consistency of the PSS for this sample. After reverse scoring, we found that the four positively stated items correlated with the summary score in the wrong direction. In cross-cultural research, it is not uncommon for reverse-worded items from U.S.- and European-validated scales to cause problems when the surveys are used in other cultural settings (Wong, Rindfleish, and Burroughs, 2003). Although the PSS is

commonly used as a unidimensional measure of perceived stress, past studies applying factor analysis to the PSS suggest that it also reflects a two-factor construct, comprised of perceived stress (negatively worded items) and perceived self-efficacy (positively worded items) (Jovanovic and Gavrilov-Jerkovic, 2015; Perera et al., 2017). Based on this past work and the reliability analyses for our sample, we retained the negatively worded items in the current study and refer to the subscale as measuring “perceived stress.” These six retained items had a Cronbach’s alpha of 0.67.

4.2.7 Fingernail cortisol (CORT) measurement

We collected fingernail clippings from participants’ fingers (all fingers, both hands) at a single time point. In the field and at the University of Notre Dame, samples were stored at room temperature in individual, ID-coded plastic bags. The fingernail samples were then shipped to Dr. Jerrold Meyer’s laboratory in the Department of Psychological and Brain Sciences at the University of Massachusetts-Amherst. There the nail samples were analyzed for CORT (pg/mg) using the Arbor Assays (Ann Arbor, MI) DetectX enzyme immunoassay kit (#K003-H1) employing the following procedures. First, each fingernail sample was weighed and placed into a 2.0-ml microcentrifuge tube. Then each sample was washed twice for one minute with isopropanol to eliminate external contamination. Following washing, nail grinding was performed for 2 min using a Mini-BeadBeater-16 (BioSpec, Bartlesville, OK) with a single 6.35mm chrome steel bead. Ground nails were put into a clean 2.0-ml tube, weighed and extracted overnight (18–24 h) with 1.5 ml HPLC-grade methanol (Doan et al., 2018). The evaporated extract was reconstituted in 0.25 ml of Arbor Assays assay buffer for subsequent assay. The

reconstituted extract was filtered using a Corning Costar Spin-X 0.45 um cellulose acetate filter (VWR, Philadelphia, PA). The intra- and inter-assay coefficients of variation (CVs) were 10.0% and 13.6%, respectively, for CORT. Because of a skewed distribution, the raw CORT variable was natural log transformed for all analyses.

4.2.8 Statistical analyses

All statistical analyses were conducted using Stata (v. 14.0), and tests of statistical significance were evaluated at $p \leq 0.05$. We treated journey length, time in Serbia, age, and measures of mental and physical well-being (perceived stress; IES-R; RHS-15) as continuous variables and partnering status, sex, education, trauma, and data collection period (wave 1 vs. 2) as categorical variables in all analyses. In all of our analyses, we used ordinary least squares (OLS) regression with standard errors clustered by individual to account for the repeated sampling from a small proportion of the sample ($n = 20$). We first tested for male-female differences for three measures of mental well-being (perceived stress; IES-R; RHS-15) in separate models for each outcome (Model 1). In subsequent models we included covariates related to trauma (Model 2) and relevant sociodemographics (education level and partnering status; Model 3) that we predicted could potentially help explain sex differences. Models 2 and 3 also provided the opportunity to test whether individuals had poorer mental well-being if their journeys to Serbia were longer and/or more traumatic. Thus, for these analyses, Model 1 included participants' sex, age, journey length, and time in residence in Serbia. Model 2 included participants' sex, age and experiences of trauma. In Model 3, we included all variables from Models 1 and 2 as well as relevant sociodemographic covariates.

We then tested a series of OLS regression models predicting refugees' CORT. We used a slightly different modeling approach for CORT compared to the models for mental well-being above because little is known about the predictors of refugees' psychobiology. In Models 1-5, adjusting for age and sex, we tested for independent correlations between CORT and: mental well-being, journey length and time in residence in Serbia, and experiences of trauma. We then included all the predictors in a single analysis (Model 6). Across analyses, we used Stata's 'cohend' command to calculate effect sizes (Cohen's *d*) for core findings for dichotomous independent variables. Finally, to present figures linking the length of refugees' journeys to measures of their mental well-being we used Stata's predictive margins and marginsplot commands.

4.3. Results

4.3.1 Refugees' mental well-being

In Model 1 predicting refugees' mental and physical health (RHS-15 scores), which included age, sex, journey length, and time in Serbia, women had scores indicating poorer well-being compared to men (Cohen's *d* = 0.48), as did those who experienced longer journeys ($p < 0.05$; Figure 4.1). With the addition of trauma in Model 2 and sociodemographic covariates in Model 3, men and women no longer differed for RHS-15 scores. No other predictors were statistically significantly linked to refugees' RHS-15 scores (see Table 4.2 for full results).

TABLE 4.2

MODELS PREDICTING MENTAL AND PHYSICAL HEALTH (RHS-15 SCORES)

(N=111)

	model 1			model 2			model 3		
	<i>b</i>	<i>SE</i>	<i>p</i>	<i>b</i>	<i>SE</i>	<i>p</i>	<i>b</i>	<i>SE</i>	<i>p</i>
female ^a	5.72	(2.54)	0.027	4.70	(2.58)	0.072	4.32	(2.86)	0.135
age	0.16	(0.15)	0.298	0.22	(0.16)	0.184	0.03	(0.22)	0.889
time in Serbia	-0.06	(0.24)	0.793				0.01	(0.21)	0.956
journey length to Serbia	0.40	(0.19)	0.038				0.30	(0.20)	0.131
trauma ^a				7.58	(4.56)	0.100	5.85	(4.20)	0.167
partnered ^a							-4.55	(3.99)	0.257
education level ^a									
high school							-2.05	(3.29)	0.534
> high school							-0.69	(3.19)	0.828
data collection period (wave 2)	1.92	(2.10)	0.363	2.11	(2.14)	0.326	1.66	(2.16)	0.443
model R2		0.12			0.11			0.16	

^aComparison groups for categorical variables: males; non-partnered adults; participants with less than a high school degree; wave 1 data.

In models following an analogous progression for post-traumatic stress-related symptomology (IES-R scores), men and women's scores did not significantly differ ($p > 0.5$). In Models 3, partnered participants reported higher post-traumatic stress scores compared to other participants ($p = 0.055$). No other predictors were statistically significantly linked to refugees' IES-R scores (see Table 4.3 for full results).

TABLE 4.3

MODELS PREDICTING REFUGEES' POST-TRAUMATIC STRESS-RELATED
SYMPTOMOLOGY (IES-R SCORES) (N=111)

	model 1			model 2			model 3		
	<i>b</i>	<i>SE</i>	<i>p</i>	<i>b</i>	<i>SE</i>	<i>p</i>	<i>b</i>	<i>SE</i>	<i>p</i>
female ^a	4.21	(3.34)	0.211	3.60	(3.35)	0.285	2.60	(3.45)	0.453
age	0.10	(0.21)	0.628	0.14	(0.22)	0.512	-0.21	(0.28)	0.456
time in Serbia	0.004	(0.30)	0.989				0.16	(0.27)	0.545
journey length to Serbia	0.33	(0.26)	0.200				0.28	(0.28)	0.328
trauma ^a				3.66	(6.53)	0.576	2.53	(6.24)	0.686
partnered ^a							-9.43	(4.85)	0.055
education level ^a									
high school							-1.24	(4.29)	0.772
> high school							-1.64	(4.21)	0.697
data collection period (wave 2)	4.35	(3.15)	0.171	4.41	(3.18)	0.169	3.51	3.24	0.281
model R2	0.05			0.04			0.10		

^aComparison groups for categorical variables: males; non-partnered adults; participants with less than a high school degree; wave 1 data.

In Models 1 and 2 for recent perceived stress (PSS negative sub-scale scores), individuals with longer journeys to Serbia reported higher scores compared to those with shorter journeys ($p < 0.05$; Figure 4.2), as did those who experienced trauma on their journeys ($p < 0.05$; Cohen's $d = 0.64$; Figure 4.3). In the full Model (3), the finding for journey length remained significant ($p < 0.05$) while experiences of trauma were no longer significantly linked to refugees' perceived stress ($p < 0.1$). No other predictors were significantly correlated with recent perceived stress (see Table 4.4 for full results).

TABLE 4.4

MODELS PREDICTING REFUGEES' RECENT PERCEIVED STRESS (PSS
NEGATIVE SUBSCALE SCORES) (N=111)

	model 1			model 2			model 3		
	<i>b</i>	<i>SE</i>	<i>p</i>	<i>b</i>	<i>SE</i>	<i>p</i>	<i>b</i>	<i>SE</i>	<i>p</i>
female ^a	1.36	(0.94)	0.151	0.93	(0.97)	0.341	1.01	(1.03)	0.329
age	0.04	(0.05)	0.341	0.07	(0.54)	0.173	-0.01	(0.06)	0.862
time in Serbia	-0.01	(0.06)	0.782				0.01	(0.06)	0.852
journey length to Serbia	0.16	(0.06)	0.008				0.14	(0.06)	0.034
trauma ^a				3.09	(1.24)	0.015	2.38	(1.36)	0.083
partnered ^a							-1.71	(1.30)	0.192
education level ^a									
high school							1.71	(1.15)	0.144
> high school							0.91	(1.23)	0.460
data collection period (wave 2)	-0.29	(1.00)	0.766	-0.21	(1.00)	0.829	-0.56	(1.08)	0.603
model R2		0.08			0.06			0.12	

^aComparison groups for categorical variables: males; non-partnered adults; participants with less than a high school degree; wave 1 data.

4.3.2 Refugees' CORT

Across multiple models in Table 5 and as shown in Figure 4.1, refugee women had lower CORT compared to men ($p \leq 0.05$; Cohen's $d = 0.41$), while in Models 2 and 4 the sex difference was not significant ($p < 0.1$). Participants who reported higher PSS negative sub-scale scores tended to exhibit higher CORT ($p = 0.05$). Meanwhile, IES-R post-traumatic stress and RHS-15 scores were not statistically significantly linked to refugees' CORT (both $p > 0.5$), nor were journey length and time in Serbia (both $p > 0.5$; Model 4). However, individuals who reported trauma during their journeys tended to exhibit higher CORT though the finding did not reach statistical significance ($p = 0.058$; Model 5; Cohen's $d = 0.43$; Figure 4.3). In addition, across Models 1-5, no other core predictors were statistically significantly correlated to refugees' CORT (see Table 4.5). Finally, in a cumulative analysis in Model 6, women had significantly lower CORT than men ($p < 0.05$). In this model, traumatized individuals no longer had significantly elevated CORT, indicating the inclusion of other predictors attenuated the relationship. No other correlations were statistically significant (see Table 4.5 for full results).

Fig. 1

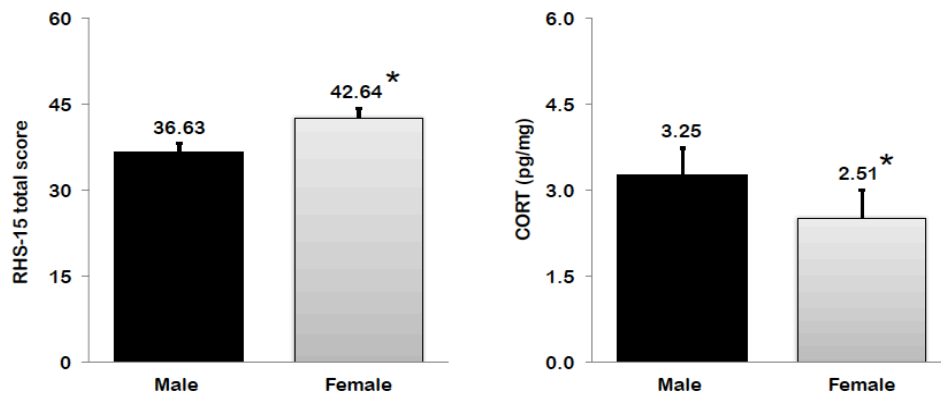


Figure 4.1 Differences between men and women for mental well-being and physical health (RHS-15 total scores) and nail cortisol (CORT). Error bars indicate SE. See table 2 and 5 for full results. * $p < 0.05$.

Fig. 2

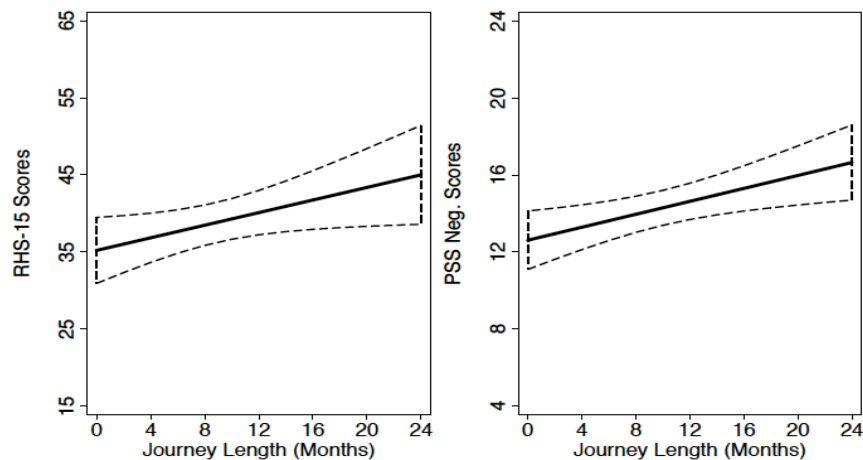


Figure 4.2 Refugees' predicted values for mental well-being and physical health (RHS-15 total scores) and recent perceived stress (PSS Neg. scores) based on the lengths of their forced migratory journeys. The y-axis in each panel is centered near the mean and ranges from -2 SD to $+2$ SD for RHS-15 and PSS Neg. scores, respectively. See Tables 2 and 4 for full results.

Fig. 3

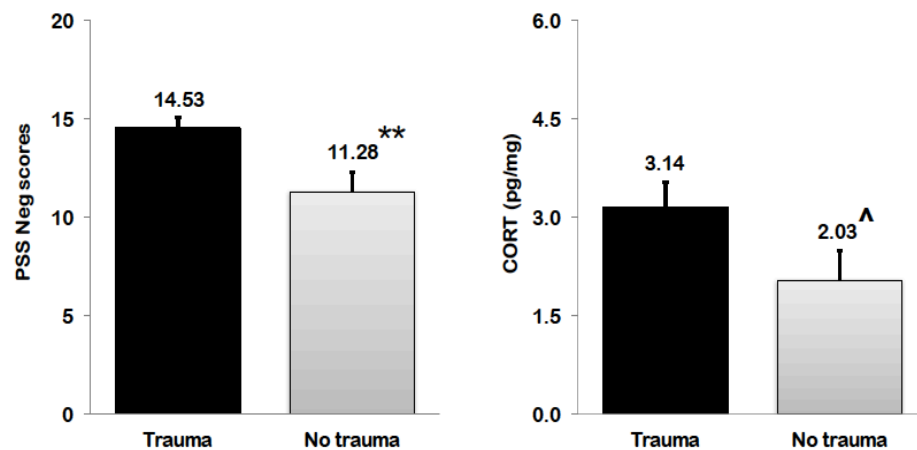


Figure 4.3 Differences between refugees who reported experiencing trauma on their journeys vs. those who did not for recent psychosocial stress (PSS Neg. scores) and nail cortisol (CORT). Error bars indicate SE. See Tables 4 and 5 for full results.

^p < 0.1; **p < 0.01.

TABLE 4.5

MODELS PREDICTING REFUGEES' CORT FROM JOURNEY EXPERIENCES, AND MENTAL AND PHYSICAL

HEALTH (N=110)

	model 1			model 2			model 3			model 4			model 5			model 6		
	<i>b</i>	<i>SE</i>	<i>p</i>	<i>b</i>	<i>SE</i>	<i>p</i>	<i>b</i>	<i>SE</i>	<i>p</i>	<i>b</i>	<i>SE</i>	<i>p</i>	<i>b</i>	<i>SE</i>	<i>p</i>	<i>b</i>	<i>SE</i>	<i>p</i>
female ^a	-0.37	(0.17)	0.036	-0.32	(0.18)	0.081	-0.35	(0.17)	0.052	-0.32	(0.18)	0.090	-0.36	(0.18)	0.051	-0.37	(0.18)	0.044
age	0.002	(0.007)	0.741	0.003	(0.007)	0.596	0.002	(0.006)	0.719	0.003	(0.007)	0.623	0.005	(0.007)	0.412	0.005	(0.01)	0.746
time in Serbia										-0.008	(0.01)	0.565				-0.01	(0.01)	0.515
journey length to Serbia										0.01	(0.01)	0.303				0.005	(0.01)	0.686
trauma RHS-15 scores													0.44	(0.23)	0.058	0.34	(0.28)	0.226
IES-R scores	0.01	(0.006)	0.118													0.003	(0.01)	0.697
PSS neg. sub-scale scores				0.004	(0.003)	0.237										-0.0002	(0.006)	0.970
education level ^a									0.03	(0.01)	0.050					0.01	(0.01)	0.226
high school																0.04	(0.30)	0.882
>high school																0.21	(0.23)	0.367
partnered ^a																0.10	(0.33)	0.760
data collection period (wave 2)	-0.38	(0.16)	0.023	-0.38	(0.16)	0.024	-0.34	(0.16)	0.034	-0.35	(0.16)	0.036	-0.33	(0.16)	0.047	-0.36	(0.18)	0.055
model R2	0.09			0.08			0.10			0.09			0.10			0.14		

^aComparison groups for categorical variables: males; non-partnered adults; participants with less than a high school degree; wave 1 data

4.4 Discussion

In this study, we tested for relationships between refugees' experiences during their arduous journeys from their home countries, their current mental and physical health, and their CORT levels during their residence in two asylum centers in Serbia. Compared to research on long-settled refugees (Bogic et al., 2012; Guarch-Rubio and Manzanero, 2017; Ssenyonga et al., 2013), there are few studies that have examined links between refugees' health and the journeys that they recently completed (Arsenijevic et al., 2017; Dolma et al., 2006; Mills et al., 2005). We contextualize our findings below within conceptual frameworks related to chronic psychosocial stress and forced migration and in relationship to sex-differences in HPA axis responses to stress (Freidenberg et al., 2010; Kudielkaa and Kirschbaum, 2005; Olff et al., 2007; Olff, 2017). Given variation in refugees' psychosocial experiences during their journeys and upon arrival, understanding how those dynamics relate to individual differences in psychological and biological profiles is a pressing concern for helping these populations robustly recuperate and cultivate resilience as they await more permanent resettlement.

4.4.1 Refugees and mental health

It is well-established that events in home countries that lead to forced migration of refugees contribute to long-term ramifications on their mental health. These exposures, prior to forced movement, are likely compounded by the traumatic events that refugees typically experience on long, dangerous journeys (Bhugra, 2004). Aligning with this perspective, we found that recently settled refugees with longer journeys reported higher recent perceived stress, poorer well-being, and physical health compared to those with

shorter journeys. These patterns complement past research showing that exposure to migration-related traumatic events was linked to increased vulnerability to psychosocial distress and mental health problems (Bhugra, 2004; Li et al., 2016; Porter and Haslam, 2005; Tempany, 2009). In particular, Al Obaidi and Atallah's (2009) study of Iraqi refugees living in Egypt revealed that 59% of refugees suffered from one or more of the psychological symptoms, mostly anxiety or depressive moods. In another study, Mollica and colleagues' (1998) study of Cambodian refugees living on the Thai border revealed that approximately 68% and 37% of refugees displayed symptoms of major depression and symptoms associated with PTSD, respectively. Given the similarity in patterns between our findings and these past studies, our work helps to further highlight the importance of establishing safe and legal routes for refugees entering Europe in order to attenuate the adverse impacts of dangerous, protracted journeys on refugees' mental health.

We also found that recently settled refugees who experienced trauma on their longer journeys reported higher recent perceived stress. In past work on this issue, various types of exposure to an array of traumatic experiences typically permeate refugee experiences (Alpak, 2015; Arsenijevic et al., 2017). Senegalese refugees reported that lack of food or water, separation from family members, incidents of beatings, and violence were usually not isolated but widespread and repeated occurrences (Tang and Fox, 2001). In addition, Dolma and colleagues' (2006) study showed that Tibetan refugees endured physical and mental hardships, including extortion, physical violence, or detainment on their journeys to Nepal. Our results add to this literature by demonstrating that refugees are likely to suffer from both serious psychological and

physical hardships as a result of their journey, which may have long-term effects on their physical and mental health. Moreover, for future research, it is also potentially notable that we did not find that traumatized individuals scored higher for PTSD related mental and physical symptoms. This may reflect the dual high prevalence of trauma and high PTSD symptom scores, on average, in this sample.

Finally, in our results women tended to report poorer well-being and physical health compared to men (via RHS-15 scores). Past research demonstrated that women, particularly during flight from their home countries, were at a higher risk of experiencing multiple forms of violence, including gender-based and sexual violence, as well as physical and psychological hardships (e.g., physical abuse, injuries, fear about the safety of children and/or being separated from them during the journey) with potential lasting mental health consequences (Dolma, 2006; Freedman, 2016; Keygnaert et al., 2012). Sex differences in the prevalence of mental health issues following extreme events may be due to women and men's differential exposure to risk factors, rather than solely because of variation in susceptibility (Mohwinkel et al., 2018). We note that we did not observe the same patterns for IES-R and PSS scales, and our present analyses are cross-sectional and therefore have limitations (see below). Nonetheless, we hope that this study lays a foundation for future research on female and male differences in health outcomes among refugees in more intermittent transitional stages of migration, with potential implications for optimizing policies towards alleviating these issues in the most vulnerable groups.

4.4.2 Refugees' CORT

Extreme physical distress and trauma have been linked to multiple patterns of

HPA axis function and dysregulation, as reflected by CORT levels (Mewes et al., 2017; Yehuda et al., 1993). Here, we found that refugees who reported experiencing trauma on their journeys to Serbia tended to exhibit higher CORT. Though our finding did not reach statistical significance, it complements prior research showing that chronic exposure to stressors involving physical and psychological threat was associated with heightened CORT activity (Mewes et al., 2017; Miller et al., 2007; Nejad et al., 2016; Stalder et al., 2017). In particular, Miller et al.'s (2007) meta-analysis of the HPA responses to chronic stress illustrated that traumatic and uncontrollable stressors that threaten physical integrity are correlated with a high, flat diurnal profile of CORT secretion and greater daily production of CORT. Similarly, Stalder et al.'s (2017) meta-analysis of hair cortisol concentrations (HCC) and chronic stress showed that exposure to routine physical and psychological stressors was linked to elevated HCC. HCC is roughly analogous to fingernail CORT, given the similarity in tissue type and accumulative effect, as opposed to saliva sampling. Thus our results generally align with these previous meta-analytical patterns.

