AMERICAN UNIVERSITY OF BEIRUT

SITUATIONAL AND PERSONAL PREDICTORS

OF ANGER IN A LEBANESE SAMPLE

by

MARWA ITANI

A thesis
submitted in partial fulfillment of the requirements
for the degree of Master of Arts
to the Department of Psychology
of the Faculty of Arts and Sciences
at the American University of Beirut
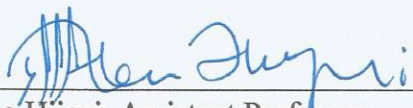

Beirut, Lebanon
January 2017

AMERICAN UNIVERSITY OF BEIRUT

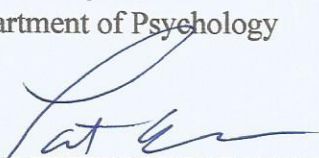## SITUATIONAL AND PERSONAL PREDICTORS OF
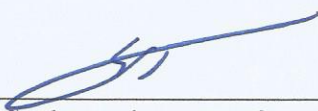
ANGER IN A LEBANESE SAMPLE

by

MARWA ITANI

Approved by:

_____   Jan 30, 2017
Dr. Alaa Hijazi, Assistant Professor   Advisor
Department of Psychology

_____
Dr. Fatimah El Jamil, Assistant Professor   Member of Committee
Department of Psychology

_____
Dr. Rim Saab, Assistant Professor   Member of Committee
Department of Psychology

Date of thesis defense: January 27, 2017

AMERICAN UNIVERSITY OF BEIRUT

THESIS, DISSERTATION, PROJECT RELEASE FORM

Student Name: __Itani_____Marwa_____Omar El Farouk__
                  Last   First   Middle

○̌ Master's Thesis   ○ Master's Project   ○ Doctoral Dissertation

[✓]   I authorize the American University of Beirut to: (a) reproduce hard or electronic copies of my thesis, dissertation, or project; (b) include such copies in the archives and digital repositories of the University; and (c) make freely available such copies to third parties for research or educational purposes.

[ ]   I authorize the American University of Beirut, to: (a) reproduce hard or electronic copies of it; (b) include such copies in the archives and digital repositories of the University; and (c) make freely available such copies to third parties for research or educational purposes
after:

       One ---- year from the date of submission of my thesis, dissertation, or project.
       Two ---- years from the date of submission of my thesis, dissertation, or project.
       Three ---- years from the date of submission of my thesis, dissertation, or project.

_____   Feb. 17, 2017

Signature   Date

ACKNOWLEDGEMENTS

I never thought that this day would come. It has been a really long journey of which I am truly thankful for because I learned a lot. There were a few times I admit I did not think I would make it through, that is why there are so many people to thank.

This would not have been possible without the constant motivation, support, and patience of my thesis advisor Dr. Alaa Hijazi. Thank you. Your cheerful demeanor, intelligence and incredible insights have constantly motivated me to do better. You are truly a mentor and someone I have the utmost respect for.

To my committee, Dr. Rim Saab and Dr. Tima Al Jamil, thank you for agreeing to be on my committee, for the wonderful advice you gave, and for the strong support.

To my friend and tutor, Fahed Hassan, you are a blessing thank you for constantly helping me and answering the thousands of questions I had. To Anis Jradah from the IT department, thank you for all your help setting up the survey, your kindness and professionalism was greatly appreciated.

To my family and friends, I cannot begin to thank you for everything you have done. Throughout this period, I was continuously flooded with support and love, which truly lifted my spirits. Without all of you (you know who you are) I would have not gotten through this.

Last, but certainly not least, to my parents, without whom nothing would be possible. You are my support system, my heart, and my soul. I love you both so much and thank you is never enough to express how grateful I am for everything you have taught me and the unconditional love that you have given me.

AN ABSTRACT OF THE THESIS OF

<u>Marwa Itani</u>   for   <u>Master of Arts</u>
                       <u>Major</u>: Psychology

Title: <u>Situational and personal predictors of anger in a Lebanese sample</u>

Anger, like all emotions, is of great importance in an individual's daily life, and a main instigator of their actions. Anger is defined as a subjective state fueled by antagonistic thoughts, and can range from mild irritation to extreme fury. When taken to an extreme, anger can have serious repercussions on an individual's personal and professional life as well as their health. It can also be considered one of the root causes of violent or aggressive behavior. Although no formal research investigates anger in Lebanon, anecdotal observations and media articles suggest Lebanese individuals have high anger and frustration in response to protracted civil strife, dysfunctional government systems, inadequate utilities, and chronic instability.

One hundred and forty-one Lebanese individuals completed online questionnaires. The results revealed that daily hassles and system justification were significant predictors of general anger. Helplessness, daily hassles, and war exposure were significant predictors of anger-in. The predictors narcissism and gender were not significant predictors of anger or anger-in. The interpretations of the findings and the limitations were discussed.