Furthermore, we also found that refugees who reported higher levels of recent perceived stress tended to exhibit higher CORT. In past work in this area, refugees reporting psychosocial stress resulting from fear or insecurity exhibited increased HCC (Dajani et al., 2017; Stalder et al., 2017). For example, Mewes and colleagues (2017) showed that recently fled asylum seekers residing in Germany exhibited 42% higher HCC, on average, compared to the non-immigrant reference group. Similarly, an earlier study of women displaced by war in Croatia, found that displaced women had higher serum CORT than their non-displaced peers (Sabioncello et al., 2000). While our findings in

this domain are preliminary, they underscore the need to understand these biopsychosocial processes at different stages of the migratory processes, given well-established links between chronically elevated CORT and vulnerability for mental and physical health problems (Adam et al., 2017; Chrousos and Gold, 1998; Sapolsky, 2004a, 2004b).

Lastly, exposure to traumatic events have been linked to sex-specific psychological and biological profiles (Condren et al., 2002; Kudielkaa and Kirschbaum, 2005; Olff et al., 2007). In this sample, we found that women exhibited lower CORT compared to men. Past studies have demonstrated that individuals who exhibited blunted CORT suffered from more anxiety-related symptoms and higher PTSD risk (Alpak et al., 2015; Meewisse et al., 2007; Olff et al., 2007; Rohleder et al., 2004; Yehuda et al., 1996). Moreover, prior literature has identified male-female differences for CORT secretion (Brewin et al., 2000; Condren et al., 2002; Kudielkaa and Kirschbaum, 2005; Zimmer et al., 2002). In particular, Meewisse and colleagues' (2007) meta-analysis of neuroendocrine function in patients with PTSD indicated that females with PTSD showed lower levels of basal cortisol compared with non-PTSD female control groups, whereas men with PTSD did not differ from non-PTSD male controls. While we did not find a direct correlation between IES-R scores and CORT, the patterns we observed for sex differences for RHS-15 scores and CORT these respective results for female refugees are nonetheless consistent with these previous studies.

4.4.3 Limitations

This study has certain limitations that merit discussion. First, the study population was made up of 72 males and 39 females, predominantly from Afghanistan. While this unbalanced sex ratio of the sample is characteristic of the overall male-female ratio among refugees in asylum centers in Serbia, these results may represent a somewhat specific (primarily Afghani male-centric) perspective on the bio-social correlates of refugees' journeys and resettlement. Thus, in our future work at this site and elsewhere in the region, our goal is to expand our sample size (overall) and to potentially over-sample female participants and/or more diverse refugee populations. These potential limitations of the current sample do not compromise the validity of the results but simply mean that caution should be taken in over-generalizing from the data. Moreover, the cross-sectional nature of our analyses is also a limitation, with longitudinal data from only a small pool of individuals. This prevents us from discerning the direction of the relationships between variables in our key results. We hope the patterns we have observed here will help inspire further work in this area, including longitudinal research tracking within-individual changes in refugees' bio-behavioral profiles during various stages of forced migration and resettlement.

In addition, we also measured CORT from fingernails, which is a relatively new approach to the study of the body's chronic exposure to the hormone. It is well-known that chronic stress and trauma can disrupt the function of the HPA axis through effects on the production of CORT across the day (Adam et al., 2014, 2015; Fries et al., 2009; Miller et al., 2007). Specifically, individuals' cortisol awakening responses and the steepness of their diurnal curves have been linked to the effects of chronic stress on

various health outcomes (Adam et al., 2017; Fries et al., 2005; Herbert, 2013; Rohleder et al., 2004; Wessa et al., 2006). For the current study, it was not possible to collect and store repeated samples of blood or saliva across the day to capture those diurnal dynamics. We acknowledge that a longer-term, cumulative indicator of the body's exposure to CORT, such as in nails, cannot address dynamic diurnal aspects of HPA functioning and health. That said, our results linking variation in nail CORT levels to trauma, psychosocial stress, and sex are nonetheless consistent with prior work in the literature and represent important insights from this vulnerable population (Izawa et al., 2015; Nejad et al., 2016; Warnock et al., 2010). Finally, we did not account for individual differences in the growth rate of nails that could be potentially affected by psychosocial stress and bring about variability in the observed concentrations (Izawa et al., 2015; Liu and Doan, 2019). However, potential individual differences in fingernail growth are unlikely to compromise the validity of the results. Specifically, we adjusted for the amount of time refugees had been in Serbia, which should help ensure that the analysis of the fingernail CORT concentrations better reflects the time period of our interest (i.e. during the participants' journeys from their home countries).

4.5 Conclusion

Physical and psychosocial stressors that permeate refugee experiences have been previously linked to poorer mental and physical health outcomes in such populations (Bhugra and Jones, 2001; Charlson et al., 2012; Dajani et al., 2017; Stalder et al., 2017). In the present study we built upon this research to show that recently settled refugees who reported experiencing trauma during their long, arduous journeys had greater recent

perceived stress and tended to exhibit higher CORT. We also found that that refugees who experienced longer journeys reported higher recent perceived stress as well as poorer well-being and physical health. Notably, refugee women reported poorer well-being and physical health but also had lower CORT compared to men, suggesting that sex differences in health and physiological outcomes associated with refugee status merit further research. Overall, our correlative findings are consistent with the notion that reducing exposure to extreme trauma and stress by establishing safe migration pathways for people fleeing hardship could potentially attenuate forced relocation-related illnesses and improve health outcomes among refugees as they await resettlement.

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CHAPTER 5:

THE INTERRELATIONSHIP OF SOCIAL DYNAMICS AND HEALTH AMONG TRANSIENT REFUGEE POPULATIONS

5.1 Introduction

Millions of people are currently undergoing forcible migration and displacement. According to UNHCR (2020), 79.5 million forcibly displaced individuals worldwide sought protection within or outside of their home country in 2019; 26 million of them were refugees relocated across international borders (UNHCR, 2020). Violent conflicts, economic deprivation, and human rights violations are often among the core drivers of contemporary forced human migration. For example, over a million people, mainly from Syria, Iraq, and Afghanistan, have been forced over the past decade to embark on dangerous migratory journeys to flee war and violence and to pursue safety far from their homelands, with many attempting to reach Europe (Hynie, 2018; IOM, 2018; UNHCR, 2019).

The refugees' pursuit of protection is often permeated by multiple losses and traumatic experiences before they flee, during their journeys, and in post-migration settings (Zimmerman et al., 2011). These circumstances have also simultaneously engendered a fundamental break with the well-known conditions of their daily lives (Arsenijevic et al., 2017; Lindert et al., 2016; Strang and Quinn, 2019), which may represent an understudied contributor to their mental health (Bogic, Njoku, and Priebe,

2015; LeMaster et al., 2018). Studies show that forced migration and repeated exposure to extreme violence and trauma are linked to poorer mental well-being among refugee populations (Bhugra, 2004; Porter and Haslam, 2005; Steel et al., 2009). In particular, they tend to suffer from higher rates of depression, PTSD, and other anxiety disorders than the non-war affected general population (Fazel et al., 2005; Morina et al., 2018; Schweitzer et al., 2011; Steel et al., 2009; Tempany, 2009).

Refugees tend to struggle with cultivating social support (Hirschfeld et al. 2000; Miller et al., 2002), which can exacerbate their feelings of loneliness and social isolation (Dolberg, Shiovitz-Ezra, and Ayalon, 2016; Gottvall et al., 2019) and potential effects on physical health and mental well-being (Cacioppo et al., 2006; Hawkey and Cacioppo, 2010; Steptoe et al., 2013). Prior research has investigated links between disrupted social relationships/lack of social support and the refugees' mental well-being in post-migration contexts (Bogic, Njoku, and Priebe, 2015; Gottvall et al., 2020; LeMaster et al., 2018). While the findings revealed that older refugees tended to report lower social support and poorer mental health than younger ones (Cummings et al., 2011; Gottvall et al., 2019), research examining sex differences in the relationship between social support and mental well-being among refugee populations is somewhat inconsistent. Specifically, some studies revealed that social support was more protective against PTSD symptoms and traumatization among displaced women compared to men (Ahern et al., 2004; Dybdahl, 2001), whereas other studies found that social support functioned similarly for both sexes (Gottvall et al., 2019; Tinghög et al., 2016, 2017). However, we know little about how the dynamics of poorer social functioning and low social support interrelate with mental health among refugees in more intermittent, transitional stages of the forced migration

process. During this period, forcibly displaced individuals often find themselves in challenging circumstances. In such circumstances, social support can be challenging to generate and maintain but it may also be a critical buffer against the effects of trauma and psychosocial stress.

Beyond refugee contexts, social support is a widely studied predictor of individuals' well-being and has generally been considered a critical protective factor concerning both mental and physical health (Cohen and Wills 1985; Cruwys et al., 2013; Ozbay et al., 2007; Uchino, 2006). Although definitions vary, interpersonal social support is often conceptualized as the help and care afforded through close encouragement of social networks/relationships (Cohen et al., 2000; Seeman, 1996). The health-promoting effects of social support are typically investigated in the context of perceived (an individual's possible access to social support) and/or received social support (the actual utilization of support resources; Barrera, 2000; Dunkel-Schetter and Bennett, 1990; Uchino, 2009; Uchino et al., 2012). The perceived availability of social support can enhance an individual's resilience and coping abilities through the encouragement of stress appraisal processes, appropriate coping responses, and feelings of control, and self-efficacy (Kawachi and Berkman, 2001; Shaw et al., 2004; Torres and Casey, 2017; Uchino, 2009). Received support can be beneficial if the type of support provided (e.g., informational, tangible, emotional) matches the stressful situation's challenges (Cutrona and Russell, 1990; Uchino, 2009).

Past research has suggested that social support may buffer against the adverse effects of distressful and traumatic life events (DeVries, Glasper, and Detillion, 2003) and trauma-related psychopathology (e.g., anxiety, depression, and posttraumatic stress

disorder - PTSD; Bogic et al., 2012; Davidson et al., 2008; Charuvastra and Cloitre, 2008; Ibarra-Rovillard and Kuiper, 2011). It has been suggested that social support can influence health via two distinct albeit not mutually exclusive pathways. Specifically, social support may encourage healthier behaviors (e.g., exercise, healthy diet, smoking cessation; Uchino, Cacioppo, and Kiecolt-Glaser, 1996; Uchino et al., 2012) and/or enhance psychological processes associated with appraisals, emotions, and feelings of control (Uchino, Cacioppo, and Kiecolt-Glaser, 1996; Uchino, 2004, 2009). Thus, social support may attenuate behavioral and psychological responses to stressful and emotionally demanding events and induce health-promoting physiological responses, including through hormone and immune system responses. When the protective effects of social support are diminished, ongoing psychosocial stress and difficulties may repeatedly activate these physiological systems and increase risks for adverse physical and mental health outcomes.

During their transitional migratory period, refugees often experience uncertainty and heightened risks for recurrent psychosocial stress that typically activate the hypothalamic-pituitary-adrenal (HPA) axis and its production of cortisol (Johnson et al., 1992; Koolhaas et al., 2011; Miller et al., 2007). Short-term activation of the HPA axis and upregulation of cortisol release is beneficial for individuals coping with acute stress (Birmingham and Holt-Lunstad, 2018), including through cortisol's metabolic, cardiovascular, and neurobiological effects (Cacioppo et al. 2015; Koolhaas et al. 2011; Dedovic et al. 2009; Dickerson and Kemeny, 2004). However, repeated exposure to chronic psychosocial stress and excess cortisol production can contribute to adverse health outcomes, including cardiovascular disease, metabolic dysfunction, and

accelerated cognitive decline (Dekel et al., 2017; Dickerson and Kemeny, 2004; Flinn et al., 2011; Miller et al., 2007). Studies have found that recently settled refugees, who generally experience recent/ongoing psychosocial stress, fear, and/or uncertainty, tend to exhibit higher cumulative indicators of cortisol production, including in hair (Dajani et al., 2018; Mewes et al., 2017) and fingernails (Jankovic-Rankovic et al., 2020).

Moreover, research has shown that chronic psychosocial stress may alter the immune system function and increase vulnerability to adverse health outcomes (McDade et al., 2000; McDade, 2007; Panter-Brick et al., 2008; Segerstrom and Miller, 2004; Yang and Glaser, 2002). In particular, ongoing psychosocial distress and the upregulation of the HPA axis can negatively affect cellular immunity. A disruption in the cellular immunity function can trigger viral reactivation of latent viruses, such as the Epstein-Barr virus (EBV; Glaser and Kiecolt-Glaser, 2005). Such reactivation may result in increased production of EBV antibodies (McDade, 2002; Sorensen et al., 2009), which is then an indicator of stress-related physiological effects on the immune function (Yang and Glaser, 2002).

Social support's protective properties appear to play an important role in attenuating links between ongoing psychosocial stress/uncertainty and biological processes, particularly among vulnerable populations, such as refugees. Indeed, there is increasing evidence regarding associations between higher reported levels of social support and better neuroendocrine responses (e.g., lower levels of HPA axis responses to stress and/or faster recovery from the physiological effects of stress; Seeman and McEwen, 1996) and immune functioning (Dickerson and Zoccola, 2009; Dixon et al., 2001; Esterling et al., 1996). Specifically, greater social support may enhance an

individual's coping abilities or lead to the appraisal of stimuli as less stressful, thereby ameliorating the HPA axis and ultimately the immune system's responses to challenging events and reducing health risks (Eisenberger et al., 2007; Uchino, Cacioppo, and Kiecolt-Glaser, 1996). The importance of social support to mental well-being, physical health, and psychobiology among refugee populations in transitional migratory stages is understudied and poorly understood. Thus, further research of the individual differences in social, psychological, and physiological changes among these populations is critical for understanding how the interplay of forced relocation, the transitional migratory stage, and protracted displacement may affect their long-term health, resilience, and recovery.

In this Chapter, I aim to help address the existing gaps by examining associations between the refugees' social support, mental health, and psychobiology. Specifically, I drew on data collected from adults ($N = 76$; 46% female) residing in Serbia's transitional refugee settlements. Based on my prior work in this area, refugees, who suffered from severe psychological and physical hardships as a result of their journey, tended to exhibit poorer physical and mental health profiles (Jankovic et al., 2020). Thus, building on my past study, I predicted that refugees with longer journeys would have lower social support. I also predicted that refugees, who reported lower social support, would exhibit poorer mental well-being, greater psychosocial stress, and PTSD-like symptoms. Finally, I tested whether refugees with lower social support had higher CORT (measured via fingernails) and EBV antibody levels (measured via dried blood spots).

5.2 Methods

5.2.1 Study population

This mixed-method study was conducted from May to June 2018 in two asylum centers in Serbia. One asylum center, “Krnjaca,” is located in Belgrade, Serbia, while the other asylum center is situated in Bogovadja, around 70 km away from Belgrade. Both centers are predominately populated by refugees from Afghanistan, Pakistan, Iran, Iraq, and (very few) North African countries (UNHCR, 2018). For the purpose of the study, refugees denote aliens who have fled their country of origin and are living in Serbia, regardless of their status.

A total of 76 participants had full data to be included in the present study. They were recruited with the assistance of local “mobilizers.” In all cases, the participants were informed about the project and its purpose, and about the permits to work in the area before any data were collected. Accompanied and unaccompanied minors were excluded from the sample. Individuals who self-reported as having any clinically diagnosed psychiatric illnesses were likewise excluded. The instruments used in this study were interviewer-administered with the help of a trained interpreter for participants not fluent in English. In particular, I administered the questionnaires verbally, followed by interpretation. All participants themselves physically filled their replies to the survey questions.

Informed verbal consent was obtained from each participant before data collection. The present analyses build on the prior work in this area and draw on related data, wherefore the methods are similar to those I reported previously (Jankovic-Rankovic et al., 2020).

5.2.2 Context and study setting

The Western Balkan region has traditionally been a source of primarily labor migrants to EU countries and overseas. Like other Balkan nations, Serbia has been, and still is, a country of emigration. Labor emigration to primarily EU countries, such as Germany, Norway, or Austria, continues on a large scale. At the same time, Serbia has been coping with the more recent arrivals of refugees from Syria, Afghanistan, Pakistan, Iraq, and many parts of Africa (UNHCR 2018, 2019). Recent conflicts and violence in the Middle East (in Syria since 2011) and Africa caused massive displacement of millions of people trying to seek refuge in Europe. The Western Balkan region, notably Serbia, became a transit country on the intercontinental forced (transit) migration route from Africa and the Middle East to Europe. Following EU restrictions on movements in November 2015 and the closure of the Balkan route in March 2016 (the EU-Turkey agreement), new arrivals came to a complete halt, and the problem tended to be outsourced to the non-EU territory (UNHCR 2017; Weber, 2017). These political developments and the breakdown of the EU's external borders turned Serbia into a refugee buffer zone for EU Member States. Moreover, the closure of the EU borders and stricter policies designed to limit arrivals had devastating effects on the lives and health of the thousands of refugees trapped in Serbia where they have been living in limbo (Arsenijevic et al., 2018; MSF, 2017; Weber, 2017). Consequently, close to 6000 refugees and asylum seekers remain in Serbia, distributed over 17 asylum centers with stays ranging from a couple of months to a few years (UNHCR, 2019).

5.2.3 Sample characteristics

The sample consisted of 76 participants (41 males; 35 females). The mean age of the participants was 30.1 years ± 7.7 SD (range=18–50 years), with similar average ages of males (30.3 ± 8.3) and females (29.9 ± 7.0). In terms of partnering status, equal shares of the participants were single and married (46.6%, respectively), while 5.26 % were divorced. The mean number of children in the families was 1.2 ± 1.4 SD. The average length of stay stood at 14.9 months 11.0 SD (range: 12 days to 50 months). Approximately 48% of the participants identified Afghanistan as their home country. Descriptive statistics for the sample are provided in Table 5.1.

5.2.4 Sociodemographic data

The demographic survey was used in this study, which included questions about: the participants' age, country of origin, sex (female/male), religion, partnering status, number of children, duration of the journey, duration of refugee status, occupation, education, and trauma and loss they experienced at home and during their journey to Serbia. I did not ask the respondents to report or describe their gender identity, wherefore I use the terms 'female' and 'male' in this dissertation.

TABLE 5.1
DESCRIPTIVE STATISTICS (N = 76)

	Participants	
	Mean	<i>SD</i>
Sociodemographic data		
Age	30.14	7.75
Number of children	1.29	1.47
Journey length	9.96	10.83
Time in Serbia	14.96	11.03
Biomarker data		
Nail Cortisol (pg/mg) ^{a b}	5.53	20.83
EBV IgG (AU/mL) ^{c d}	160.83	266.56
Health survey data		
RHS-15 Total Score ^e	40.18	12.33
IES-R Total Score ^f	56.86	15.64
PSS Neg. Total Score ^g	14.39	4.86
FS Total Score ^h	13.55	4.52
	(%)	
Partnering Statusⁱ		
Partnered	46.67	
Not partnered	53.33	
Country of Origin		
Afghanistan	48.68	
Iran	28.95	
Syria	3.95	
Pakistan	2.63	
Iraq	2.63	
Other	<2.63	
Education		
<High school	34.21	
High school	21.05	
>High school	44.74	
Trauma		
No trauma	21.05	
Physical	14.47	
Psychological	3.95	
Both	60.53	

^aWe present raw values for nail CORT but used log-transformed values in all the analyses.

^bn = 73; one man and two women did not have CORT data.

^cWe present raw values for EBV antibodies but used log-transformed values in all the analyses.

^dn = 66; seven men and three women were EBV seronegative.

^eRHS-15 Total Score = Refugee Health Screener 15.

^fIES-R Total Score = Impact of Event Scale-Revised.

^gPSS Neg. Total Score = Cohen Perceived Stress Scale - negatively worded items.

^hFS Total Score = Friendship Scale.

ⁱn = 75; one man did not report partnering status.

5.2.5 Semi-structured interviews

All participants were met in the asylum centers and engaged in interviews, which lasted approximately an hour. Most participants I interviewed in their native language (e.g., Farsi, Pashto, Urdu) with the assistance of a trained interpreter. Participants fluent in English preferred to be interviewed in English. The participants took part in a demographic survey and four self-report questionnaires.

As described in the following paragraph, the demographic survey included questions about the refugees' migratory journey (e.g., its duration, if they lost someone on their journey to Serbia) and traumatic experiences. Participants who reported longer journeys and trauma were encouraged to elaborate on their responses to those questions in a semi-structured interview format. The participants were asked about their journey (e.g., What was your journey like? How long did it take you to reach Serbia?), and the types of trauma (physical, psychological, or both) they faced during their flight to safety (e.g., Have you experienced any traumatic event on your journey?).

As reported in my previous work (Jankovic et al., 2020), physical trauma was defined as bodily injury and/or pain caused by physical violence, deprivation, or exhaustion and psychological trauma as emotional or psychological fear or threat resulting from a highly stressful or life-threatening situation. The traumatic experiences during the journey reported by the participants included severe physical hardships, including one or more the following: severe exhaustion, food/ water deprivation, physical pain, injuries, as well as physical violence; while their psychological trauma included one or more the following: separation from loved ones, uncertainty about the whereabouts of

their family members, threats of *refoulement*, and lack of control due to their inability to migrate in an organized and legal fashion.

Next, after completing the Friendship scale (see below), the participants were asked to elaborate on their sources of social support and ways of handling their concerns/problems (e.g., Do you have people you can trust with your intimate thoughts and feelings? Do you have people you can ask for advice when you have a problem? Do you have people in or outside this asylum center with whom you can spend time and share experiences?)

Qualitative data collected on journey-related trauma were evaluated and coded by the author. A score of “1” was assigned if a participant reported experiencing one or more physical and/or psychological traumatic events; otherwise, a score of “0” was given. The dichotomized data were then entered into the Stata dataset, alongside the other variables. Lastly, qualitative data collected provided an emic perspective – the participants’ personal and culture-specific accounts regarding sources of social support and relationships. These qualitative data were thematically considered and analyzed.

5.2.6 Survey measures of mental well-being and psychosocial stress

The 22-item Impact of Event Scale-Revised (IES-R; Weiss and Marmar, 1997) was used to measure subjective distress caused by traumatic events. Participants were asked to identify one traumatic event and rate each IES-R item with respect to the identified distressing experience on a 5-point scale ranging from 0 (not at all) and 4 (extremely). This 5-point scale reflected the degree to which a particular symptom was a problem for respondents during the previous week in relation to an identified past

distressing/traumatic event (Weiss and Marmar, 1997). This instrument is considered a valid measure of self-reported PTSD symptomology (Weiss and Marmar, 1997; Weiss, 2004), aiming to capture the degree of an individual's distress rather than the frequency of the symptoms (Motlagh, 2010). The IES-R survey contains seven additional items related to the hyperarousal symptoms of PTSD, which were not included in the original IES (Weiss and Marmar, 1997). This questionnaire is a widely used self-report instrument/tool within trauma literature, and it is compatible with the DSM conceptualization of PTSD (e.g., Joseph, 2000; Weiss and Marmar, 1997). Cronbach's alpha, a measure of internal consistency, for the total IES-R was 0.85.