CONTENTS

CHAPTER I

Introduction and Definitions

A. Introduction to Anger

Emotions are key aspects of an individual's daily life, and a key motivator of one's actions (Spielberger & Reheiser, 2009). They have a significant impact not only on one's mental but also physical health and overall well-being. Although anger is similarly important, research has mainly focused on other emotions and mood states such as anxiety and depression (DiGiuseppe & Tafrate, 2007; Meichenbaum, 2005). It is common for individuals to be concerned about the amount of anger they feel, and about one in ten individuals find it challenging to regulate this emotion (Hamdan-Mansour, Dardas, Nawafleh & Abu Asba, 2011). High levels of anger have been found to adversely affect occupational functioning, social relationships, physical and mental health, and to increase odds of run-ins with the law (Vecchio & O'Leary, 2004). Anger is also associated with various forms of aggression such as spousal and child abuse, road rage, and even homicide. Records from the U.S. Department of Justice indicate that 29% of murders were incited by an anger-fueled argument (Vecchio & O'Leary, 2004). In terms of health, anger can lower one's immune functioning, and is highly associated with elevations in blood pressure and pulse rate, which can have serious effects on the cardiovascular system (Spielberger & Reheiser, 2009; Vecchio & O'Leary, 2004). Anger also has a particularly high co-morbidity with Post-Traumatic Stress Disorder and substance abuse disorders (Meichenbaum, 2005). On the other hand, anger in its best form, can act as an adaptive mechanism that prevents others from

impinging upon one's rights and can motivate an individual to resolve an unjust situation (Robbins, 2000).

Anger is a subjective state marked by the presence of physiological arousal and antagonism related cognitions (Robbins, 2000). It is often experienced in response to feeling that one's personal goals are being blocked by an external agent and provoked by feelings of frustration and feeling that one's expectations or wishes were not met (Orth & Wieland, 2006; Siegel, 1986). Anger is a complex emotion that can be experienced and expressed in various ways. In the past, however, much research focused on anger that was expressed outwardly such as aggression and hostility and hence neglected the more complex nature of anger (Boman, Curtis, Furlong, & Smith, 2006).

Measures of anger assess various dimensions of it, such as its frequency, duration and magnitude. Frequency relates to how often the individual experiences anger, duration relates to how long the individual remains angry, and magnitude assesses the extent or severity of the individual's anger. State anger (S-anger) is a psychobiological state where an individual's personal feelings of anger vary from slight annoyance to extreme rage (Spielberger, Reheiser, & Sydeman, 1995). State anger varies over time and across situations (Spielberger et al., 1995). Trait anger (T-anger) on the other hand is measured over time and considers the frequency of an individual's experience of angry feelings (Spielberger et al., 1995). Individuals with high T-anger are classified as more easily angered and have more rises in S-anger as well (Spielberger et al., 1995). Long lasting and continuously present anger is considered a trait because it becomes an enduring part of one's personality (Azvedo, Wang, Goulart, Lotufo, & Bensenor, 2010). Furthermore, general trait anger is highly correlated with

other measures of anger, including anger consequences, hostility and aggression (Morgan, 2004). Hence, it can be considered the closest measure of general anger. Both state and trait anger can also be assessed in terms of duration and frequency (Siegel, 1986).

In addition to variability in the frequency, magnitude and durability of anger experiences, there is also variability in *how* anger is expressed, as it can be expressed outwardly, experienced inwardly, or suppressed (Thomas, 1989). Anger-out is when anger is directed towards someone or something else in a manner that is verbally aggressive or action-oriented (Aquino, Douglas, & Martinko, 2004). Conversely, anger-in is when anger is suppressed inside and the individual has a difficult time letting go of this anger (Spielberger et al., 1995). Examples of anger-in would be harboring grudges or hiding one's anger (Siegel, 1986).

Due to its complexity, anger is an essential emotion to understand. It not only can be harmful when directed outwardly, such as leading to violent acts, but also when kept inside, such as harboring grudges. Therefore, this study will be assessing the predictors of not only general anger but anger-in as well.

B. Introduction to the General Aggression Model and appraisal theories of emotions

At its peak, anger can manifest in dangerous forms and can be a gateway for aggressive behaviors (Aquino et al., 2004; Wiseman, Metzl, & Barber, 2006). Both state and trait anger, as well as anger expression, are closely related to hostility and physical and verbal aggressiveness (Azvedo et al., 2010; Barrio, Aluja & Spielberger, 2004). Aggression can be defined as any behavior intended to hurt another person who does not want to be mistreated or hurt such as: cursing, slapping or pushing (Bushman &