The 15-item Refugee Health Screener 15 (RHS-15; Hollifield et al., 2013) survey was also used to screen individuals for both trauma-related mental and physical health problems. The RHS-15 was developed by the *Pathways to Wellness: Integrating Community Health and Well-Being* program as a validated screening instrument for common mental disorders and physical ailments in refugees, including anxiety, depression, and posttraumatic stress disorder, and it stands in contrast to other instruments developed for measuring single mental illnesses in refugees (Hollifield et al., 2013; Pathways to Wellness, 2011; Stingl et al., 2017). Items 1–14 ask participants to rate the frequency of psychological and somatic symptoms on a 5-point Likert scale scored 0 ('not at all') to 4 ('extremely') and diagrammatically annotated with a beaker filled to varying degrees corresponding to the 0 to 4 scaling. Item fifteen is a 10-point distress thermometer (from 0 - 'no distress' to 10 - 'extreme distress') that asks participants to rate their level of distress. A total score of ≥ 12 on items 1–14 and/or a score of ≥ 5 on the distress thermometer are considered to be a positive screen for emotional and physical

distress (Hollifield et al., 2013). The participants' mean scores on items 1–14 was 40.18 ± 12.33 SD, whereas their mean score on a 10-point distress thermometer was 6.46 ± 2.56 SD. Cronbach's alpha was 0.82.

The 10-item Cohen Perceived Stress Scale (PSS; Cohen et al., 1983) was administered to measure more recent psychosocial stress (i.e., over the previous four weeks). Each of the items on the PSS-10 is rated on a 5-point Likert scale (1=never to 5=very often). The scores are obtained by reversing responses to the four positively stated items (items 4, 5, 7, & 8) and then summing across all scale items (Cohen et al., 1994). The 10 items in the scale inquire about feelings and thoughts related to the degree to which the respondents find their life situation unpredictable, uncontrollable and stressful. The respondents indicate how often they have felt or thought a certain way in the past month on a 5-point Likert scale (Cohen et al., 1983). After reverse scoring, we found that the four positively stated items correlated with the summary score in the wrong direction. In cross-cultural research, it is not uncommon for reverse-worded items from the U.S.- and European-validated scales to cause problems when the surveys are used in other cultural settings (Wong et al., 2003). Although the PSS is commonly used as a unidimensional measure of perceived stress, studies applying factor analysis to the PSS suggest that it also reflects a two-factor construct, comprised of perceived stress (negatively worded items) and perceived self-efficacy (positively worded items) (Jovanovic and Gavrilov-Jerkovic, 2015; Perera et al., 2017). Based on this past work and the reliability analyses for our sample, we retained the negatively worded items in the current study and referred to the sub-scale as measuring “perceived stress.” These six retained items had a Cronbach's alpha of 0.68.

Finally, the six-item, self-report Friendship scale (FS; Hawthorne, 2006) was used to assess aspects of both perceived social isolation/loneliness and connectedness over the previous four weeks in the refugees' life (Hawthorne 2006, 2008; Hawthorne et al., 2013). The six items measure the availability of social support/perceived social isolation. Each of the items on the FS is rated on a 5-point Likert scale (almost always = 4 to never = 0), whereas items 2, 5, and 6 are reverse scored (Hawthorne, 2006; Hawthorne et al., 2013). The participants' mean scores on all six items were 13.55 ± 4.52 SD, suggesting a high level of social isolation and lower social support. Cronbach's alpha was 0.50.

5.2.7 Fingernail cortisol (CORT) measurement

I collected fingernail clippings from the participants' fingers (all fingers, both hands) at a single time point. CORT aggregates in fingernails, which are composed primarily of keratin, through similar mechanisms as in hair, which is a more commonly used medium to measure the body's longer-term production of cortisol (e.g. over the previous month; de Berker et al., 2007; Russell et al., 2012). However, based on my prior ethnographic research at this site, it would not have been feasible to collect the participants' hair because of their religious beliefs (e.g. women's reluctance to take off their hijab in public or in the presence of a male interpreter) as well as routine cultural practices, such as men keeping their hair very short to the scalp. CORT measured in fingernails likewise provides a long-term aggregate indicator of the body's exposure to cortisol 3–4 months prior to sampling (Izawa et al., 2015; Warnock et al., 2010) and was thus appropriate for our study population and research goals.

The samples were stored at room temperature in individual, ID-coded plastic bags

both in the field and at the University of Notre Dame. The fingernail samples were then shipped to Dr. Jerrold Meyer's laboratory in the Department of Psychological and Brain Sciences at the University of Massachusetts-Amherst, where they were analyzed for CORT (pg/mg) using the Arbor Assays (Ann Arbor, MI) DetectX enzyme immunoassay kit (#K003-H1) by employing the following procedures. First, each fingernail sample was weighed and placed into a 2.0-ml microcentrifuge tube. Each sample was then washed twice for 1 min with isopropanol to eliminate external contamination. Following washing, nail grinding was performed for 2 min using a Mini-BeadBeater-16 (BioSpec, Bartlesville, OK) with a single 6.35 mm chrome steel bead. Ground nails were put into a clean 2.0-ml tube, weighed and extracted overnight (18–24 h) with 1.5 ml HPLC-grade methanol (Doan et al., 2018). The evaporated extract was reconstituted in 0.25 ml of Arbor Assays assay buffer for subsequent assay. The reconstituted extract was filtered using a Corning Costar Spin-X 0.45 μ m cellulose acetate filter (VWR, Philadelphia, PA).

5.2.8 Dried blood spots collection and EBV measurement

I collected four blood spots using standardized filter paper (Schleicher and Schull #903, Keene, NH) for Epstein-Barr virus (EBV) antibody titer analyses, following established collection and laboratory procedures (McDade et al., 2000). Specifically, following Eick et al. (2016), EBV immunoglobulin G (IgG) antibody levels in DBS were assayed at the Global Health Biomarker Laboratory at the University of Oregon and are expressed in the arbitrary units of absorbance units per milliliter. Each participant's finger was cleaned with alcohol and then pricked with a sterile, disposable microlancet. Blood spot samples were dried at room temperature, placed in individual plastic bags,

refrigerated the same day, and stored at -20°C in Serbia; they were shipped to the University of Notre Dame for storage at -80°C . They were later shipped on dry ice to the University of Oregon for analysis. Because of a skewed distribution, the raw EBV variable was natural log transformed for all analyses.

5.3 Data analyses

5.3.1 Qualitative analysis

This analysis was guided by the literature on social support, and, first, transcripts were read to gain familiarity with the data. Next, using two observational techniques - word repetition and the presence or absence of expression, I laid the groundwork for the theory-driven thematic analysis with flexibility in the coding process and generating themes (Russell, Wutich, and Ryan, 2016). During the data coding process, I aimed to identify the relations between codes and merged or separated some of them where needed. Lastly, basic themes were grouped under the broader theme of sources and types of support.

5.3.2 Statistical analyses

All statistical analyses were conducted using Stata (v. 14.0), and tests of statistical significance were evaluated at $p \leq 0.05$. We treated journey length, age, residence time in Serbia, and measures of social support, mental well-being (perceived stress; IES-R; RHS-15; and FS), and physiological markers (CORT and EBV) as continuous variables and sex and trauma as categorical variables in all analyses. First, primarily for descriptive purposes, I ran Pearson's bivariate correlations for key study continuous variables (see

Table 5.2 for full results). I then used ordinary least squares (OLS) regression to test the relationship between refugees' length of journey and social support. Using model selection procedures (see below), I then considered the participants' sex, age, trauma experiences, and residence time in Serbia as potential covariates for this model predicting social support from journey length (see Table 5.3 for full results).

Next, I used multivariate analysis-of-variance (MANOVA) to test whether social support predicted the refugees' mental health outcomes for each scale (perceived stress; IES-R; RHS-15), which were moderately to highly correlated with one another (Table 5.2; Jankovic et al. 2020). I included the following covariates, which emerged from model selection procedures (see below): age, trauma experiences, and journey length. Following statistically significant MANOVA results, I then used the Stata 'mvreg' command to test for the links between the predictors and the individual dependent variables. The full model results for these analyses are presented in Table 5.4. Following the MANOVA results, I then used OLS regression models to test whether the refugees' social support predicted their mental well-being (Model 1; Table 5.4). I included age, trauma experiences, and journey length covariates for the refugees' RHS-15 scores, trauma experiences for IES-R scores, and journey length for perceived stress (PSS negative sub-scale; Model 2; see Table 5.4 for full results). The included covariates in Model 2 for refugees' mental health outcomes for each scale emerged from model selection procedures (see below).

Finally, in separate models, I then used OLS regression to test whether the refugees' social support predicted significant differences in CORT and EBV titers. I did

not use MANOVA for these two dependent variables, as they were not meaningfully correlated (see Tables 5.3 and 5.5 for full results).

5.3.3 Covariates and model selection

To help select the strongest model fit for the collected data and to avoid overfitting the models, I identified covariates that could potentially help explain the refugees' levels of social support and associations between the refugees' social support and their mental health, CORT and EBV antibody titers, including sex, age, trauma, residence time in Serbia, and journey length. Using Akaike Information Criterion (AIC), I then ran a base OLS regression model predicting each of the core dependent variables, respectively, and assessed whether the covariates improved the model fit for those core analyses. My assessment was based on whether the model including the covariate had a lower AIC value compared to the base model AIC value (Burnham and Anderson, 2004). In a model predicting the refugees' social support from journey length, the inclusion of age, trauma, and residence time in Serbia did not improve the model fit (see Table 5.3). In models predicting the refugees' mental health (perceived stress; IES-R; RHS-15) from social support, the inclusion of age, trauma, and journey length each improved the model fit, compared to the base model (see Table 5.4 for full results). In the models for the refugees' physiological markers, covariates included did not improve the model fit (see Table 5.3 for full results). Along with the full model results, I report the final models' AIC values in Table 5.3.

5.4 Results

5.4.1 Qualitative results

Participants in the two asylum centers spoke about traumatic experiences and perceived and/or received social support from their family members, spouses, and/or friends following displacement. Fifty-one participants (67.1%) recounted numerous instances in which they were reluctant to seek support from their social network, while twenty-five interlocutors (32.9%) expressed their content of having close confidants nearby. As I explain below, the refugees routinely faced various social and psychological hardships on their journey to Serbia. Thus, these distressing experiences seem to have affected their trust in people and eagerness to create and maintain profound relational exchanges with close confidants and other refugees in the asylum centers. I discuss each group's experiences below.

Forced migration, the forced displacement of people, is routinely marked by recurrent trauma and psychosocial stress. Such experiences are inextricable parts of their drive to seek safety and security across international borders, away from the debilitating conditions in their homelands. Due to numerous structural constraints and restrictive migration policies, refugees are often compelled to navigate rugged terrains, physical barriers, police patrols, and smuggling networks on their lengthy journey to reach protection outside their country of origin. Not all refugees succeed in their first attempt to cross multiple borders and reach safety across international borders. Caught in a vicious cycle of numerous border-crossing attempts during their plight, refugees are routinely subjected to various torments, including separation from their loved ones, endless walking for days without food and/or water, physical and psychological abuse at the

hands of the border police and smugglers. Thus, forced to embark on more clandestine and dangerous migratory routes, such traumatic experiences become an inseparable part of the realities of transient refugee populations in Serbia. One participant said:

I traveled with my family. We came from Afghanistan to Serbia on foot. First, we went to Pakistan and then to Iran [...] we did not eat for 3-4 days or drink any water for two days while hiding in the forest [...] I was with my family in Greece, and we wanted to go to Austria. We paid smugglers to take us there. My family was placed in one vessel, and I in a different one. The police intercepted my boat, but not the one my family was in; they managed to reach Germany. I was deported back to Bulgaria. Being separated from my family affected my sanity... That's why I decided to continue my journey and come to Serbia (Asylum center "Krnjaca," May 30, 2018).

Even as they negotiate their lives in this new liminal space of an asylum center, most study participants continue to grapple with the hardships of the journey-related trauma and loss, as well as uncertainty and a new life in the shadows on a daily basis. Such past and present traumatic experiences are likely to cause disruptions in their system of social support. Specifically, forced displacement-related experiences have opened the door to different forms of mistrust and constraints upon their social and emotional interactions. Most interlocutors (fifty-one participants; 67.1%) felt that they would be better off if they kept their emotions and concerns to themselves instead of sharing them with close confidants. They also expressed their distrust in people. Such wariness came from their often distressing experiences and interactions *en route* with other people (e.g., smugglers, border police, refugees). One interlocutor described it as following:

It is hard to trust people and relate to them when I experienced bad things in my life and on the journey to Serbia. I am here with my wife and kids,

but I do not share my problems and feelings with them. I often feel alone; it is hard to find people outside your family you can trust and share your problems or concerns with (Asylum center “Krnjaca,” June 8, 2018).

As a consequence of their migratory journey-related experiences, refugees’ mistrust continues to persist and pervade their interactions with other people in the asylum centers. They reported relying on their own personal capacity rather than seeking help from others in dealing with personal problems. They typically resorted to activities such as walking, self-analysis, and thinking. Participants also expressed unwillingness to engage in or uphold social interactions with other refugees while still in transit. Two interlocutors explained:

I do not have anyone to share my problems and concerns with... I do not trust anyone. I would love to have someone to share my thoughts and feelings with, but I have not found such a person so far. When I have problems, I go somewhere outside the asylum center, sit, and think through those issues alone. It is not good to share your problems and feelings with other refugees in the camps since they are not constantly here and can leave the camp anytime (Asylum center “Krnjaca,” June 8, 2018).

I do not talk with my family about my problems and concerns. Sometimes I feel I am alone and do not have any real friends here. People come and go...they continue their journey. If I have a problem, I take a walk and think about possible solutions (Asylum center “Krnjaca,” June 10, 2018).

In the state of shattered social support systems and impaired social relationships, refugees may be at risk of experiencing social isolation and loneliness, even when they have their families and friends nearby.

The intricate intersection of the border crossing experiences, daily struggles, and challenges in maintaining social support appears to have ripple effects on refugees and their families. Social relationships and interactions are critical to human functioning and

well-being. In the context of disrupted social support, a warm hug, a good listener, even a handshake might be a profound act of human connection and utter care. When these intimate and meaningful interactions turn into nonexistent or dysfunctional ones, they may add another layer to the refugees' ongoing stress and further intensify the decline of social contact. According to most of the participants (fifty-one participants; 67.1%), numerous social and psychological hardships appear to have taken a toll on their readiness to engage in profound relational exchanges or even share their concerns with close confidants. Specifically, a desire to protect their loved ones from any potential problems, reluctance to engage in new social interactions and readiness to tackle their problems alone are some of the core remarks that have informed the participants' narratives. Such disconnections from their familial and social networks may exacerbate their feelings of loneliness and social isolation and critically contribute to their poor health outcomes. One participant explained:

My problem is that I keep everything to myself. I can talk to my wife, but, at the same time, I do not want to put a huge burden on her. When I feel that way, I usually go outside the center or occupy myself with some physical work to distract my thoughts or to find a solution (Asylum center "Bogovadja," June 12, 2018).

In contrast, twenty-five interlocutors (23.9%) expressed their contentment with having their spouses, friends, and family members nearby. These are their go-to people of trust, particularly when they are experiencing challenging and difficult times. Having close confidants with whom they shared similar traumatic experiences and lived realities in an asylum center reassured the participants that they were not lonely and/or friendless. Moreover, potential access to and/or actual utilization of social support afforded the

participants a sense of security, relief, and ease. They felt they did not have to go through all problems alone. Trust in a family member, partner, and a friend to share most intimate thoughts when they felt sad, lonely, and disappointed provided the participants mental unload and comfort. Two participants stated the following:

I talk to my wife about everything. I can talk about all problems and concerns. She is my biggest support and a person of trust. I also talk to my family back in my home country (Asylum center “Bogovadja,” June 13, 2018).

I have friends with whom I talk about my problems and resolutions. I can also share my concerns and feelings with them. I have been here in Serbia for two years now, and during the time, I managed to find a few people I can trust and talk with about anything (Asylum center “Bogovadja,” June 17, 2018).

Perceiving and receiving support was imperative to some participants. They were more likely to feel confident and reassured, which further enhanced their trust toward the people with whom they unreservedly shared their thoughts, emotions, and concerns without embarrassment or discomfort. The participants also expressed satisfaction with having their family and friends who helped them face their problems, providing a place to talk about anything, and above all, understanding their past and present struggles. The refugees’ lived realities have been and still are fraught with worries and trauma. These existing meaningful affective ties, social relations, and support are likely to buffer the effects of uncertainty and psychosocial stress during emotionally and mentally demanding periods between displacement and resettlement.

While a small number of participants expressed their content with having family and friends nearby, most of them, as I noted, said that they preferred not to rely even on the people they considered a reliable source of protection, particularly during challenging

times. They have chosen to face problems and cope with them in seclusion as they continue to live in uncertain conditions. The refugees' narratives in which they recounted physical and psychosocial difficulties *en route* apparently continue to affect their social exchanges, relationships, and systems of support and to reinforce mistrust in others while they are living in the asylum centers. Moreover, refugees tended to refrain from establishing and preserving social relationships, emphasizing their and other people's intention to continue the journey to the desired destination. In the context of such impaired social functioning, the refugees often lack appropriate support, coping responses, and care, which may be critical in overcoming the adverse impact of trauma and stress. Thus, long periods of loneliness can harm an individual's physical and mental health (Cacioppo, Hawkley, and Berntson 2003), particularly among vulnerable refugee populations.

5.4.2 Quantitative results

5.4.2.1 Bivariate correlations

Bivariate correlations showed that the refugees' social support was negatively correlated with their mental health (RHS-15, $r = -0.32$, $p = 0.005$; IES-R, $r = -0.29$, $p = 0.010$; and, PSS negative sub-scale, $r = -0.29$, $p = 0.010$). The refugees' social support was also negatively correlated with their CORT ($r = -0.21$, $p = .072$), while their recent perceived stress was positively correlated with their CORT ($r = 0.22$, $p = 0.051$; see Table 5.2 for full results).

TABLE 5.2

PAIRWISE CORRELATIONS FOR KEY STUDY VARIABLES

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(1) FS Total Score	1.000								
(2) PSS Neg. Total Score	(76) -0.29*	1.000							
(3) IES-R Total Score	(76) -0.29*	(76) 0.51***	1.000						
(4) RHS-15 Total Score	(76) -0.32**	(76) 0.57***	(76) 0.71***	1.000					
(5) Age	(76) 0.13	(76) 0.09	(76) -0.005	(76) 0.12	1.000				
(6) Journey length	(76) -0.27*	(76) 0.31**	(76) 0.21 [†]	(76) 0.26*	(76) -0.008	1.000			
(7) Time in Serbia	(76) -0.08	(76) 0.02	(76) 0.03	(76) -0.008	(76) -0.04	(76) -0.06	1.000		
(8) Log Nail Cortisol	(76) -0.21 [†]	(76) 0.22 [†]	(76) 0.09	(76) 0.01	(76) -0.03	(76) 0.07	(76) -0.02	1.000	
(9) Log EBV	(73) 0.006 (66)	(73) 0.14 (66)	(73) 0.20 [†] (66)	(73) 0.07 (66)	(73) 0.04 (66)	(73) 0.05 (66)	(73) 0.03 (66)	(73) -0.07 (66)	1.000 (66)

Pearson's r is listed in the top row of each cell with the bivariate sample size in parentheses in the second row. [†] $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

5.4.2.2 Refugees' well-being and social support

In Model 1 predicting the refugees' social support, which included journey length, individuals with longer journeys tended to report lower social support (b , 95% CI: -0.11, -0.20 -0.02; p : 0.017; Model R2: 0.07). No other predictors, including age, sex, traumatic experiences, and residence time in Serbia, were statistically significantly linked to the refugees' FS scores (see Tables 5.3 and 5.4 for full results).

I then used MANOVA models to examine the link between social support and outcome variables for the refugees' mental health (perceived stress; IES-R; RHS-15). In Model 1 predicting the refugees' mental health, individuals with lower social support tended to exhibit poorer mental well-being (all p 's < 0.05; see Table 5.4). With the addition of trauma, age, and journey length as covariates, in Model 2, refugees who reported trauma on their mobility journeys tended to exhibit poorer physical health and mental well-being (RHS-15 scores; $p < 0.05$), while refugees with longer journeys tended to report higher recent perceived stress (PSS negative sub-scale scores; $p < 0.05$; see Table 5.4 for full results). In OLS regression models for the refugees' mental health (RHS-15 scores), post-traumatic stress-related symptomology (IES-R scores), and recent perceived stress (PSS negative sub-scale), following the MANOVA results, refugees with lower social support tended to report poorer mental well-being (Model 1; all p 's < 0.05; see table 5.4). With the addition of trauma, age, and journey length in Model 2, refugees with longer and more traumatic journeys tended to exhibit poorer mental and physical health than other participants (RHS-15 scores; all p 's < 0.05). In Model 2, the finding for journey length remained significant for PSS negative sub-scale scores ($p < 0.05$), while experiences of trauma were no longer significantly linked to the refugees' IES-R scores ($p > 0.05$; see Table 5.4 for full results).

TABLE 5.3

MODEL FIT STATISTICS (AIC) FOR KEY COVARIATES PREDICTING
REFUGEES' SOCIAL SUPPORT, MENTAL WELL-BEING, AND PHYSIOLOGICAL
MARKERS^a

Predicting social support ^a					
Base model AIC: 442.3					
AIC with the covariate added to the base model					
Sex	443.4				
Age	442.9				
Trauma	444.3				
Time in Serbia	443.5				
Predicting outcomes from social support ^b					
	FS base model for PSS Neg. AIC: 452.2	FS base model for RHS-15 AIC: 592.2	FS base model for IES-R AIC: 629.8	FS base model for CORT AIC: 226.9	FS base model for EBV AIC: 188.1
	AIC with the covariate added to the base model			AIC with the covariate added to the base model	
Sex	453.3	592.5	630.1	228.1	189.8
Age	452.7	591.7	631.7	228.9	190.0
Journey length	449.2	591.3	630.2	228.9	189.8
Trauma	453.6	589.3	629.2	228.4	190.1
Time in Serbia	454.2	594.1	631.8	228.8	190.0

^aThe base model predicts social support (the FS scale) from journey length.

^bThe base model predicts each outcome variable (i.e. the mental well-being surveys and physiological markers) from social support (the FS scale).

TABLE 5.4

MANOVA MODELS PREDICTING REFUGEES' MENTAL WELL-BEING AND
FOLLOW-UP OLS REGRESSION MODELS

Effect	Model 1				Model 2			
	Pillai's Trace	F	df	Sig.	Pillai's Trace	F	df	Sig.
FS scores	0.1256	3.45	(1, 74)	0.021	0.1095	2.83	(4, 71)	0.048
Journey length					0.0501	1.21	(4, 71)	0.311
Trauma					0.0748	1.86	(4, 71)	0.144
Age					0.0732	1.82	(4, 71)	0.152

OLS regression models following the MANOVA results

	Model 1 (<i>N</i> =76)			Model 2 (<i>N</i> =76)		
	<i>b</i>	<i>SE</i>	<i>p</i>	<i>b</i>	<i>SE</i>	<i>p</i>
RHS-15						
FS scores	-0.87	(0.29)	0.005	-0.84	(0.30)	0.007
Age				0.35	(0.17)	0.042
Journey length				0.10	(0.13)	0.436
Trauma				7.72	3.48	0.030
Model R2		0.10			0.21	
	Model 1 (<i>N</i> =76)			Model 2 (<i>N</i> =76)		
	<i>b</i>	<i>SE</i>	<i>p</i>	<i>b</i>	<i>SE</i>	<i>p</i>
IES-R						
FS scores	-1.01	(0.38)	0.010	-0.96	(0.38)	0.013
Trauma				6.65	4.20	0.118
Model R2		0.08			0.11	
	Model 1 (<i>N</i> =76)			Model 2 (<i>N</i> =76)		
	<i>b</i>	<i>SE</i>	<i>p</i>	<i>b</i>	<i>SE</i>	<i>p</i>
PSS neg.						
FS scores	-0.31	(0.11)	0.010	-0.24	(0.12)	0.050
Journey length				0.11	(0.05)	0.028
Model R2		0.08			0.10	

TABLE 5.5

MODELS PREDICTING REFUGEES' SOCIAL SUPPORT AND PHYSIOLOGICAL
MARKERS

Social support	Model 1 (<i>N</i> =76)					
	<i>b</i>	<i>SE</i>	<i>p</i>			
Journey length to Serbia	-0.11	(0.04)	0.017			
Model R2		0.07				
Biomarker	Model 1 (<i>N</i> =73)			Model 2 (<i>N</i> =73)		
	<i>b</i>	<i>SE</i>	<i>p</i>	<i>b</i>	<i>SE</i>	<i>p</i>
CORT						
FS scores	-0.05	(0.02)	0.072			
PSS neg.				0.05	(0.02)	0.051
Model R2		0.04			0.05	

5.5 Discussion

In this study, working with recently settled refugees, I tested for relationships between the refugees' social support and the length of their journey from their home countries to Serbia and how their social support was linked to their mental well-being and physiological markers relevant to psychosocial stress. As opposed to ample research on social support among long-settled refugees (Gottvall et al., 2019, 2020; Koochek et al., 2007), only a few studies have examined links between recently settled refugees' social support and health (Correa-Velez et al., 2020; Georgiadou, Schmitt, and Erim, 2020; Riley et al., 2017; Stewart, 2014). I contextualize the findings regarding forced migration and social support vis-à-vis concepts pertaining to chronic psychosocial stress and

neuroendocrine responses (Bartram, 2015; Kawachi and Berkman, 2001; Miller et al., 2007; Seeman and McEwen, 1996; Uchino, 2006, 2009; Uchino, Cacioppo, and Kiecolt-Glaser, 1996).

5.5.1 Mental health

The lives of many forcibly displaced people are characterized by recurrent stress and traumatic experiences at all stages of the migration process (Arsenijevic et al., 2017; Belloni, 2019; Zimmerman et al., 2011). The closure of borders and governments' various technologies of power to police, control, discourage, and curtail refugee movements across international borders (Gerard and Pickering, 2013; Lischer, 2014; Mountz, 2010; Weber, 2017), have impeded safe and legal migration of most of the forcibly displaced individuals. Consequently, many refugees must embark on dangerous and risky routes in seeking protection outside their homeland, thereby exposing themselves to various physical hardships, psychosocial stress, and uncertainty on their protracted journeys (Arsenijevic et al., 2017; Dolma et al., 2006; Hsu et al., 2004; Sandalio, 2018; UNHCR, 2019). Aligning the idea that such experiences may fracture existing sources of social support and impair the generation of new social relationships, I found that refugees, who had experienced longer journeys, tended to report lower social support than those with shorter journeys.

These findings are in line with prior research showing that exposure to migration and journey-related stressful experiences and trauma was linked to the refugees' lack of sources of social support, feelings of loneliness, and poorer social exchanges once they reached security across borders (Blair, 2001; De Vries and Van Heck, 1994; Gottvall et

al., 2019, 2020; Liamputtong and Kurban, 2018). In this past work, lower social support was linked to poorer mental well-being (Bhugra, 2004; Li et al., 2016; Hauff and Vaglum, 1995; Porter and Haslam, 2005; Tempany, 2009). In particular, a study among Syrian refugees resettled in Sweden found that exposure to migration trauma and torture was associated with lower social support and a higher likelihood of expressing PTSD symptomology (Gottvall et al., 2019). Similarly, another study among Bosnian refugees in the U.S. found that the adverse experience of exile pertinent to social isolation was associated with PTSD-related symptoms in individuals in a non-clinical group to a greater extent than in their clinical peers (Miller et al., 2002).

The dynamics of losses and interruptions associated with forced migration may impair the refugees' coping abilities, psychological and behavioral responses to recurrent psychosocial stress and trauma, contributing to links between lower social support and poorer mental health outcomes (Behnam, 2003; Beiser et al., 2011; Miller et al., 2002; Ryu and Park, 2018; Rowan et al., 2020). Here I found that recently settled refugees with lower social support reported poorer mental and physical well-being, greater PTSD-related symptoms, and higher recent perceived stress than those with higher social support. Similarly, Schweitzer and colleagues' (2006) study of recently settled Sudanese refugees in Australia found that loss of social support as an outcome of migration-related trauma and post-migration difficulties contributed to their higher levels of psychosocial stress and poorer mental health outcomes. As such, social support appears to be an extremely important correlate of the refugees' feelings of better mental and physical health, which is unsurprising given their adversity and challenges of their overall experiences (Bhui et al., 2006; Jaranson et al., 2004; LeMaster et al., 2018; Mawani,

2014; Ozbay et al., 2007; Southwick et al. 2005; Stewart, 2014). My findings add to this literature by indicating that the protective properties of social support are a likely critical factor in alleviating and buffering against the adverse mental health effects of displacement-related psychosocial stress and trauma.

Further, the qualitative dimensions of my study suggest that uprooted social networks, disrupted social support, and experiences of journey-related distress intensified the impact of social constraints on the refugees' social and emotional interactions with others. Specifically, the emic perspective on social support revealed that most recently settled refugees recounted numerous social and psychological hardships undermining their engagement in profound relationships and willingness to share their concerns with close confidants. The refugees described various adversities they had suffered during their migratory journey to Serbia, including physical trauma, violence, uncertainty, distrust, family separation, and fear. Once in an asylum center, such distressing experiences have brought about constraints on their familial and social networks while simultaneously enhancing their desire to protect their loved ones from personal problems and additional stress, frustration, and despair. Particularly, the refugees' tendencies towards seclusion and loneliness weakened their social ties because they deliberately curtailed their relations with family and friends in the asylum center to safeguard the welfare of their loved ones. Past studies in this domain revealed that some refugees, fearing future loss, showed a tendency toward isolating and refraining from investing affection in social interactions, which further damaged their relationships with their close confidants (Blair, 2001; Blackwell, 1993). Aligning with this perspective, my findings further highlight the potential positive effects that establishing support programs in

transitional encampment settings may have for improving the refugees' existing relationships and expanding their opportunities to meet and socialize with new people, and potentially reduce their social isolation.

Lastly, the refugees' narratives revealed that the transitional stage in their migration process dramatically affected their social interactions with other refugees residing in asylum centers, confined and liminal spaces. As they contemplate their next steps about migratory journeys, refugees tend to avoid and refrain from engaging in profound social interactions, relationships, and support systems before reaching the desired destination. Thus their ability and willingness to build strong social ties and support decline because they often redirect their energy and time to finding ways and critical resources necessary to continue their journey. Besides, as a consequence of past traumatic experiences, the refugees' mistrust of other people likely contributes to their reluctance to establish and maintain social relationships while they are in the asylum center. Thus, weakened social relationships, lack of trust, and patterns of social and emotional disengagement may render everyday life more difficult and have adverse effects on refugees' mental health (Biehl, 2015; Brun, 2015; Horn, 2010; Smith, 2004), as they consider their potential trajectories and final destination choices. My findings suggest that establishing peer support and community-based activities may help the refugees regain trust in others while encouraging and empowering them to engage socially since the effects of impaired social support or relationships over a more extended period may lead to chronic illnesses that can negatively impact their subsequent integration in post-migration settings (Ahmad, Othman, and Lou, 2020). I hope that this study lays a foundation for future research of social support and its influence on health,

particularly among displaced populations in more intermittent transitional stages of migration, as a deeper understanding of this relationship may be critical in designing effective interventions to enhance the health-promoting aspects of confined social settings to support the refugees' more promising permanent resettlement trajectories.

5.5.2 CORT and EBV

Complementing the results for social support and health, I found that refugees who reported lower social support tended to exhibit higher CORT. While the finding did not reach statistical significance, I observed patterns in the same direction for associations between low social support levels and higher CORT that have been observed elsewhere (Cacioppo et al., 2000; Evolahti et al., 2006; Matheson et al., 2008). I also found that recently settled refugees, who reported higher recent psychosocial stress, had higher CORT, aligning with my past results and other findings (Dajani et al., 2018; Jankovic et al., 2020; Mewes et al., 2017; Miller et al. 2007). Though this latter finding was not the primary focus of the study, the patterns of the results for CORT, social support, and recent psychosocial stress hint at the need to understand further these biopsychosocial processes at transitional migratory stages, given the well-established links between chronically elevated CORT and poorer health outcomes (Herane-Vives et al., 2018; Staufenbiel et al., 2013; Steudte et al., 2011).

5.5.3 Limitations

There are several limitations to this study that merit discussion. First, its cross-sectional design precludes us from assessing directional inferences between variables in

our key results. For example, I predicted that lower social support would be associated with the refugees' poorer mental health profiles, consistent with the idea that social support may buffer against trauma-related psychopathology and enhance coping abilities and resilience to stress. However, it is also possible that poor mental health can impair an individual's ability to cultivate support and social relationships (Bogic et al. 2012; Davidson et al. 2008; Hirschfeld et al., 2000; Olatunji et al., 2007). I hope our findings in this study will help inspire further work in this area, including longitudinal research tracking within-individual changes through time in the refugees' biobehavioral profiles and social support systems during various stages of forced migration, as such data would help disentangle key health-related drivers and processes during these challenging periods.

I also measured CORT from fingernails, a relatively new approach to studying the body's cumulative exposure to the hormone. Prolonged exposure to demanding psychosocial conditions may lead to maladaptive neuroendocrine responses; notably, they can disrupt the function of the HPA axis through effects on the production of CORT throughout the day (Adam et al., 2014, 2015; Fries et al., 2009; Miller et al., 2007). While prior research has linked cortisol awakening responses and the steepness of their diurnal curves to the effects of chronic stress on various health outcomes (Adam et al., 2017; Fries et al., 2005; Herbert, 2013; Rohleder et al., 2004; Wessa et al., 2006), it was not feasible to collect and store repeated samples of blood or saliva throughout the day to capture those diurnal dynamics in this study. I acknowledge that a longer-term, cumulative indicator of the body's exposure to CORT, such as in nails, cannot address dynamic diurnal aspects of HPA functioning and health. That said, my research aimed at

measuring correlates of chronic psychosocial stress and trauma, rendering CORT measured in fingernails – an aggregate indicator of the prolonged body’s exposure to cortisol - an appropriate approach for our study population and research goals.

Lastly, I measured EBV antibodies, an indirect cell-mediated marker of chronic stress and trauma (Glaser and Kiecolt-Glaser, 2005; McDade et al., 2000; McDade, 2002). Research has shown the link between chronic stress and increased EBV antibody level (Glaser and Kiecolt-Glaser, 2005; McDade, 2002; Sorensen et al., 2009; Worthman and Panter-Brick, 2008; Yang and Glaser, 2002). In this domain, EBV antibody production is generally conceptualized as reflecting prolonged exposure to psychosocial stress (McDade, 2002). For my dissertation research, I decided to collect blood spots.

5.6 Conclusion

Social support is well-characterized as a critical factor and essential component in maintaining an individual’s health and well-being (Cohen and Wills 1985; Cruwys et al., 2013; Ozbay et al., 2007; Uchino, 2006). In the present study, I build upon this research to show that recently settled refugees, who reported lower social support, had poorer mental well-being, higher post-traumatic and recent perceived stress scores than other participants. I also found that refugees, who had experienced longer journeys, reported lower social support. Generally, these correlative findings are consistent with the notion that enhanced social support is likely a necessary means and resource for the recovery, resilience, and health of recently settled refugees as they await permanent resettlement. Additionally, given that refugee populations tend to experience ongoing uncertainty and stress (Bhugra, 2004; Ben Farhat et al., 2018) and suffer from higher rates of mental

disorders (Fazel et al., 2005; Morina et al., 2018; Tempany, 2009), I join calls to consider the refugees' social support and services a public health policy agenda (Gottvall et al., 2019).

5.7 References

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CHAPTER 6:

GRASPING THE REALM OF ORDINARY, LIVED EXPERIENCES, AND ROUTINIZED SOCIAL PRACTICES (RSPs) IN TRANSIENT REFUGEE SPACES

6.1 Introduction

Afshin⁴ and I sit on the red carpet in a 12m² room in one of the 24 barracks in the ‘Krnjaca’ asylum center in Belgrade, where he lives with his wife Amaya and their two young children, a boy and a girl. They came from Iran. He offers two pillows as a backrest against the wall to make my sitting position and time in their intimate space more comfortable. Amaya is sitting on the other side of the room, folding her clean laundry and putting it into a closet left of the room’s door. Next to the room’s window is a small dresser full of spices, coffee, tea, and sweets for the children. On top of it is a tiny hot plate they use to cook food and boil the water for hot beverages. Afshin sits across from me, and we talk about cooking, his favorite spices, and their daily life within the confined space of the center. His tone is worried as he talks about his children, future, and aspirations. The water starts boiling; Afshin takes the coffee pot with hot water and pours it into three mugs containing spoonfuls of Nescafé (instant coffee). Amaya is pleased she’s put away the laundry and can join us for coffee and a good conversation. Afshin and I are having about the daily life in the center and their plans. She sits next to Afshin, and before we continue our chat, she tells him to play *ney-anbān* (a traditional

⁴ All names mentioned in this chapter are pseudonyms.

instrument - bagpipe - popular in southern Iran). He puts his cigarette down in the ashtray, goes to the closet, and takes his traditional instrument out; Afshin brought it with him from Iran. The room starts filling with the sweet sound of the instrument that I see and hear the first time, but which unbelievably resembles the traditional bagpipes (*gajde*) from the Balkans. For a moment Afshin took us on a journey to his homeland.

Most of the 26 million displaced people worldwide spend years and even decades in temporary settlements, such as asylum centers and refugee camps providing shelter and fundamental necessities, while awaiting repatriation or resettlement (UNHCR, 2020). Afshin and Amaya have been living in Krnjaca for the last 27 months. Unlike most transient refugees I met during my fourth season of fieldwork in Serbia between November 2019 and March 2020 in two asylum centers ‘Krnjaca’ and ‘Banja Koviljaca’ (the latter located around 150 km away from Belgrade), Afshin and Amaya have been living in the confined liminal space of the center longer than they’d expected. They are tired of playing the ‘game’ and want to recuperate physically, emotionally, and financially before continuing their journey to their desired destination – one of the Western European countries. Afshin and Amaya hope to be resettled in the European Union (EU) with the help of the UNHCR. They signed up for the resettlement program, although they are both uneasy about the waiting time for the interview – Afshin tells me, “We can’t take any more risks by playing the game. We have two young children. I don’t want to stay in Serbia; we want to continue our journey to the EU legally.”

Despite the UNHCR’s action plan for realizing durable and comprehensive solutions to the refugees’ situation, the growing number of displaced populations makes this task increasingly difficult, consequently leaving them to spend long periods in exile

(Milner, 2014; UNHCR, 2016). For instance, around 196,666 registered refugees living over a decade at Kakuma camp, Kenya, have no proximate projections of repatriation or resettlement in a third country (Agier 2011; Oka 2014; UNHCR, 2020). When durable solutions (i.e., voluntary repatriation, local integration, and resettlement) fail to be aptly materialized, refugees continue to live in stagnant, isolated refugee camps and/or asylum centers that confine their mobility, rights, and independence (UNHCR, 2019). Those who occupy these liminal political spaces are routinely characterized by palpable ‘refugeeness,’ battered, entirely dependent on charity and assistance, lacking choices and prospects, and, more importantly, lacking agency and control (McDowell, 2013). Stripped of their economic, political, and social rights, refugees are often perceived as a problem or threat to the state, national welfare systems, cultural and national identities, and domestic peace and stability (Biehl, 2015; Chatty, 2014; Milner, 2014). In this context, refugees are robbed of freedom and mobility, precluding them from pursuing normal, everyday lives in encampment.

However, even in the refugee camps and asylum centers, life goes on, and everyday time continues to flow through routinized practices and survival strategies (Brun, 2015). My ethnographic research also shows that life, indeed, continues to flow through sustainable everyday activities – through daily social undertakings in the form of culturally appropriate routinized social practices (RSPs). In particular, RSPs, as part of the flow and movement of everyday life, serve as means of regularity and control, while simultaneously acting as mitigators of psychosocial stress and drivers of health. By (re)establishing RSPs, refugees actively strive to challenge their treatment as passive clients with a “dependency syndrome” (Turner 2005:260) or “relief mentality” (Kibreab

1993:323). Afshin works as a hairdresser in “Krnjaca” – “Refugees knows that they can come to me if they need a haircut. I charge them 200 dinars (which is around 2\$ in the United States). It means a lot to secure some additional funds while being affordable to other people in the center. With this money, I can buy some sweets for the kids or cigarettes for me. Whatever we need at the given time.”

Prior research has documented how refugees, like many groups living in high-stress confined liminal spaces, cultivate various social activities to mitigate the stresses of waiting and encampment (Agier, 2008, 2011; Harrell-Bond and Voutira, 1992; Jacobsen, 2002; Oka, 2011, 2014). These undertakings are actively maintained in the face of challenges and indignities of compulsory idleness in confined spaces, in the form of daily activities, such as agentive participation in local commercial economies, social consumption of food, drink, and other comforts and luxuries not provided by the relief or welfare programs, and visiting friends (Brun 2001, 2015; Kibreab 1993, Oka, 2011, 2014; Trapp, 2018). Some recent studies note that structured daily activities constitute a particular niche of coping and resilience to encampment conditions, while simultaneously acting as potential drivers of well-being (Oka, 2011; Riley et al., 2017; Trapp, 2018).

It is the practices of everyday life – RSPs – that I examine here, as production and reproduction of daily social routines that may be particularly important to refugees as ways of maintaining some continuity, control, and giving meaning to life in a situation imbued with uncertainty. RSPs may thereby also act as a significant buffer against the effects of recurrent trauma and daily psychosocial stress of encampment. It is important to note that a body of literature in psychology has examined the relationship between various daily activities, including family functioning, parenting, marital satisfaction,

domestic chores, and physiological process in Euro-American contexts. These findings have suggested that these daily activities in various life domains may actually add to daily stressors and activate stress physiology (i.e., cortisol) in the Euro-American context, potentially leading to the development of mental and physical diseases (Saxbe et al., 2011; Saxbe et al., 2008; Hibel, Mercado, and Trumbell, 2012).

While these results have meaningful implications for research on health, marriage, and gender in non-displaced populations, refugees often find themselves in qualitatively different and unique life circumstances, in which engagement and valuation of daily social practices may, indeed, serve to impart regularity and mitigate stresses of the encampment processes. Similarly, some other studies have pointed out that daily routinized practices seem to play an important role as drivers of health and well-being in non-conflict or non-displaced societies and post-conflict reconstruction and rebuilding efforts (Gupta and Sullivan, 2013; Kohrt, 2015; Koome et al., 2012; Sointu, 2005). Building upon these findings with an approach based on practice theory in relation to concepts pertaining to chronic psychosocial stress and neuroendocrine responses, I suggest that, by operationalizing the complexities and variations underlying RSPs, through which *doxa* and *habitus* are actualized, we add a biocultural perspective to the realm of the ordinary and shed light on abstract discussions of agency, social practice, and health in encampment situations.

There are only a limited number of studies that have examined the positive association of daily social practices with mental well-being among refugee populations (El-Shaarawi, 2015; Riley et al., 2017; Turner, 2005; Trapp, 2018). However, the complex and bi-directional interaction between RSPs and biosocial responses, especially

in encampment situations, has been understudied and is poorly understood, revealing a significant gap in our understanding of the relationship between RSPs, enhanced routine, control, and predictability, and their potential impact as drivers of health and well-being. Consideration of this relationship is particularly salient among refugee populations living in confined, liminal spaces, where they are often depicted as passive victims, disempowered, and depoliticized, thereby lacking the ability to act in the present and envision the future. Moreover, life in these temporary settlements is often associated with recurrent psychosocial stress, trauma, and uncertainty, which may have meaningful consequences for their short- and long-term health and well-being. Therefore, I suggest that investigation of the summary impacts of RSPs on daily psychosocial stress and hardship in relation to both mental and physical health is critical for understanding how refugees actively cope and cultivate resilience to adversity, while awaiting resettlement or recuperating for their engagement in another ‘game’ to their desired destination. In this chapter, I investigate the realm of ordinary and biosocial profiles to conceptualize the social, material, and personal dimensions of RSPs associated with the refugees’ sense of regularity, means of coping, and better health.

6.2 Country roads, take me home, to the place I belong!

“We don’t like the food cooked and served us here in the center!”

“The food doesn’t have any taste or spices in it. It’s also too greasy!”

My interlocutors kept repeating these and similar statements to me about the food prepared and provided to them in the asylum centers. In Krnjaca, the cafeteria is located

at the end of the center –opposite to the main entrance (gate) into the Commissariat for Refugees and Migration compound. It is placed in one of the barracks, across from the health center; the refugees can come to eat and/or take their food rations back to their rooms three times a day. It was around 8.30 am when Zakia and I took a short walk from her barracks to the cafeteria. We entered it and saw a line of people waiting their turn to get their breakfast. After a few minutes of standing and waiting in line, it was Zakia's turn to get breakfast for her entire family. She lives in a small room with her husband and four children. Today, refugees are having butter, jam, and warm milk. Before taking a plastic container for the milk, Zakia first gave a paper card to one of the servers who ticked the box that she took her portion. She received two loaves of bread, six servings of milk, 12 small packages of butter and jam, two packets of "Plazma" (a famous Serbia cookie), and two small milk containers for two of her youngest children. On our way to her room, Zakia tells me: "You know, Jelena, we really don't like to eat the food prepared for us. I prefer the food I cook in my room, though the Commissariat prohibits it."

A theory of practice attempts to grasp "the interaction and interconnection of structure and agency, by opposing the notion of strict ontological dualism" (O'Reilly, 2012:15). In numerous publications, Bourdieu (1977, 1984, 1986, 1990) has developed a theory of practice based on the idea that people act in the context of structured framework and expectations principal to the conscious prioritizing of individual dispositions and practices. Specifically, in "*The Logic of Practice*," Bourdieu (1990: 53) writes: "The conditionings associated with a particular class of conditions of existence produce the habitus, systems of durable, transposable dispositions, structured structures predisposed

to function as structuring structures, that is, as principles which generate and organize practices and representations.” With the habitus, in his model, Bourdieu aims to reconcile the structure-agency problematic, by saying that dispositions that emerge from social structures shape individuals’ actions that will either reproduce or transform those social structures. For anthropologists struggling to reconcile structure and individual agency (e.g., Ortner 1984), Bourdieu’s concepts of habitus and *doxa* have offered an alternative way for operationalizing structures, taken-for-granted rules, and activities to suggest that everyday practices are both strategic and emerge from an individual’s past and present conditions (Downey, 2010). The refugees’ agency, practices, and daily life are significantly constrained and shaped by state and humanitarian mechanisms utilized to govern and control them. These formal structures exacerbate the refugees’ near-total disempowerment and depoliticization, while simultaneously negating their ability to act and challenge rules and power structures (Jacobsen, 2014; Rozakou, 2012).

Numerous anthropologists and other social scientists have engaged with the practice theory framework (reviewed in Chapter 2) to argue that refugees are social agents who have goals and intentions but who live in a social context that constrains their action and behavior (Bauder, 2003, 2005; Friedmann, 2002; McKay, 2001; Nee and Saunders, 2001). Even within these unfavorable and transitory conditions, through small initiatives and activities, refugees strive to challenge the indignity of compulsory idleness and transform into active agents contemplating ways and means to satisfy their strategic and practical necessities (Kibreab, 1993; Oka, 2011; Turner, 2005). Farzana (2017:186) asserts that they handle the imposed circumstances and live through them, moving on with what they have. In her book, Puig Cortada (2015) explores the Syrian refugees’

struggles to resume their lives far away from home through small daily activities such as cooking in the Zaatari camp in Jordan, arguing that this everyday practice represents a powerful political tool for defying and maneuvering structures. She continues: “In the very beginning, in Zaatari camp, like in most refugee camps, refugees were given cooked meals that were brought into the camps by external catering services. However, after a while, refugees started to protest, for they wanted to be able to make their own food. People in Zaatari camp can now cook their own meals, at home” (Puig Cortada, 2015:21).

Unlike refugees in the Zaatari camp in Jordan, refugees residing in asylum centers in Serbia continue to cook their food in secrecy. Many of my interlocutors told me that they expressed their discontent to the Commissariat with their food rations, but to no avail. They still get served all three meals prepared in Krnjaca by Serbian cooks and are prohibited from cooking their own food. The refugees seek to defy these regulations – and these temporary and liminal spaces – by engaging in grocery shopping and cooking – the RSP labor domain – notwithstanding the center manager’s restrictions and control. This capacity to act and engage in a small daily activity, such as cooking, even under the circumstances of ‘permanent impermanence’ (Brun, 2015:19) shows that not only does everyday life in refugee camps continue to flow, but refugees also strive to challenge the conceived boundaries of the camps and transform their reality. Puig Cortada (2015:22) notes, “cooking your own food gives structure to your day, it gives control over your life; it brings back some degree of autonomy, reassurance, and normalcy.” For many refugees, food unquestionably offers a sense of comfort and contentment that is linked to their homeland.

After a few days of doing my research in the other asylum center, “Banja Koviljaca,” I could not get rid of a nickname my interlocutors gave me – “Doctor” – despite my perpetual explanations that I am just a Ph.D. student in anthropology.

“Doctor, Doctor, do you want to spend today’s afternoon with us? Will you have time? We’re planning a barbeque, and we want you to be our guest and try homemade Syrian spicy meat,” Karam said. In the center’s main hallway, I was talking with Hosein, my interpreter from Iran, when Amira, Fatima, and Karam came up to us and invited us to their barbeque on the Drina River. I accepted the invitation and looked forward to having an afternoon off. Hosein and I were strolling down a steep street from the asylum center to the downtown of Loznica city, where we met my interlocutors. From there, we took a 15-minute walk to a vast yellow-greenish field right next to the Drina River – the border between Serbia and Bosnia and Herzegovina – embraced by bare trees. On the other side of the river, we could see the Romanija Mountain, the unadorned forest, and a few people fishing. It was February when I came to the center to do my fieldwork, yet the weather resembled spring rather than winter. “We don’t like the food served us in the center. It is made for us by external catering services, but it isn’t good. The meat has a weird smell, it’s not seasoned like back home, and it’s too oily. That’s why I cook every night in my room under the rose,” Amira said while her friends were nodding their heads in approval. “We’ll show you how we like our meat seasoned and cooked,” Karam added. I will never forget that afternoon. We washed the chicken meat in the river, then seasoned it the way they do in Syria, gathered branches for the fire in the woods, sang, danced, and talked about their plans. My interlocutors and I were not in Serbia anymore, I felt that we had journeyed to Damascus; they took me back to their home.

Transitional temporary settlements, such as refugee camps and asylum centers, are more than structures or physical spaces (Rozakou, 2012); they actually represent a set of methods, of “discursive and material sites of power” (Hyndman, 2000:87). These spaces are often transformed into ‘humanitarian sanctuaries’ (Agier, 2008:43) and ‘standard equipment’ (Malkki, 2002:355) for governing and controlling refugees. As Agamben (1998:170) argues, “the camp is the structure in which the state of exception is permanently realized,” where bodies are disciplined, and populations are regulated (Foucault, 2007:161; 1990a: 139; 141–145) by government and non-government actors. The effects of disciplinary and regulatory power are established through hierarchies, control over daily rhythm, norms, and rules to which able bodies must conform (Foucault, 1975:167), aiming at specific and perpetual regulation of the refugee bodies, their routines, activities, and comportment. Despite these regulatory mechanisms of the state apparatus, refugees in asylum centers in Serbia engage in daily activities, such as cooking, and actively defy the state-specific everyday practices and techniques of power – the microphysics of power (Foucault, 1991:26). Numerous daily routines, De Certeau (2011:34) notes, “are tactical in their character. And so are, more generally, many “ways of operating” victories of the “weak” over the “strong...” By their everyday practices, my interlocutors – who are expected to be passive, dependent victims and disciplined by established regulations – both consciously and tacitly challenge, resist and circumvent strategies produced by the dominant structures of the asylum center. Without disputing my interlocutors’ lived experiences of uncertainty, angst, and fear brought on by non-compliance with the center’s rules, it is, however, important to stress that these small, mundane RSPs give structure to their day and control over their life. Moving from a top-

down approach to the refugees' everyday life in confined, liminal spaces, we can ask questions about how engagement in RSPs constitutes and changes the course of their life, while simultaneously serving as mitigators of psychosocial stress and drivers of better health.

6.3 Performance and materiality in a different ordinary world

Arina plays and talks with her baby girl while I am drinking herbal tea with saffron that she made for us. Her second older son sits next to me on the floor covered by a blanket and plays a video game on his small tablet. Farhad, Arina's husband, is about to arrive from his work outside the asylum center. He works every day from 7 am to 5 pm, except on Sundays, for a private construction company specialized in façade repairs. It was 6.15 pm when Farhad entered the room with a big smile on his face. He did not seem tired after a long day of hard physical labor. "Hi Jelena, hi my dear and my beautiful kids," he greeted us. "I am going to take a shower and will join you in just a few minutes," Farhad said. When he returned, he sat down on the floor next to me and I asked him about his day at work. "I like my job, my crew, the manager is good, and the company pays on time," Farhad continues, "I was a mechanical engineer in Iran, but unfortunately, I could not find a job that matched my qualifications. We still don't have legal papers, so I have to do whatever I can to earn money and provide a decent life for my family. We don't want to rely only on the money card⁵ and the aid assistance here in the center."

⁵ The Money Card program was run by Catholic Relief Services and the local organization "Covekoljublje," with the permission of the Commissariat for Refugees. Farhad's family was receiving 15000 RSD a month (circa USD 150), 3000RSD per family member).

Refugee populations seize every opportunity to earn and secure an income by engaging in diverse income-generating, including economic relationships with local business people or affluent farmers (Kibreab, 1993) in order to fight and mitigate the idleness of the enduring present. The refugees' aspiration to earn an income and preserve their former lifestyle and relative autonomy is a way for them to overcome the apathy, boredom, and lethargy that are integral parts of camp life while awaiting permanent resolution of to their problems. (Kibreab, 1993:341). However, access to working opportunities and livelihood is frequently impeded by "social and political exclusion processes that arise within both the host population and the various refugee communities" (Jacobsen, 2014:103). Indeed, both social and political exclusion diminishes the refugees' rights and abilities to pursue economic and other activities. Denied permission to work renders refugees unable to utilize their human capital obtained in their home countries and become a part of the host's formal economy.

Despite being precluded from taking part in the officially accepted income-generating opportunities, refugees actively attempt to utilize and translate their economic capital by participating in informal economy, which is one of the prominent features of the mundane life in a camp. Afshin, my interlocutor, whom I mentioned at the beginning, works as a hairdresser in the asylum center. His wife Amaya also works as a hairdresser and a make-up artist. They are both actively engaged in the RSPs labor domain. "I worked as a cosmetician in Iran. I've tried to find a job outside the center, but they ask for my papers everywhere I go. I'll keep trying. In the meantime, I'm glad I can earn some money for my family," Amaya said. Although they receive various forms of aid assistance, the limited supply of basic necessities often leaves refugees discontented. In

an attempt to make themselves less reliant on humanitarian aid, refugees initiate and take part in economic activities inside and outside the camps not only to meet their immediate practical everyday needs, but also to fight against images that depict them as vulnerable and passive recipients of supplied subsistence (Farzana, 2017; Oka, 2011, 2014). While work in or outside the camp is erased and rendered invisible, economic activities do take place, and refugees do perform work (Trapp, 2018:103).

In his study, Oka (2011, 2014) examines the informal food economy as a mechanism for maintaining dignity and normalcy of refugees living in the Kakuma camp. He argues that informal economies are considered an imperative since via them refugees obtain goods and services unavailable in the relief packages. More importantly, the informal economies are critical in “generating a sense of ‘normal’ for refugees in their transient lives” (224). While being an instrument for regaining a sense of normalcy through an act of consumption, informal economies also generate the feeling of agency even under conditions of statelessness and long-term wait. Oka (2011:259) indicates that the refugees’ engagement in these economic undertakings makes them feel empowered “through the act of ‘normal’ behavior and through the continuous formation of community and solidarity through food sharing and feasting.” Hence, the underlying structure created by the informal economies is just as essential since it enables livable lives for refugees and sustainability for aid relief missions. Another important feeling stimulated through social acts of consumption is that of dignity. Among refugees, “dignity is the desired condition – one in which the refugee can actively be normal while diminishing the enforced passivity of receiving aid and relief” (Oka, 2014:33). Thus, dignity and normalcy become expected outcomes of consumption that connect people to

their pasts, while simultaneously enabling them to both have self-respecting lives in the present and envision and hope for brighter futures.

The organization of daily life also depends relentlessly on unpaid household/domestic labor. This kind of labor enables people to perform in other domains of life, maintain good health and well-being. These routinized social practices – RSPs – such as washing dishes, cooking dinner, doing the laundry, emptying the trash, are what we do unconsciously, yet what helps us keep going through our day. In her study of everyday life among refugees in Nayapara camp, Bangladesh, Farzana (2017:157), notes: “as a mother, Halima’s main preoccupation is cooking and taking care of her family. Halima also does the household cleaning and washing.” Through these mundane practices and small initiatives, such as netting or sewing, growing chili plants, and raising pigeons, female refugees try to bring about positive changes to their lives, often characterized by social chaos and lack of normal social structures. These small everyday acts enable refugees to feel a sense of normalcy while creating their niches of coping and resilience to often volatile and harsh circumstances of encampment.

Zakia is helping her oldest daughter to prepare for school. She helps her put on her jacket and winter cap. Zakia takes her daughter’s school backpack and signals that it is time to go. “The bus will not wait for you, my child,” she said. We left the room. Outside their barracks, Zakia’s friend and his son wait for them to walk together to the asylum center’s main entrance, where the school bus picks the children up and drives them to the elementary school. It is 9.30 am when the bus arrives; Zakia kisses her daughter on the forehead and tells her to have a wonderful day at school. On our way back to her room, Zakia tells me that she needs to make the beds, clean the room, prepare

breakfast for her other three young children, and wash the dishes to have them clean for lunchtime. We are approaching her room and can hear that one of her children is crying. Zakia started soothing the kids even before she opened the door: “Mama is here, don’t cry, mama is back.” She opens the door, puts on a big smile, and runs towards her children.

After a few minutes of playing with them, Zakia started making the bunk beds, where her children sleep. To do so, she needs to climb the queen bed - where she sleeps with her husband - that is made of dismantled bunk beds. There is no space between this queen bed and her kids’ bunk beds. Her movements are quick and synchronized as she tightens the sheet and covers the bed with colorful blankets. Zakia then moves on to making her bed; she performs the same bodily movements as she covers it with the red bedspread. Her kids are playing on the floor. Before she started sweeping the floor, she gave the children milk. Zakia is “laying a table” on the floor for the second breakfast. She takes out a vinyl tablecloth that she lays on the floor; then she takes out bread, Choco cream, “Nutella,” butter, and jam from a dresser to the right of the door. She also puts the kettle on for our tea. She is feeding her two youngest children, while her second oldest daughter is eating by herself. Thirty minutes later, Zakia takes a big plastic container with the dirty glasses and plates. I walk with her to the bathroom. “This is the only place where you can wash dishes. This is our kitchen and bathroom. I had a big kitchen back home, but here you have to adjust and work with what you have,” Zakia tells me. She puts the plastic container with the dirty dishes on the table next to the sink and waits her turn. A man was doing dishes when we arrived. After a couple of minutes of waiting, it is

Zakia's turn. She performs this daily routinized activity the same way she has been doing it in her big kitchen back home.

The contemporary practice theory perspective understands social practices as routinized activities that can change over time (Fajans, 2015). She continues, “practice-oriented anthropology looks at widely disparate types of phenomena in which actors perform processes that place them in social and cultural situations and networks and affect the outcomes of events” (782). In this way, contemporary practice theorists can go beyond mere accounts of the daily undertakings people perform, to look at “the integration of social organization, social action, and the production of meaning – the ways in which social processes are turned by practical activity into cultural forms and in turn inform the improvisation of social practices” (Calhoun and Sennett, 2007:5).

Kelly stands in the bathroom above a plastic tub where she has soaked the white laundry, T-shirts, socks, and pants. She bends over it, takes a shirt into her hands, pulls it out and gives it a rub a couple of times, then soaks it again, takes it out, rubs it again. She keeps repeating the process for each piece of clothing immersed in the water and soap. “I had a washer in Burundi. I did not have to handwash my clothes back home. Here I have to do it because we can use the washer only one day a week. That's the center policy. I can't wait that long, which is why I take advantage of having my own bathroom in the room.” Kelly lives with her husband Darnel in Banja Koviljaca. Their room is located on the top floor of the center. Those who live on it are considered ‘privileged’ because each room has its own bathroom. Refugees living on the lower floors have to share a bathroom. “I remember when my mom was doing the laundry by hand. I am using those

memories to repeat the process and do what my mother did when I was a child,” Kelly tells me while standing hunched over the plastic tub.

The idea of practice-as-entity and practice-as-performance offers a means of conceptualizing both stability and change of social practices across space-time (Shove, Pantzar, and Watson, 2012). Specifically, it elucidates how social practices in different locations intersect and change through past and present bodily memories, cultural expectations, and beliefs (Maller and Strengers, 2013), while recognizing the multiple ways of ‘doing’ practice (Shove, Pantzar, and Watson, 2012). By paying attention to practices as entity and performance, researchers can study them empirically as they are carried out and performed by individuals (*carriers*) and explain and investigate change and stability without prioritizing the recursive relationship between agency and structure (Shove, Pantzar, and Watson, 2012:7). Kelly would not have been able to do her laundry without the recognizable conjunction of elements - such as the plastic tub, soap, and clothes, bathroom - consequently figuring as an entity, specific competencies put in motion, and, finally, the evocation of various meanings while doing the laundry, such the feelings, memories, and interpretations of her mother performing the very same practice. In this way, we can understand how daily routines may change, disappear, and/or come to life again over time and under different social circumstances and cultural schema through performance, the combination of elements, and inclusion of new ones into practice (Pink, 2012; Maller, 2015). Thus, by considering the ongoing dynamics of everyday life through the lens of RSPs, particularly in highly stressful living conditions, we ought to acquire a more profound and nuanced understanding of their effects on daily structures, social values, meaning, and health, while simultaneously shedding light on the complex co-

constructing relationship between structure and agency in the lived experience in the realm of the ordinary.

6.4 Bridge over challenging times - let all know we are not alone

We are social beings heavily relying on social relationships and social interactions that give sense to and frame our everyday lives. Migration, however, often entails a profound break with customary circumstances of everyday life, including disruptions in social interactions and relationships occurring via daily social practices (Blair, 2001; Gottvall et al., 2019, 2020; Mahar, 2010). Ahmed, an Iranian man of around 50, came to Serbia six months ago. He left his home country because of his government's strict religious practices that he simply refused to take part in and perform. Ahmed explains that not practicing religion and believing in another God is considered 'haram' (a sin) in Iran, so he decided to leave his homeland. I met Ahmed in front of the Commissariat's barracks, where the offices are located. It was around 9 am when we started walking towards his room. He lives alone in one of the barracks situated close to the center's main entrance. The room was bright; the table with a neatly stacked small hot plate, a couple of glasses, dishes, and a rice cooker was left to the door; there was also a big closet and Ahmad's mattress covered with a blue-gray bedspread. His closet played a dual role: the left side was reserved for Ahmed's clothes, whereas the right side contained spices, rice, sweets, fruit, and vegetables. He also cooks in his room, mostly rice, which he combines with the food he gets in the cafeteria.

Ahmad's entire family lives in Iran. He also left his girlfriend, Leila, back home. The phone rang; it was Leila calling. Ahmad contorted his face into a smile, "Aziz-am,"

(my dear) he says. They spoke in Persian, and, although I did not understand their conversation, I could hear happiness, joy, and love in their voices. I asked Ahmad how he had met Leila. He tells me that he met her online three months ago. Ahmad also tells me that they talk every day for hours – that he pretty much looks forward to their long Skype conversations. I asked him about his family in Iran and whether he kept in touch with them. “I talk to my siblings twice a week. I have five brothers and three sisters,” he says. We talked about his social interactions and relationships in the center. “I don’t want to make friends in the center. I don’t trust the people here. I have a few friends outside the center. I speak good Serbian, Russian, and English, so my friends who need help renting a room in a hostel or a private apartment call me to interpret for them,” he continues, “My neighbors from Syria live in the room across mine. They have a young boy, but they fight all the time. I can hear the mother and the son crying every day. That’s not a good environment for a child to grow up in. They have marital problems,” Ahmad explains. He also tells me about his other neighbor, a pregnant Afghani woman. “I don’t understand why a pregnant lady goes three times for the gate to cross into Hungary. That’s not good for her and the baby. It’s very stressful,” he expresses his opinion and continues, “People in the center come and go. You can’t make friends with someone who plans to stay for a short period before trying to continue his journey.”

Unlike Ahmad, Yara likes to spend time with her neighbors from the barracks. She came from Syria to Serbia with her husband and three children, one son and two younger daughters. It was around 1 pm when I came to Yara’s room. I knocked on the door; Yara opened it and greeted me in Arabic with a big smile on her face, “Kefak, Jelena” (How are you, Jelena). I smiled back and responded in Arabic by saying, “Shufi

Mafi, Yara” (I am good, Yara). I learned this expression from my good Iraqi friend, whom I met almost eight years ago when I came to the U.S to study for my Masters in International Peace Studies at the University of Notre Dame. I asked my interlocutors to teach me how to count and ask someone their name, age, country, educational level, religion, and marital status in Arabic. This is where my ability to communicate in Arabic ends with Yara, who doesn’t speak English. But, this minor obstacle, apparently did not prevent us from understanding each other. She hand gestured the invitation into the room, motioned me toward a place on a mattress on the floor covered by a light brown blanket, where I could sit and pointed at a pillow to lean on against the wall. Her two daughters were sitting and playing on the bunk bed on the left side of the room. We greeted each other, “Salam Aleikum,” (a traditional Arabic greeting, which means “Peace be upon you”), I uttered as I was entering the room. I sat on the mattress when Yara raised a coffee pot, asking me nonverbally if I would like to join her for a cup of coffee. She had made it for herself a few minutes before I came into the room. I nodded ‘Yes,’ and thanked her in Arabic, “Shukran.”

Before I could finish sipping my delicious black Serbian coffee that Yara made for me, we heard a knock on the door. It was Yara’s neighbor and friend. She came with her young daughter. We greeted each other in the traditional Arabic way, but I could see surprise and confusion in her eyes, followed by a question referred to Yara. Based on Yara’s gestures and directed gazes toward me, I concluded that she was trying to explain to her friend that I would be spending a few hours in her room observing their daily life and social practices. Yara’s friend’s confusion was quickly replaced by a smile as she proceeded to sit on a mattress next to the window, diagonally from the place where I was

sitting and enjoying my black coffee. Yara and her friend were chatting when we heard another knock on the door. Yara opened the door and saw three of her neighbors and friends standing outside the room. Two of Yara's friends brought their children along. They came in and saw me sitting on the mattress close to the door. I saw the same surprise and confusion on their faces as I saw a few minutes before with Yara's other friend. It felt almost as *déjà vu*. They were walking toward the mattress next to the window to join Yara's seated friend, undoubtedly asking questions about me. Yara said something in Arabic, I guess, explaining why I was in the room, when all three newly arrived friends suddenly smiled at me. I smiled back. Yara's friends' children joined Yara's daughters on the bunk bed; they played while their moms were chatting. I was fascinated by how quickly Yara and her friends stopped paying attention to me and forgot about my presence in the room. They were talking, laughing, playing music, and singing; they were just simply having fun. I was captivated by their engagement in various RSPs falling into the social domain. I felt they totally disregarded the reality of living in the asylum center, like they were back home and took me with them to their living room.

In his ethnographic study about the refugees' everyday life in the Buduburam camp in Accra, Ghana, Trapp (2018) notes the importance of social relationships in making ends meet. According to him, a greater responsibility is placed on refugees to meet their own needs and provide the bulk of their food since the food rations cover only a portion of their diet. In the state of moderated humanitarian aid, "social relationships, 'petty trade,' and transnational remittances constitute vital livelihood strategies" among refugees in the camp (96). An ability to give and receive and engage in daily social interactions proves critical to refugee livelihoods. For instance, taking care of children

whose parents do not reside in the camp is a typical manner of procuring a distributive outcome and building social capital (103). Therefore, both social relationships and exchanges among refugees become a way of obtaining resources, having more control over their lives, and mitigating the encumbrance of long-term encampment.

Social relationships and social interactions – which Bourdieu (1986:22) defines as social capital, the aggregate of the actual or potential resources and “a continuous series of exchanges in which recognition is endlessly affirmed and reaffirmed” – have a dual role. While being a critically important contributor to good mental and physical health, social relationships and daily social interactions help us structure our everyday life, afford a sense of continuity, and maintain social reality. Transient refugee populations find themselves in qualitatively unique situations and predicaments (Malkki, 1992), often accompanied by the dynamics of losses and interruptions in rebuilding and upholding social relationships and interactions while in exile. Despite these adversarial and unfavorable social circumstances, refugees actively seek to recreate and maintain strong social bonds and family cohesion (Brun and Fábos, 2015; Farzana, 2017; Montclos et al., 2000). Ahmed and Yara demonstrate their relentless fight to maintain intimate and meaningful relationships and interactions that structure their daily life and mitigate ongoing psychosocial stress.

Encouraging social bonds and interactions provides refugees with a safe environment where they can spend their time together, care for children, eat and drink together, and experience “normal moments” (Oka, 2011: 235), while negotiating the difficult conditions of life in a camp. The family, neighbors, and friends are the prominent means helping refugees cope with their difficult circumstances (Riley et al.,

2017) and represent a significant source of social capital for refugees to indulge in various daily activities and RSPs in order to take control of their lives in the world that is never quite the same, but instead ever-changing. The primary idea behind this dissertation project is to test whether engagement in and valuation of RSPs indeed afford a sense of regularity, control, and structure to daily life in asylum centers and serve as drivers of better health. In the following section, I operationalize and demonstrate the interplay between the RSPs and their psychobiological impacts by examining these relationships using first descriptive statistics and then multivariate correspondence analysis (MCA).

6.5 The summary impact of routinized social practices (RSPs)

In this chapter, I also present the data related to the summary impact of RSPs in relation to mental and physiological stress of transient refugee populations living in two asylum centers in Serbia. Specifically, I analyze the RSP list administered to my interlocutors, mental health surveys (Cohen's Perceived Stress Scale, PSS_negative subscale; Refugee Health Screener, RHS-15; and Impact of Event Scale-Revised, IES-R), social dynamics (Friendship scale, FS), and Epstein-Barr virus (EBV) antibodies and blood pressure biomarkers. In doing so, I ask whether engagement in RSPs has meaningful consequences for the refugees' daily structure, mental and physical health.

I predicted that refugees with greater engagement in RSPs in some or all three domains would have lower scores on mental health scales (PSS, RHS-15, IES-R, and FS), higher scores on FS, and exhibit greater physiological profiles, as measured via EBV and BP.

6.5.1 Data collection

I previously described the ethnographic data collected via semi-structured interviews, mental health measures, and biomarker data (Chapters 3, 4, and 5). Chapter 6 integrates the ethnographic data collected via the RSP list and participant observation with mental health and biomarker data. Here, I describe the RSP list and measures of blood pressure:

I asked 24 out of 98 participants to fill a pre-formed list of daily activities fitting into three domains: personal, social, and labor, every day during one week. This pre-formed list I developed was based on my previous work in this area and drew from the interlocutors' accounts of how they organized different types of practices in their daily lives and the order in which they engage in these activities. The RSP assessment was also used to measure the frequency of RSPs to help us account for the breadth of habitual activities individuals engage in across the day. This measure reflected the relative value individuals place on each RSP (importance; How important is this activity for you? Why?") and the frequency of the RSP in each domain (How many times have you engaged in this activity?). In addition, I was observing participants engaging in their daily social activities in privacy (in their rooms) and in public for approximately eight hours per person over one, or in some cases, multiple field seasons.

6.5.2 Blood pressure measurement

Blood pressure (BP) was measured with an Omron 10 series wireless upper arm automatic monitor. Three consecutive blood pressure readings were obtained before I collected blood spots. Before each BP measurement, interlocutors were seated with their

left arm supported at heart level and asked to relax for at least 10 minutes and not consume tobacco or caffeine for at least 30 minutes. A mean blood pressure score was created from the average of all three BP readings.

6.5.3 Data analyses

First, primarily for descriptive purposes, I ran Pearson's bivariate correlations for key study continuous variables (see Table 1 for full results). Next, I used multiple correspondence analysis (MCA) contextualized within ethnographic data to understand how transitional spaces of the asylum center designed for temporary accommodation are turned into places through RSPs centered around the interface between daily practices in personal, labor, and social domains that bring back some semblance of normalcy, regularity, and control. I used MCA to circumvent the problem of interdependence of qualitative variables in affecting individual engagement in RSPs and health (Oka and Gengo, 2020). MCA is specifically appropriate for use on categorical data rather than continuous numerical values. I used MCA to display the correlational or associative structure of variables, allowing for the analysis of how individual observations relate to each variable and categorical variables based on their relative positions and distribution along the dimensions in space and (Costa et al., 2013; Hoffman and De Leeuw, 1992). MCA was used to "represent and model datasets as "clouds" of points in a multidimensional Euclidean space," while "describing the patterns geometrically by locating each variable/unit of analysis as a point in a low-dimensional space" (Costa et al., 2013:1-2). This method is particularly powerful in providing a rapid and informative means of visualizing data and quickly identifying and understanding the most significant

associations between variables in “studies where a large amount of qualitative data is collected, often in pair with quantitative data, and where qualitative variables can become suboptimized in the data analysis” (Costa et al., 2013:2).

6.5.4 Results

6.5.5 Bivariate correlations

Bivariate correlations showed that the relative value refugees placed on each personal and labor domains was positively correlated with the length of their journey (personal domain importance, $r = 0.42$, $p = 0.039$; labor domain importance, $r = 0.55$, $p = 0.005$), while their blood pressure was negatively correlated with the length of their journey (systolic blood pressure average, $r = -0.58$, $p = 0.002$; diastolic blood pressure average, $r = -0.53$, $p = 0.007$). The refugees’ investment in RSPs in the personal domain was positively correlated with age (personal domain frequency, $r = 0.60$, $p = 0.002$), and negatively correlated with their EBV (personal domain importance, $r = -0.41$, $p = 0.043$). The refugees’ investment in the personal domain was negatively correlated with reported recent perceived stress scores (personal domain frequency, $r = -0.41$, $p = 0.045$), as well as their EBV (personal domain frequency, $r = -0.41$, $p = 0.043$). The refugees’ investment in the social and labor domains were positively correlated with their relative values placed on those two domains (social domain frequency, $r = 0.72$, $p = 0.000$; labor domain frequency, $r = 0.88$, $p = 0.000$; see Table 1 for full results). Because of the small sample size and limitations of regression modeling, I turned to a statistical ordination technique for understanding how multiple variables can have impacts on each other and on the people reporting these findings: MCA.

TABLE 6.1

PAIRWISE CORRELATIONS FOR KEY STUDY CONTINUOUS VARIABLES (N=24)^a

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
(1) Journey length (24)	1.000 (24)															
(2) Time in Serbia (24)	0.12 (24)	1.000 (24)														
(3) Age (24)	-0.03 (24)	-0.08 (24)	1.000 (24)													
(4) IES-R Total Score (24)	-0.19 (24)	0.04 (24)	-0.02 (24)	1.000 (24)												
(5) RHS-15 Total Score (24)	0.20 (24)	-0.07 (24)	-0.15 (24)	0.80*** (24)	1.000 (24)											
(6) FS Total Score (24)	0.04 (24)	0.15 (24)	-0.05 (24)	-0.39 [†] (24)	-0.40 [†] (24)	1.000 (24)										
(7) PSS Neg. Total Score (24)	0.06 (24)	-0.09 (24)	-0.27 (24)	0.65*** (24)	0.70*** (24)	-0.37 [†] (24)	1.000 (24)									
(8) Log EBV (24)	0.03 (24)	-0.28 (24)	-0.14 (24)	0.19 (24)	0.36 [†] (24)	-0.25 (24)	0.07 (24)	1.000 (24)								
(9) Systolic BP average (24)	-0.58** (24)	-0.15 (24)	0.18 (24)	-0.18 (24)	-0.31 (24)	0.04 (24)	-0.29 (24)	-0.11 (24)	1.000 (24)							
(10) Diastolic BP average (24)	-0.53** (24)	-0.27 (24)	0.22 (24)	-0.04 (24)	-0.16 (24)	0.003 (24)	-0.18 (24)	0.20 (24)	0.71*** (24)	1.000 (24)						
(11) Personal domain importance (24)	0.42* (24)	0.25 (24)	0.15 (24)	-0.33 (24)	-0.34* (24)	0.10 (24)	-0.41* (24)	-0.13 (24)	-0.25 (24)	-0.19 (24)	1.000 (24)					
(12) Social domain importance (24)	0.29 (24)	0.23 (24)	-0.35 [†] (24)	-0.002 (24)	0.007 (24)	0.17 (24)	0.11 (24)	-0.02 (24)	-0.18 (24)	-0.09 (24)	0.20 (24)	1.000 (24)				
(13) Labor domain importance (24)	0.55** (24)	0.30 (24)	-0.07 (24)	-0.17 (24)	0.05 (24)	0.30 (24)	0.05 (24)	0.28 (24)	-0.42** (24)	-0.13 (24)	0.35 [†] (24)	0.35 [†] (24)	1.000 (24)			
(14) Personal domain frequency (24)	-0.13 (24)	0.03 (24)	0.60** (24)	0.14 (24)	-0.16 (24)	-0.12 (24)	-0.06 (24)	-0.41* (24)	0.05 (24)	0.10 (24)	0.31 (24)	-0.12 (24)	-0.26 (24)	1.000 (24)		
(15) Social domain frequency (24)	-0.20 (24)	0.37 [†] (24)	-0.27 (24)	0.12 (24)	-0.002 (24)	0.16 (24)	0.03 (24)	-0.19 (24)	0.19 (24)	0.14 (24)	-0.16 (24)	0.72*** (24)	0.02 (24)	-0.01 (24)	1.000 (24)	
(16) Labor domain frequency (24)	0.39 [†] (24)	0.27 (24)	-0.05 (24)	-0.008 (24)	0.15 (24)	0.19 (24)	0.10 (24)	0.20 (24)	-0.35 [†] (24)	-0.05 (24)	0.22 (24)	0.14 (24)	0.88*** (24)	-0.22 (24)	-0.009 (24)	1.000 (24)

Pearson's r is listed in the top row of each cell with the bivariate sample size in parentheses in the second row. [†] $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

^aThis table is available in the supplementary material.

6.5.6 Multiple correspondence analysis (MCA)

The MCA results showed that RSPs aligned with each other and the interlocutors' demographics (Figure 6.1) while loading opposite to the values of EBV (Figure 6.2). These MCA findings complement ethnographic data showing, for example, a clear divide between men and women, with men's higher engagement and valuation of social and personal RSPs and women being associated with higher concentration in the labor domain and higher valuation of RSPs in the personal domain (Figure 6.1). Also, married couples with children were valued and engaged in personal and labor domains to a lesser extent than single people who placed higher value and were more invested in the social domain. Remarkably, the findings suggest that being a woman with children is strongly associated with higher valuation and investment in the labor domain. In contrast, older single men place higher valuation and investment in personal RSPs, while younger, unmarried men get value and invest more in social RSPs (Figure 6.1). Moreover, the acquisition and valuation of RSPs in all three domains help mitigate psychosocial stress, thereby affording better physiological profiles, as measured via EBV (Figure 6.2).

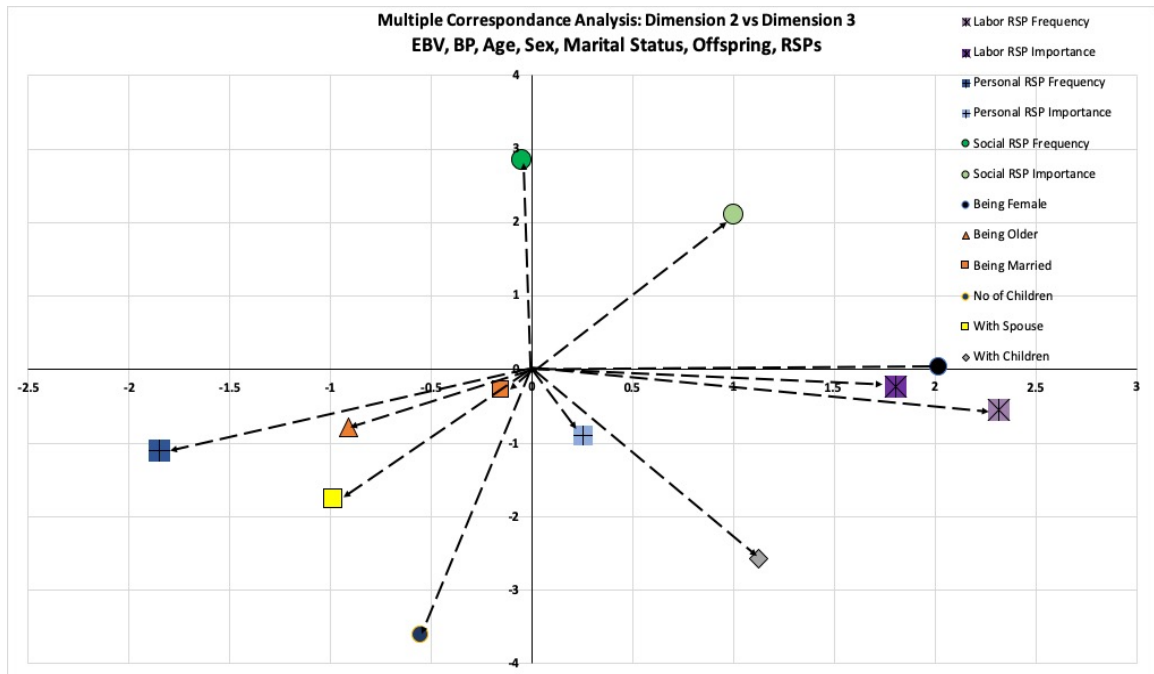


Figure 6.1 RSPs aligned with each other and the participant demographics

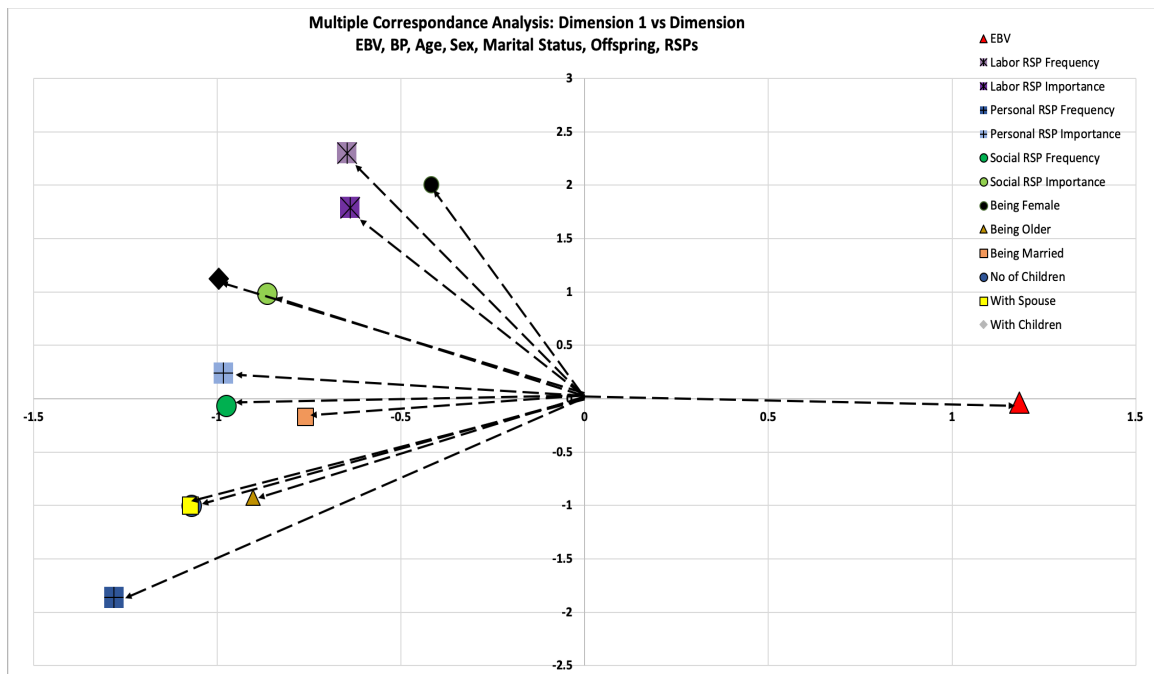


Figure 6.2 RSPs aligned with each other, the participant demographics, and raw EBV values

Furthermore, the MCA results showed a significant clustering of refugees based on their responses on the RSPs list that load prominently on negative Dimension 1 and Dimension 2 (positive and negative). In contrast, EBV loads prominently on positive Dimension 1. This suggests that both the refugees' engagement in RSPs (frequency) and relatively higher valuation of RSPs (importance) might serve to mitigate psychosocial stress resulting from life in administratively confined, liminal spaces – asylum centers in Serbia. Specifically, refugees with higher value and engagement in RSPs (frequency and importance) tend to exhibit lower EBV titers (see Figure 6.3). In addition, the results showed that despite some refugees' relatively higher scores on mental health surveys, the majority of the respondents, who reported higher frequency and importance of engagement in any or all three RSP domains, also exhibited lower levels of stress as measured by EBV. This is perhaps one of the most critical findings because it shows how these everyday routines and activities do indeed bring regularity and help lower stress and even trauma emerging from the journey and daily life in administratively confined temporary settlements. These findings complement prior research in this area that has recognized the importance of daily activities as acts of normalcy and independence in such settings (Brun, 2015; Oka 2011, 2014; Trapp, 2018). Moreover, this analysis shows that RSPs can be operationalized and examined for their potential psychobiological impacts.

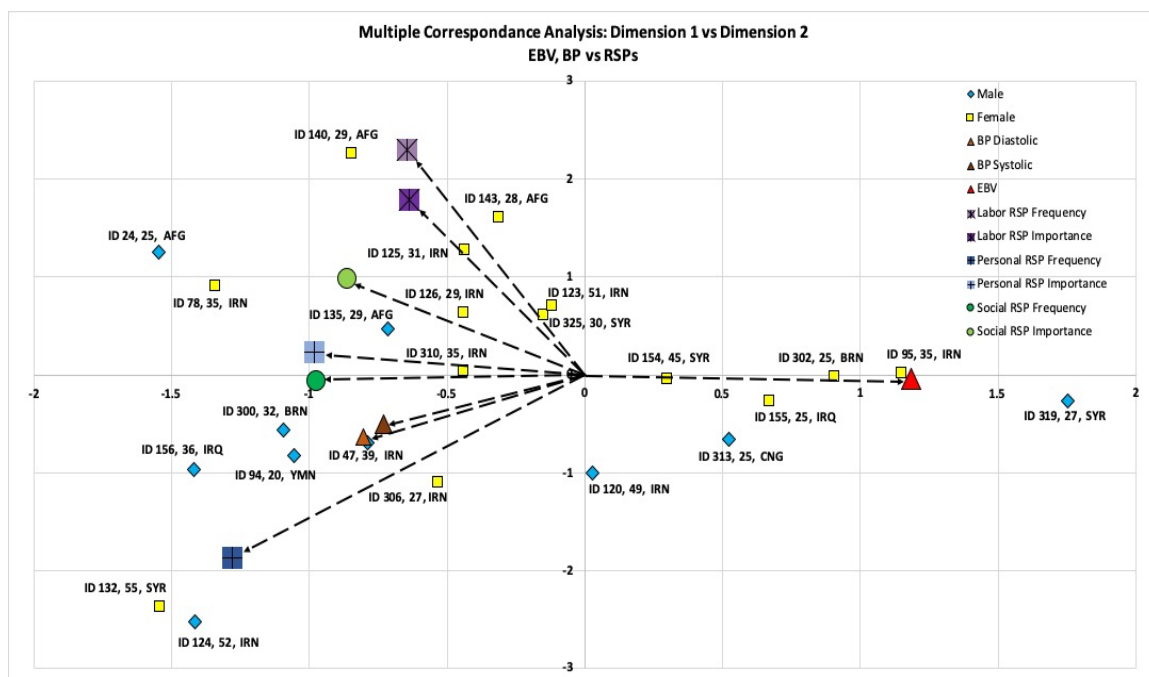


Figure 6.3 RSPs vs. EBV and BP

For example, Khaled (ID 24; figure 6.3) is a young single man in his early twenties from Afghanistan. He holds a job and regularly attends Serbian and English language lessons outside the asylum center “Krnjaca.” Khaled also tells me that he has managed to make friends with people at his job and language school and cultivate a relatively solid group of friends inside the center. His investment in and valuation of the RSPs in both the labor and social domains (a broad social support network) help him mitigate his everyday psychosocial stress and uncertainty as he waits to be reunited with his family in Germany. “I stopped playing the game. I want to go to Germany where my family currently lives, legally,” Khaled says. After his job or school, he usually comes back to the center, where he likes to cook dinner, clean his room, and invite his friends over to spend some quality time with them before he goes to bed. Khaled has been living

in the asylum center for over four years. As he explains, he is waiting to resettle permanently in Germany and reunite with his family; therefore, investing in labor and social RSPs affords him a sense of structure, purpose, and normalcy. As other anthropologists have demonstrated, life continues to flow and resumes normalcy even in liminal spaces where the ideas of ‘life on hold’ and indefinite waiting permeate the refugees’ everyday life (Brun 2015; Oka, 2011). For Afshin (ID 124; Figure 6.3) and Yara’s husband (ID 132; Figure 6.3), who are in their early fifties, engagement in and valuation of the personal domain seem to matter the most. They both smoke and care a lot about their physical appearance. While both tend to be somewhat socially engaged, the ability to engage in personal hygiene practices like they used to back home appears to afford them a sense of regularity and normalcy, while simultaneously serving as mitigators of daily stress. All three men exhibited low EBV titers.

Unlike Khaled, Walid (ID 319; Figure 6.3), a single Syrian man in his late twenties, scored low across all three mental health measures, along with the friendship scale, and exhibited very high EBV titers. He was a soldier in Syria, but he did not want to share this information with anyone in the center. He deserted from the army. He did not want to fight any more against his brothers and sisters. When I spoke to him in his room, he confided “I am afraid that this may scare people, which is why I tend to keep it to myself.” He shares the room with two other young men, two brothers from Syria. But, it seems that having roommates does not automatically imply having friends and trusting them. “I typically spend time on my bed, playing with my phone, listening to music, or talking to my mom and brother. They are still in Syria,” Walid says, as he inhales the cigarette smoke and picks up his cup of coffee. He tells me that he does not feel free in

this center and wants to leave Banja Koviljaca as soon as possible. “The first day I came here, I met the center coordinator who explained the rules. I asked him whether this was jail or not. He hasn’t liked me ever since,” Walid also tells me that he thinks the coordinator is not a good man. He still thinks and dreams about his beautiful home in Syria and family business, but he has at the same time realized that things will never be the same. Walid hopes he will be living a better life in Germany, so making friends or investing in the other two domains seems less important to him, while he is fighting against a sense of being ‘stuck’ in transit, trapped at yet another unavoidable stop on his way to his desired destination.

This analysis also shows that RSPs might be a better indicator of stress mitigation, than even the mental health surveys, along with friendship scale used in this study. There is the example of Kelly (ID 302; Figure 6.3) and her husband Stephen (ID 300; Figure 6.3), from Burundi. Both are young, and report good mental well-being on all three scales and robust friendships (FS scale), and hence might be predicted to have low EBV titers. Yet Kelly’s EVB titers are much higher than her husband’s. The difference is that while they both place a relatively higher value on the importance of RSPs in all three domains, Kelly is less frequently engaged in practicing these RSPs than her husband. Unlike her husband, Kelly does not have many friends in the center; she appears to be an introvert who feels less comfortable being surrounded by unknown people, mainly from other parts of the world. She aches being separated from her family and far away from her homeland. She feels stressed out because she is unable to see her family and friends every day, which impacts on her social engagement and activity in the other two domains. Although he does not call them friends, Kelly’s husband appears to be more socially

engaged with other refugees in the center, having a more comprehensive social network than Kelly. They spend time together, but for Kelly, who is missing her family and friends, spending time only with her husband does not mitigate the stress she experiences every day. While not definitive, the MCA analysis seems to confirm that engagement with RSPs is associated with lower EBV and hence lower psychosocial stress.

To further understand the ways in which the 24 informants engage with RSPs, I removed EBV (since it did not load along any other dimension except positive Dimension 1) as well as BP values because most of the informants had normal BP. In doing so, I examine the distribution of the ways in which the six RSP domains (importance and frequency) loaded against each other and the informants in Dimensions 2 and 3 (Figure 6.4). The results show the following: a) personal RSP frequency loads along negative Dimensions 2 and 3, b) personal RSP importance and both labor RSPs along positive Dimension 2 and negative Dimension 3, and c) social RSP importance loads along positive Dimensions 2 and 3 (Importance), d) while social RSP frequency loads along positive Dimension 3 (and insignificantly on negative Dimension 2; see Figure 6.4).

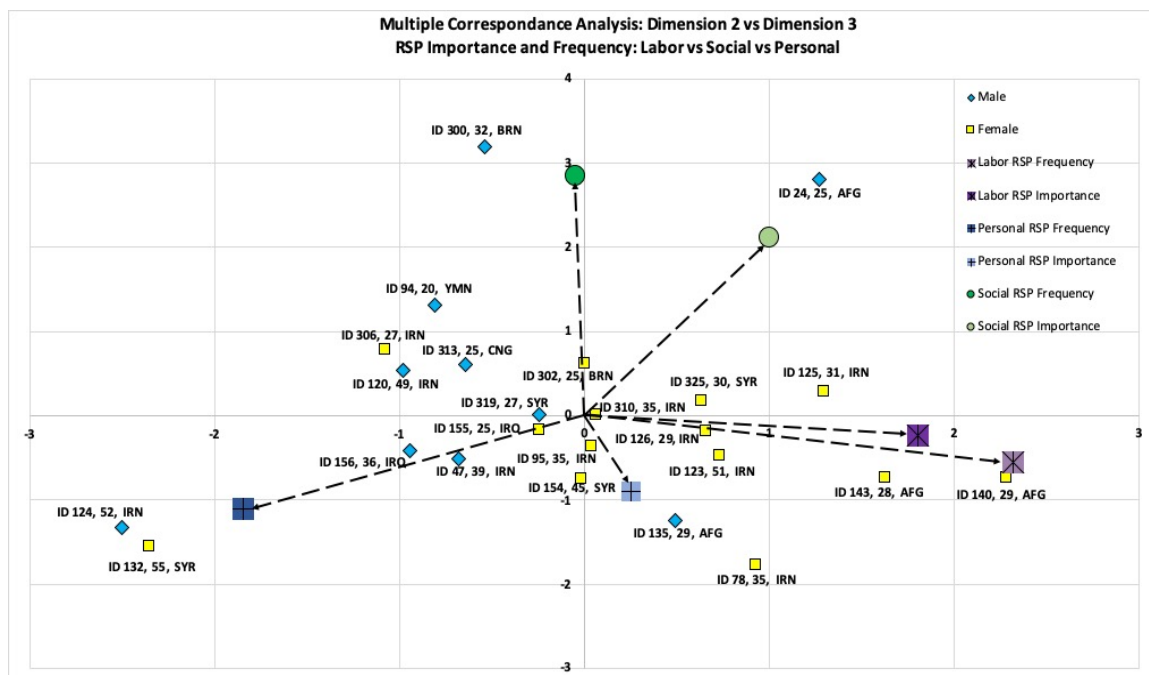


Figure 6.4 RSPs importance and frequency

Zakia (ID 140; Figure 6.4) and Rima (ID 143; Figure 6.4) are married women, who came from Afghanistan to Serbia with their husbands and four and two children, respectively. They both live with their families in Krnjaca. During my observation of these two families, both women were occupied pretty much with domestic labor, heavily invested in work around their children and in the place (the center's room) where they live. They wake up early, take the food from the cafeteria, cook, feed the children, wash dishes, clean the room, and repeat the same process for the other two daily meals. They also bathe their children and prepare them for bed. Rima's husband works on the black market outside the center (he sells shoes at the market), with a few of his friends from the center engaged in the same informal business. He usually comes back to the center at

around 6 or 7 pm, time for dinner, completely exhausted from a long day at work. He tells me that he feels better when he is going with friends, since the police often chase them away, so that he feels relief when he faces them in the company of people he trusts. Actually, Rima's husband is one of his friends with whom he typically buys and sells shoes. They normally go to the market in Pancevo (a city around 15 km away from the asylum center) to buy shoes at lower prices and then sell them at higher prices at a downtown Belgrade market (the market "Zeleni Venac"). They do their business every day in a week, and the profit earned gives their families a sense of independence and stability. As salesmen, they also need to be social and vocal; he tells me if he and Rima's husband want to afford some semblance of financial security, normalcy, and control to their families, they need to be friendly with their customers. While their husbands are at work, Zakia and Rima keep practicing their roles as mothers, while simultaneously fulfilling a larger share of 'household' activities on a daily basis.

In Banja Koviljaca, Amal (ID 310; Figure 6.4) and Zahra (ID 325; Figure 6.4) came from Iran and Syria with their three and two children, respectively. They are both divorced. Amal separated from her husband without her family's permission. She felt she had to leave the country if she wanted to keep her children. Zahra divorced her husband six months into her marriage; she could not recognize the man she had dated for three years. Although her family tried to save their marriage, they realized that the issue between the two of them was insurmountable, and they eventually accepted Amal's decision to divorce her husband and return to the family home. Zahra left her country because of the war. It was Monday morning in February of 2020 when I came to Zahra's room. She was brushing her daughter's hair and helping her son prepare his backpack for

school. A few minutes later, someone knocked on the door. It was Zahra's friend who came with her daughter ready for school. Zahra and her friend were having a conversation about meeting the center's employee who would accompany them and their children to school. I asked Zahra if I could join them and she nodded in confirmation. We left Zahra's room and descended to the center's main hallway. I saw Amal standing with her two older children, the center's employee, and a few other women with their kids. The school is located in downtown Banja Koviljaca, ten minutes away from the center by foot. We left the center and started strolling toward the school. The center's employee was joking and laughing with the kids. On our way to school, we saw a family (parents and four kids) sitting on the pavement. They heard about the asylum center and were looking for a place to spend the night. The center's worker gave them directions and the coordinator's name to talk to about accommodation. We went on our way. In school, we all met the school pedagogue and psychologist. They organized a small welcome reception for children. The school principal came as well to meet the kids. He appeared happy to have refugee children in his school and started talking about their teachers and grades. The children appeared excited to have the opportunity to continue their education while their mothers were extremely pleased that their children would have a future. The reception and exchange of information lasted around half an hour. As we all made our way back, the children were jumping, their mothers talking among themselves, while the center's employee and I discussed the event at school. It was lunchtime when Zahra told me that her children would not eat the food served in the cafeteria. It was not the food per se, but the way it was cooked and prepared. It differed from the food they used to eat back home. The other day, Amal told me about the same problem with the food and that

her children refused to eat it. They both cook in their room in secrecy because of their children. They want their children to be happy and fed. Zahra and Amal also told me that they clean their rooms every day. Their daily life revolved around their children. Like Zakia and Rima, they were heavily invested in looking after their children and their ‘household’ chores. It appeared that, regardless of the partnering status, for these women, their children and their happiness were their top priority. Thus, it is not surprising that the MCA results complement ethnographic data showing a divide between valuation and engagement in social, labor, and personal RSPs for women and men living in those two asylum centers.

6.6 Parting thoughts

In this chapter, I present a biocultural model that offers a nuanced understanding of the complexity underlying the emergence, persistence, and endurance of RSPs in conditions of transiency and instability in relation to mental and physical health. By developing and utilizing RSP measures, embedded in rich ethnographic data and with the physiological markers, I empirically evaluated the role of routine action in everyday life, health, and stress mediation. Furthermore, I emphasized the importance of considering a dynamic dialectical relationship between social structures and agency associated with biosocial responses, while simultaneously highlighting the significance of considering the materiality of everyday, routine activities and habits across transient refugee populations.

Because refugees are often depicted as passive victims within static liminal spaces and leaching on the generosity of the host state, I address the question of how RSPs impart structure and predictability, thereby affording a perception of control and certainty

in the daily lives and alleviating psychosocial stress in transient refugee populations living in two asylum centers in Serbia. Daily activities, such as cooking, walking, going to work each day, are figured as coordinated activities by webs of various significant and interconnected dynamics (Reckwitz, 2002; Schatzki, 2002) that make everyday life structured, normalized, and regulated in different spheres, including professional, social, and personal (Smart, 2007; Shove et al., 2012). By engaging in RSPs, the refugees' agency and practices remain in a recursive relationship with the center's structures shaping not only what they actually do and think in particular places and at particular times, but also constructing sociocultural conditions conducive for people to challenge these static arrangements through daily practices and survival strategies, thereby experiencing better health outcomes. In the realm of the ordinary, RSPs signify emergent social phenomena that serve as means dignity, normalcy, and regularity as much as mitigators of psychosocial stress and drivers of health across and within refugee spaces.

While previous studies in this area have pointed out that refugees relentlessly fight against images of helpless victims and blank slates by engaging in economic, political, and other activities generating a sense of control, normalcy, and dignity (Brun, 2010, 2015; Farzana, 2017; Oka, 2011, 2014; Trapp, 2018), there remains a lack of engagement with the complex and bi-directional interplay between the social processes underlying RSPs and their biological impacts, especially among encamped refugee populations. If we slightly shift our focus to social practices as distinct entities with their trajectories away from behaviors of displaced people, attention to the real world of lived experience replete with its own contingency - the lived, social, and material dimensions of daily life - offers a deeper understanding of how refugees have the capacity to exercise

their agency and act in the present, defy structures of transiency, and engage in practices promoting regularity, resilience, and well-being. Moreover, this dissertation project shows how RSPs serve as a source of stability and regularity to refugees, who have decided to continue their journeys to their desired destinations legally, and equally as a source of energy and recovery for those willing to keep playing the ‘game’ on their migratory trajectories.

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CHAPTER 7:

DISCUSSION AND CONCLUSIONS

7.1 Introduction

Today, there are approximately 79.5 million forcibly displaced people worldwide, including 26 million refugees (UNHCR, 2020a). As daunting as these numbers appear at first glance, they do not convey the complex reality hiding behind current migratory flows. As legal channels of migration progressively diminish, people fleeing war, poverty, and persecution in their country of origin must often embark on long, dangerous, and clandestine journeys and risk their lives as they attempt to reach safety across international borders. In doing so, refugees are compelled to negotiate imposed state policies around migration, closed borders, and stricter regulations generating increasingly demanding and ever-changing circumstances in which refugees often have little control and make choices within a very narrow range of possibilities. Having to use smuggling networks, being compelled to cross the Mediterranean in makeshift boats, and/or walk for days across rugged terrain speak to the social, political, and economic implications of a more heavily militarized and bordered world (Albahari, 2016; Belloni, 2020; Vogt, 2018).

Fleeing people who manage to cross multi-national borders to reach safety further afield are routinely confined in temporary settlements, such as refugee camps and asylum centers, that provide shelter and basic necessities while awaiting repatriation or

resettlement (El-Shaarawi, 2015; UNHCR, 2017). The latest figures reveal that more than 6.6 million refugees and people in refugee-like situations live in these transitional spaces (UNHCR, 2020b). These administratively managed spaces exemplify the most standardized, planned, and formal response to migration and mass displacement, which is often an outcome of war, economic exclusion, and/or political struggle. Moreover, they often turn into permanent urban settlements in which life is characterized by persistent boredom, volatility, and violence (Agier, 2011; Brun, 2015; Oka, 2011). These constructed environments of despair are conducive to processes that aim to strip people of their identities as individuals and lump them into a homogenous group. Built on the margins of cities, these temporary settlements usually far from urban spaces also serve as the mechanism through which high planetary separation is engendered (Agier, 2008), and compulsory idleness and a destructive cycle of dependency perpetuated (Oka, 2014). In this way, this symbolic wall built between the host and refugee communities functions as a divider of two worlds.

Refugees residing in these liminal transit spaces are seen as static and passive in their longing for the past and devoid of agency (Brun, 2015; McDowell, 2013). They are routinely portrayed as homogenous and uniformed groups, considering only their physical presence stripped off their belief, ideas, and practices. Agier (2008:8) suggests that refugees represent a population defined by one common feature, that of a 'victim,' a population reduced to the sole imperative of keeping alive far from home, in places of waiting. Human beings who have become both victims and undesirables occupy liminal spaces for an extended period while simultaneously experiencing protracted uncertainty and lack of control over their present and alternative futures. Indeed, refugees feel stuck

in the present, full of unpredictability and uncertainty, in which they do not want to be while awaiting a future that is frequently far too distant.

However, even in these static liminal spaces, refugees have the capacity to exercise their agency and act in the present. Their agency and practices are in a dynamic dialectical relationship with social structures shaping not only what they actually do and think in particular places and moments, but also constructing sociocultural settings in which refugees can challenge these static arrangements through routinized social practices and survival strategies. Through small initiatives and daily social practices, such as participation in local economies, cooking and cleaning, refugees challenge an image and discourse depicting them as passive recipients of supplied subsistence, while simultaneously transforming into active agents contemplating ways and means to meet their needs beyond mere subsistence and regain control of their lives (Brun, 2010, 2015; Farzana, 2017; Kibreab, 1993; Oka, 2011; Turner, 2005).

The primary goal of my dissertation is to outline and operationalize the idea of Routinized Social Practices (RSPs) and their psychobiological effects on transient refugee populations living in confined, liminal settlements. Although anthropologists and other social scientists have examined the role of daily activities serving as drivers of social cohesion, continuity, and adaptability to the volatility and instability of the encampment process (Jacobsen 2002; Oka 2011), they have not considered the summary impact of RSPs, particularly in relation to refugee mental and physical health. I suggest that through RSPs, agency, and decision-making processes, transient refugee populations actively strive to impart daily structure, affect cultural meanings, mitigate psychosocial stress, cope, and cultivate resilience to adversity. Like many scholars before me, I also

aim to problematize a traditional dichotomy of ways in which the migration phenomenon tends to be explained, and unveil how the intersection of structural constraints, restrictive policies, and enhanced borders has been shaping the refugees' journeys, lived experiences, mental health, and psychobiology.

Building on the rich body of literature of migration perspectives and human displacement, I consider structural constraints on mobility that create conditions conducive to clandestine multi-national border crossings to Europe, while serving as the mechanism for the exclusion and illegalization of displaced people. Next, I use a practice-oriented, biocultural approach to the consideration of the importance of daily practices, social interactions, and lived experiences in co-constructing niches of coping, recovery, and resilience among transient refugee populations that may affect their life trajectories as they await permanent resettlement or the next 'game.' I divide RSPs into three primary domains, social, personal, and labor, based on my previous work in this area focusing on how refugees organize various types of practices in their daily lives and their engagement in these activities. Going a step further, I suggest RSPs have meaningful consequences for the refugees' daily structure, regularity, and normalcy, while simultaneously indicating capacity to variously mediate pathways between stressful, volatile, and unstable migration and encampment process, and mental health and psychobiology. Thus, a deeper and more nuanced understanding of how structural and social inequalities intersect with people's everyday lives and practices of resistance may be crucial to more than just those characterized as refugee populations.

7.2 The realm of the ordinary caught in transiency

7.2.1 Stories and lived experiences of the migratory journey of transient refugee populations in Serbia

The central experience for many fleeing individuals embarking on fragmented, dangerous journeys is characterized by uncertainty, physical hardship, and recurrent psychosocial stress, accompanied by structural constraints, restrictive policies, and bordering practices that continue to serve as a mechanism of division and exclusion imposed by states (Johnson et al., 2011; Parker and Vaughan-Williams, 2012). For refugees living in asylum centers in Serbia, who have undergone this highly risky process of fleeing their homes to reach Europe, such traumatic experiences and hardships constitute their lived realities that carry unique painful memories and have implications for their mental and physical health.

In Chapter 3, I utilized the emic perspective in relation to quantitative analyses to unpack the particularities and complexities of clandestine transit journeys, playing the ‘game,’ and experiences paved by stress, risks, and trauma. I took a step further in Chapter 4, considering the impact of pre-flight trauma and migratory journey on the refugees’ mental well-being, physical health, and downstream physiological dysregulation in greater detail. Focus on the non-linearity of migratory transit processes and their potential impact on refugee health revealed the ways refugees conceptualize, understand, survive, and cope with this life-changing event with substantial health consequences.

Rarely have anthropological studies investigating migration employed a mixed-methods approach to understand the complex interplay between state and non-state

practices of control, power, and exclusion, and everyday lived experiences, social interactions, and health, particularly in the context of transit migration. Many anthropologists have highlighted the significance of biocultural approaches providing frameworks through which the connections between the social and biological worlds can be modeled (Dressler 2005; Fuentes 2017; Goodman and Leatherman 1998; McDade 2002). Building upon this rich body of biocultural studies, I also take an integrative approach to investigating human experiences and individual differences of transient refugee populations in social and biological domains. Thus, combination of rich measurements of social and cultural contexts gleaned through ethnographic research and physiological information obtained from a collection of biomarkers enables a better understanding of how social contexts “get under the skin” to shape mental well-being and physical health (McDade 2009).

In my ethnographically contextualized Chapter 3, I elucidated the emic perspective on the unauthorized migratory journeys to Europe and the refugees’ increased vulnerability to poorer mental health profiles, while proposing a simplified illustration of the ‘game’ model and a set of strategies, decisions, and outcomes for its players, refugees and border police, and the role of smugglers, as enabling agents. Border closures, enhanced regulations, and stricter EU policies impeded refugees from migrating legally and safely and forced them to embark on risky journeys and use smuggling networks to reach their desired destination (Arsenijevic, 2017; Freedman 2016; Mandic and Simpson, 2017; Sandalio, 2018). In particular, my findings suggest that refugees had experienced numerous physical challenges, recurrent psychosocial hardships, and egregious violations of their human rights on their mobility journeys, especially while playing the ‘game,’

leading to poorer mental health outcomes among women and those whose journeys had been longer and more traumatic.

I then proceeded, in Chapter 4, to examine how pre-flight and journey-related trauma and recurrent psychosocial stress interrelate not only with the refugee's mental well-being but with their physical health and psychobiology as well. Given the variation in the refugees' psychosocial experiences during their journeys and upon arrival, my findings showed the associations between such experiences permeating refugee transit migratory trajectories and poorer mental and physical health outcomes in such populations. Specifically, the study results revealed that recently settled refugees, who reported they had experienced trauma during their long, arduous journeys, had greater recent perceived stress and physiological effects on the neuroendocrine system in the form of elevated cortisol (CORT). I also found that refugees, who had experienced longer journeys, reported higher recent perceived stress, as well as poorer mental and physical health. Notably, the study revealed sex differences, as evidenced by the refugee women's poorer health outcomes and lower CORT compared to men, which complemented prior research that had reported differences between men and women in responses to stress with regard to the HPA axis and PTSD symptomatology (Breslau et al., 1997; Breslau, 2009; Olf et al., 2007).

These findings have important implications for understanding individual and sex differences in health outcomes and psychobiological implications of migration-related trauma, specifically of the journey and the 'game' among refugee populations in more intermittent transitional stages of migration. Unlike earlier work in this area that focused on the pre-and post-migration contexts, migratory journeys remain a relatively poorly

understood and under-researched theme in refugee and migration studies (BenEzer and Zetter, 2015). By stressing the role of the clandestine journey in the refugees' experiences, lived realities, and poorer health profiles, I suggest that this facet of contemporary human (transit) migration has the potential to affect different stages of their migratory and developmental trajectories across their lifespan. By deepening our understanding of migratory transit processes, whilst focusing on the journey, we can make minor fractures in and problematize state regulations and structural constraints permeating the refugees' everyday lives and lived realities upon which various support interventions for reducing the harmful effects of their ordeal may be implemented.

7.2.2 In the transient world of disrupted social dynamics

Refugees' pursuit of protection and safety outside their national borders is often permeated by multiple losses and traumatic experiences before they flee, during their journeys, and in post-migration settings (Zimmerman et al., 2011). Precarious structural, political, and material circumstances accompanied by the psychosocial stress refugees experience before and as a result of their flight undeniably mark their lived realities, mental well-being, and physical health. Moreover, these circumstances instigate a fundamental break with the well-known conditions of their daily lives (Arsenijevic et al., 2017; Lindert et al., 2016; Strang and Quinn, 2019), including sources of social support and considerate social relationships (Hirschfeld et al., 2000; Miller et al., 2002). The dynamics of interrupted relationships and support in the refugee social world affect their physical and mental health (Cacioppo et al., 2006; Hawkey and Cacioppo, 2010; Steptoe et al., 2013).

In general, social support is considered a critical factor for maintaining good health and well-being (Cohen and Wills, 1985; Cruwys et al., 2013; Uchino, 2006). Despite its varying definitions, the health-promoting effects of social support are typically considered in the context of perceived and/or received support (Barrera, 2000; Dunkel-Schetter and Bennett, 1990; Uchino, 2009; Uchino et al., 2012). While the perceived availability of social support enhances an individual's resilience and coping abilities (Kawachi and Berkman, 2001; Shaw et al., 2004; Torres and Casey, 2017; Uchino, 2009), the received support is beneficial if the type of support provided (e.g., informational, instrumental, emotional) matches the stressful situation's challenges (Cutrona and Russell, 1990; Uchino, 2009). Thus, through distinct, albeit not mutually exclusive pathways, social support can influence health by encouraging healthier behaviors (Uchino, Cacioppo, and Kiecolt-Glaser, 1996; Uchino et al., 2012) and/or promoting psychological processes associated with appraisals, emotions, and feelings of control (Uchino, Cacioppo, and Kiecolt-Glaser, 1996; Uchino, 2004, 2009). Moreover, with the potential to attenuate behavioral and psychological responses to highly stressful and traumatic events, social support can induce health-promoting physiological responses, including through hormone and immune system responses.

Once they leave their home country, refugees in more intermittent, transitional stages of the migration process tend to experience heightened psychosocial stress and struggle in cultivating and maintaining social support systems, which can exacerbate their feelings of loneliness and social isolation (Dolberg, Shiovitz-Ezra, and Ayalon, 2016; Gottval et al., 2019) and potentially impact on their mental well-being (Gottvall et al., 2019; Miller et al., 2002). When protective effects of social support are reduced and

accompanied by ongoing psychosocial stress and difficulties, such challenging circumstances may repeatedly activate physiological systems and increase risks for adverse physical and mental health outcomes. The stress-responsive systems, including the hypothalamic-pituitary-adrenal (HPA) axis and its production of CORT, in particular, play a critical role in preparing individuals to cope with acute stress (Birmingham and Holt-Lunstad, 2018; Sapolsky et al., 2000). In highly demanding and uncertain environments, such as asylum centers, refugees experience ongoing psychosocial stress that may lead to the upregulation of the HPA axis function, resulting in consistently elevated CORT levels and altered neuroendocrine responses. Moreover, the upregulation of the HPA axis can negatively affect cellular immunity by triggering viral reactivation of latent viruses, such as the Epstein-Barr virus (EBV; Glaser and Kiecolt-Glaser, 2005), which may result in increased production of EBV antibodies (McDade, 2002; Sorensen et al., 2009). Higher EBV antibody titers are a well-established indicator of stress-related physiological effects on the immune function (Yang and Glaser, 2002).

In Chapter 5, I examine associations between the refugees' social support, mental health, and psychobiology in relation to their personal and culture-specific accounts regarding sources of social support and relationships. In doing so, I suggest that an ample understanding of challenges transient refugee populations commonly experience should thoughtfully consider their struggles in generating and cultivating social support that may affect their long-term health, resilience, and recovery. We can then start to investigate whether the protective properties of social support represent a likely critical factor in alleviating and buffering against the adverse mental health effects of displacement-related psychosocial stress and trauma.

The qualitative dimensions of the dissertation suggest that disrupted social support systems and impaired social relationships, as an outcome of journey-related distress and life in administratively confined spaces, have deepened the effect of social constraints on the encamped refugees' interactions with others. The various adversities they suffered during their migratory journey and in asylum centers in Serbia, including physical trauma, uncertainty, and distrust, have affected their willingness to engage in profound and meaningful social interactions or share their concerns with close confidants. The refugees' prevailing need to protect their loved ones from their own problems and additional stress, frustration, and despair, has left them to resort to their personal capacity for dealing with issues rather than seeking external support. Numerous studies in this area suggest that the refugees' fear of loss and tendencies towards seclusion and loneliness weakens their social ties and further impairs their relationships with their close confidants (Blair, 2001; Blackwell, 1993), adversely affecting their health (Biehl, 2015; Brun, 2015; Horn, 2010; Smith, 2004). Refugees also tend to refrain from interactions with other refugees residing in asylum centers. Many of them contemplate their next steps in their migratory trajectories, thereby avoiding and refraining from creating social networks they consider futile, since they need to redirect their energy and time to finding ways and critical resources they need to continue their journey.

When examined in relation to the ethnographic data, the quantitative dimension of the study revealed that the refugees' lower social support predicted their poorer mental health outcomes. Specifically, individuals with lower social support tended to exhibit poorer mental health, higher post-traumatic stress-related symptomology, and higher recent perceived stress. Also, individuals, whose journeys had been longer and more

traumatic, tended to exhibit poorer mental health profiles. When considering their psychobiological profiles, the study results revealed that refugees with lower social support tended to exhibit higher CORT, as did individuals who reported higher recent psychosocial stress. While these findings did not reach statistical significance, they were consistent with patterns of a dynamic CORT response to highly demanding conditions characterized by recurrent psychosocial stress and trauma that had been observed elsewhere (Cacioppo et al., 2000; Evolahti et al., 2006; Matheson et al., 2008). The study showed that recently settled refugees, who reported higher recent psychosocial stress, tended to exhibit higher CORT. Although this was not my main focus, these findings aligned with results in my Chapter 4 (Jankovic-Rankovic et al., 2020) and other findings (Dajani et al., 2018; Mewes et al., 2017; Miller et al. 2007). The biocultural approach that I utilized in this dissertation project helped to capture the complexity underlying social dynamics and health among displaced populations in more intermittent transitional stages of migration.

7.2.3 A biocultural approach to routinized social practices (RSPs) in confined, liminal spaces

The latest figures compiled by the United Nations High Commissioner for Refugees (UNHCR, 2020a) show that 26 million displaced people worldwide spend years in temporary settlements, such as asylum centers and refugee camps, which provide shelter, subsistence, and safety to people seeking protection in the immediate areas or outside their national borders. Despite UNHCR's action plan to improve the international response to mass displacement and create conditions for durable solutions to the

refugees' situation, the growing number of displaced populations continues to live in exile for prolonged periods (Milner, 2014; UNHCR, 2016). For example, around 6,300 new refugees, asylum-seekers, and refugees remain in Serbia, living in 18 asylum centers with no proximate projections of resettlement in a third country (UNHCR, 2017, 2020). When efforts for robust solutions fail to materialize, refugees continue facing administrative and structural constraints designed to limit their mobility, rights, and independence as they remain in those liminal spaces (UNHCR, 2019).

Refugees in temporary settlements are seen as inhabitants of restricted areas or 'zones of exceptions,' which are not under the jurisdiction of the laws applicable to the local citizens (Agier, 2008; Biehl, 2015; Farzana, 2017). Characterized by palpable 'refugeeness' and complete dependence on charity and aid assistance, refugees are often deprived of agency and intention while simultaneously lacking choices and prospects (Biehl, 2015; Chatty, 2014; Milner, 2014; McDowell, 2013). The refugees' total reliance on humanitarian supplied relief is often a common rationale in state and policy discourse for their warehousing and treatment as passive recipients who only require food and shelter. Neither merely "bare life" nor a whole political being (Agamben, 1998), the encamped refugees are perceived as receivers of humanitarian generosity (Rozakou, 2012: 568) and subjected to "state-of-the-art biopolitical humanitarian interventions" (Turner, 2005:270). However, even in these administratively confined spaces, refugees have the capacity to defy imposed structural arrangements, exercise their agency, and act in the present. Their agency and practices are in a dynamic dialectical relationship as they strive to adapt, establish and maintain social mechanisms that serve as drivers of social cohesion, continuity, and regularity in the instability of the encampment process.

Building on the ideas of daily routines (Highmore, 2010; Pink, 2012), practices as entity and performance (Schatzki, 1996; Shove, Pantzar, and Watson 2012) and Bourdieu's (1977, 1990) concepts of habitus, *doxa*, and *bodily hexis*, in this dissertation, I propose and utilize the notion of Routinized Social Practices (RSPs) in Chapter 6. In doing so, I ask how RSPs serve to enhance refugee routine, control, and predictability and act as drivers of their health and well-being. Specifically, I consider the RSPs' summary impact on daily psychosocial stress and hardships in relation to health and psychobiology to examine how transient refugee populations actively cope and cultivate resilience to adversity, while awaiting resettlement or recuperating for their engagement in another 'game' taking them closer to their desired destination. I relate biomarkers of immuno-inflammatory (EBV) and cardiovascular (blood pressure) physiology to measures of engagement in and valuation of RSPs.

Based on the idea that RSPs afford a sense of regularity, control, and structure to everyday life in asylum centers, I predicted that refugees with greater engagement in RSPs in any or all three domains would have lower scores on mental health scales (PSS, RHS-15, IES-R), higher scores on FS, and exhibit better physiological profiles, as measured via EBV and BP. The findings provided evidence that social, material, and personal dimensions of RSPs associated with the refugees' sense of regularity, means of coping, and resilience serve as mitigators of daily psychosocial stresses, thereby affording better health. Pearson's correlations for key continuous study variables showed associations between engagement in and valuation of personal, social, and labor RSPs and biomarkers, mental health measures, and journey length. However, because of the small sample size and limitations of regression modeling, I turned to a statistical

ordination technique – the Multiple Correspondence Analysis (MCA) - to understand how multiple variables can impact on each other and people reporting RSPs.

The MCA showed that RSPs aligned with each other and the interlocutors' demographics, while loading opposite to the values of EBV. Specifically, the analysis revealed sex differences, with men's higher engagement in and valuation of social and personal RSPs and women with higher concentration in the labor domain and higher valuation of RSPs in the personal domain. Moreover, families with children valued and engaged more in personal and labor RSPs, whereas single refugees were more invested in social RSPs. Remarkably, the findings suggested that being a woman with children was strongly associated with the higher valuation and engagement in the labor RSPs compared to older single men who valued and engaged more in personal RSPs. Younger, unmarried men value and are more invested in social RSPs.

Moreover, the acquisition and valuation of RSPs in any or all three domains helped to mitigate psychosocial stress, thereby affording better physiological profiles, as measured via EBV. In particular, refugees with higher value and engagement in RSPs tended to exhibit lower EBV titers despite some refugees' relatively higher scores on mental health surveys. This was probably one of the most critical findings because it revealed that these everyday routines and activities did afford a sense of regularity and control while helping to lower stress and trauma emerging from the journey and daily life in the temporary settlements. These findings aligned with prior studies in this area that had documented the importance of daily activities as acts of normalcy and independence in such settings (Brun, 2015; Oka 2011, 2014; Trapp, 2018).

To better understand how the 24 informants engaged with RSPs, I removed biosocial correlates - EBV and BP - because they did not load along any other dimension except positive dimension 1 and most of the informants had normal BP. The findings showed that married women with children were more engaged in the labor RSP domain and valued more personal RSP, whereas men were predominantly engaged in social and personal RSPs.

The biocultural RSP model I present in this chapter has provided a nuanced understanding of the complexity underlying the emergence, persistence, and endurance of RSPs in temporary transitional settlements and RSPs as drivers of better mental and physical health. By developing and utilizing RSP measures embedded in rich ethnographic data concerning physiological markers, I empirically outlined the role of routine action in everyday life, health, and stress mediation. In the world of the ordinary, RSPs denote the emergent social phenomena that promote dignity and normalcy, mitigate daily stresses, and serve as a source of stability and regularity to transient refugee populations contemplating their legal resettlement or the next ‘game’ on their migratory trajectories to the desired destination.

7.2.4 Intellectual merit

The interplay between the agency of refugees and structures of sociopolitical and physical temporary spaces that unfolds within their daily lives and quotidian social practices among long-term refugees and displaced people has been well studied within the field of anthropology (Agier, 2011; Malkki, 1995a, 1995b; Kibreab, 1993; Oka, 2011, 2014; Trapp, 2018). However, the extent to which RSPs engender behavioral

mechanisms through which refugees enact resilience within adverse structural conditions to create social niches of coping, mitigate stress, and experience better health requires keener consideration of the role of the social world in shaping and influencing health and physiology and vice versa.

In this dissertation, I considered transit migration with particular emphasis on migratory journeys since they characterized life-changing events with potentially long-lasting effects on the refugees' health and resilience. Given that prior research in this area tended to focus on long-settled refugees rather than those in various transitional stages, examining journey-related experiences, trauma, and hardships in relation to mental and physical health among transient refugee populations proved to be a valuable lens for a deeper understanding of the interplay between structure and agency, decision-making processes, the role of smugglers in facilitating their unauthorized mobility across international borders, and social dynamics. Such insights are of particular relevance given that the migratory journeys have been relatively under-studied in anthropology as well the EU's response to the unprecedented refugee crisis that has failed to protect the fleeing people's rights and lives and provide adequate support (Arsenijevic et al., 2017; BenEzer and Zetter, 2015; Bjertrup et al., 2018; Mandic and Simpson, 2017).

Building on contemporary practice theories (Highmore, 2010; Pink, 2012; Schatzki, 1996; Shove, Pantzar, and Watson 2012) and Bourdieu's (1977, 1990) concepts of habitus, doxa, and bodily hexis, I examined how refugees, as active social agents, invest in daily routinized practices to afford some semblance of continuity and normalcy. In doing so, I expanded the practice theories framework by proposing and operationalizing the notion of RSPs in relation to health and stress mediation. Various

studies have utilized practice theories to examine the refugees' social life and practices in different socio-cultural contexts (Bauder, 2003, 2005; Friedmann, 2002; McKay, 2001; Nee and Saunders, 2001). Although emphasis was put on the importance of human bodies and bodily comportment in practice, the studies overlooked the physical and biological circumstances of human bodies and how, through performance and inclusion of new elements, social practices might change over time under different social circumstances. Moreover, overly cognitive understanding of the refugees' daily lives and practices reflecting only the social aspect was disassociated from examining psychobiology pathways linked to the refugees' health outcomes and well-being. In their capacity to promote regularity, resilience, and enhanced well-being, RSPs serve as a social niche where refugees exercise their agency and act in the present while defying structures of transiency as they await a long-lasting solution to their precarious situation.

Lastly, this dissertation combined sociocultural and biological data to compare the complex links between RSPs and stress mitigation in transient refugee populations living in asylum centers in Serbia. By joining calls for conceptualizing human biological and cultural processes not as distinct, but rather as intertwined and integrated (Gravlee, 2009; Goodman and Leatherman, 1998; Dressler, 2005; Fuentes, 2017), and by combining ethnographic and biological research methods, this dissertation places sociocultural anthropological concepts in dialogue with the biocultural consideration of the social context that is socially and biologically embodied and manifested in physiology and health. In doing so, I developed and used the quantitative RSP measure that proved effective in empirically evaluation of the role of routine action in transformation, imagination, and agentive choice, as well as in health and stress mitigation. Using

measures of RSPs, mental health, and physiological markers, I provided evidence that participation in any or all three RSP domains promotes dignity and normalcy that can diminish psychosocial stresses in rigid social management circumstances, thereby affording psychological and psychological health benefits for transient refugee populations.

7.3 Study's limitations and future directions

Despite its several limitations that merit discussion, this dissertation project paves the way for further refinement and expansion upon in future research endeavors. Primarily, the study's cross-sectional nature, with longitudinal data from only a small pool of informants, precluded me from discerning the direction of the observed relationships between the observed variables in the key findings. Equally important is the studied population predominantly comprised of men from Afghanistan, although it was a representative cross-section of the asylum center populations across multiple field seasons. Chapter 3 suffers from the unbalanced sex ratio of the sample, made of 50 males and 21 females. Although the sex ratio is characteristic of the overall male-female breakdown of refugees in asylum centers across Serbia, these results may represent a somewhat specific and primarily Afghani male-centric perspective on the journey-related trauma and the 'game.' Chapter 4 suffers from the same limitation, since the study sample included 72 males and 39 females, predominantly from Afghanistan. While this does not compromise the validity of the study findings, it merits caution in overgeneralizing from the data. Future work could include more female participants and diverse refugee populations in examining similar themes and dynamics, including

longitudinal research tracking within-individual changes in the refugees' social and biobehavioral profiles during various stages of transit migration.

For Chapter 5, the same cross-sectional study design limitation prevented me from discerning whether lower social support is associated with the refugees' poorer mental health profiles or whether poorer mental health may have impaired the refugees' ability to cultivate social support and relationships (Bogic et al., 2012; Davidson et al., 2008; Hirschfeld et al., 2000; Olatunji et al., 2007). In my final fieldwork season, I worked with 98 informants. Still, in Chapter 6, I considered responses from only 24 of them since I had to administer RSP lists and engage in in-depth interviews and participant observation with a limited number of informants. However, this can be resolved by collecting additional data to achieve more significant insights into refugee RSPs, lived experiences, and daily lives. Additionally, I measured CORT from fingernails, utilizing a relatively new approach to studying the body's chronic exposure to this hormone. While saliva or blood sampling represent the gold standard for CORT research, it was impossible to collect and store repeated blood or saliva samples across the day to capture dynamic diurnal aspects of HPA functioning. Thus, future research might consider investigating similar themes among encamped transient refugee populations in relation to physiological measures of the individuals' cortisol awakening responses (CAR) and the steepness of their diurnal curves.

In today's world, conflicts and socio-economic instability keep increasing the number of people seeking protection outside their homeland. Their transit migratory journeys often entail unauthorized border crossing and smuggling networks and are frequently paved by recurrent trauma, psychosocial stress, and physical hardship. When

considering the critical meaning of the journey as a life-changing event, with subsequent effects on various stages of the refugees' migratory trajectories and their health, more research of this facet of the migration process is needed for a more nuanced understanding of individual experiences of the journey and the modalities of the refugees' lived realities. Moreover, some 26 million displaced people worldwide are confined in temporary settlements, with no viable projections of their repatriation or permanent resettlement (UNHCR, 2020a). Therefore, further research of the interplay between mobility and stasis during transitional migratory stages can contribute to advancing our understanding of how the social and cultural realms of the world of lived experiences with psychobiological pathways responding to social contexts are manifested and embodied in the refugees' daily lives, health, and physiology. Lastly, discerning how encamped transient refugee populations value and engage themselves in RSPs and mitigate the challenges they encounter, we avoid reducing them to humanitarian categories, while enriching our general understanding of how they cope and actively cultivate resilience to adversity.

7.4 Closing thoughts and practical implications

This dissertation study aimed to utilize a genuinely integrative anthropological perspective on how the peculiarities and complexities underlying transit migration and daily life in confined spaces interrelate with health and psychobiology among transient refugee populations. In doing so, I attempted to contribute to new directions in integrative anthropological research by highlighting the importance of the ethnographic context for more accurate and precise quantitative data analysis from survey instruments and

biomarker analyses. Indeed, ethnographic analysis with physiological biomarkers has allowed me to gain meaningful insights and shed light on abstract discussions of agency, social practice, and health in encampment situations. This is of particular significance since these populations are principally vulnerable, yet it is critical to go beyond representing them as vulnerable subjects, while simultaneously avoiding underestimating the highly stressful and demanding circumstances refugees face on their migratory trajectories and whilst in administratively restricted spaces, such as asylum centers.

Transit stages of the migration process characterize an important period in which people feel not only stranded in-between home and final destination, but they also actively defy their representation of passive victims by engaging in RSPs serving as mitigators of stress and drivers of health outcomes across and within refugee spaces. Not many anthropologists or other social scientists study the dynamics and underlying complexities of transit migration. I suggest that these migratory stages are critical for understanding how displaced populations frame their everyday lives, forward cultural traditions, and participate in RSPs, while also exchanging in novel meaning-making and convalescing in new and challenging socio-ecologies.

Anthropological work offers a critical perspective on increasingly prefabricated truths (Herzfeld, 2018:144), including ones regarding refugees, proclaimed by governments and other powerful national and international entities. Working on the ground, anthropologists often witness the devastating impact of dominant narratives. One of those well-known discourses refers to how the ideas of “refugee waves” and “crisis” shape the EU’s (and other states’) practices of regulation, policies, and control of migration, borders, and human movements across them. Such developments justified the

proliferation of categories such as “bogus” and “genuine” refugees and the reality in which human migration is often defined through the lens of the binary logic of forced vs. voluntary migration and agency vs. lack of choice. While I am not the first scholar-to-be to call these dichotomies outdated and not reflective of the situation on the ground, I want to reiterate that consideration of refugees and contemporary (transit) migration necessitates creative solutions going above and beyond the well-established categorizations. I believe that anthropologists are well positioned to think outside policy-driven categories while providing insights into the real world of lived experience replete with its own contingency. Additionally, ethnographers need to be in the field if they are to make sense of the transient refugees’ abilities to survive, recuperate, and thrive in conditions of displacement, stasis, and uncertainty. Providing insights into the refugees’ real stories, vulnerabilities, ways of coping with adversity, and desires and struggles for onward mobility with their own eventualities is another way of generating objective knowledge without denying the ethnographic authority and partiality of data collected by this method.

Finally, from a prescriptive policy perspective, the receiving countries need to do more to improve the refugees’ livelihoods and help them recuperate and thrive as they await permanent solutions to their precarious situation. Humane and dignified treatment of fleeing individuals is vital for their well-being and full participation in society at their final destination. Examination of complex and peculiar links between social and biological domains in the realm of migration is critical for developing improved approaches to physical and psychosocial well-being and enhancing (inter) national policies, solutions, and responses to transient refugees facilitating their active

participation in shaping their own futures, while living in dignity and freedom.

7.5 References

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