Huesmann, 2010). Aggression can be divided into two parts: instrumental aggression and hostile aggression (reactive). Instrumental aggression is conceptualized as proactive, cold and calculated, especially when the individual perceives aggression as the quickest and most effective way to solve a problem, for example when an assassin is paid to murder someone (Bushman & Huesmann, 2010; Ramirez & Andreu, 2005). In contrast, hostile aggression is described as reactive, volatile, impulsive, and lacking planning. It is also viewed as primarily driven by anger and a need to cause harm to another, for example in the case of a husband that pulls out a gun and murders his spouse's lover. Individuals demonstrating instrumental aggression may display some control and restraint over their anger; however, individuals experiencing hostile aggression are overwhelmed by anger they feel they cannot control (Bushman & Huesmann, 2010; Ramirez & Andreu, 2005). Nonetheless, aggression is a complex behavior, and at times individuals can vacillate between instrumental and hostile forms of aggression. For example, school shootings are often well planned and executed precisely, yet the individuals that organize the attack are often filled with anger (DiGiuseppe & Tafrate, 2007).

Various lines of research seek to predict aggressive behavior, but anger is sometimes neglected as one such predictor because aggression can occur without anger (such as instrumental aggression) (DiGiuseppe & Tafrate, 2007). Anderson and Bushman (2002), however, postulated five ways anger can result in aggression; 1) it gives individuals reason to retaliate and prevents them from seeing wrong in their actions, 2) it helps fuel aggression over time through increasing recollection of the incident, 3) individuals are more likely to interpret an ambiguous situation negatively when angry 4) anger instigates aggressive thoughts, scripts and expressive motor

movements and subsequently heightens the awareness of anger related stimuli, 5) anger raises levels of excitement, which drives aggression (Anderson & Bushman, 2002).

The General Aggression Model (GAM) (Anderson & Bushman, 2002) is a widely accepted model for synthesizing and understanding precipitants and outcomes of anger and aggression. Although the model focuses on aggression, DiGiuseppe and Tafrate (2007) propose that all the variables considered may similarly influence anger, and so the GAM can also be seen as a general model for anger. The model organizes anger dimensions into **Inputs**, **Routes** and **Outcomes**. **Inputs** include biological, environmental, psychological, and social factors that motivate aggressive behavior, and can be divided into **Person** factors and **Situational** factors. **Person** factors include all the attributes an individual brings to the situation, such as personality traits, attitudes, and genetic predispositions, whereas **situational** factors include aspects of the situation, such as an occurrence of a provocation or an aggressive prompt (Anderson & Bushman, 2002). These various **person** and **situational input** factors influence one's cognitions, affect, and arousal, termed **routes** in the model. These **routes** mediate how one responds to a situation, and what decisions are taken, termed the **outcome** in the model. Whether the final **outcome** that emerges at the end of the model is resolved properly or not affects how individuals react to future similar **inputs** (Anderson & Bushman, 2002). This paper will focus on variables related to the **input** level of the model because they are the main drivers of the cycle.

Emotion appraisal theories provide another framework for understanding how the variables in this study may be associated with anger. These theories suggest that specific situations trigger cognitive appraisals of these situations that in turn elicit emotional reactions. The appraisals that most commonly cause anger are the following:

1) Goal-obstacle, the perception that something is standing in the way of an objective or goal that one is trying to reach 2) Other accountability, refers to blaming someone for standing in the way of an individual or blaming the other for what happened to oneself 3) Unfairness or the perception that the person has been unfairly treated or something has been taken away from them without justification and 4) Threat to self-esteem, as self-esteem can affect one's likelihood of getting angry. Those with low self-esteem, or inflated or unstable self-esteem (e.g. in narcissism) tend to have more elevated levels of anger (Kuppens, Mechelen, Smits, Boeck, & Ceulemans, 2007).

C. Relevance of Anger in Lebanon

"Thieves, thieves, get out!" was one of the chants the Lebanese yelled during one of many "you stink" protests in the Fall of 2015. The title of these series of protests was a play on words reflecting the corruption of the politicians and the rising level of garbage on the streets (British Broadcasting Corporation, 2015). The protests gathered a significant amount of support that mounted up to 100,000 followers and generalized to a range of injustices including lack of garbage collection, water shortages, electricity cuts, and corrupt political processes (Jay, 2015). Although the anger displayed in these protests may be perceived as rightful and healthy, anecdotal observations –as there is no empirical research on the issue- suggest that the Lebanese experience high rates of irritability and anger in general. In 12 angry Lebanese, a documentary based upon real life stories of prisoners in Lebanon, one of the convicted killers quips "in fact we are [..] five to six million angry Lebanese- or maybe even 350 million angry Arabs" (Daou, 2009). Furthermore, various blogs discuss anger on the streets, including the infuriating road and traffic conditions (Hatem, 2013). Lastly, half of the Lebanese youth want to leave the country due to lack of opportunities (Harb, 2010).

Unfortunately, there is no empirical research about the prevalence, experiences, or predictors of anger in Lebanon. However, the Center For Strategic and International Studies (CSIS); examined current data on key demographics, economics, and security patterns in the Middle East and North African region (MENA). They indicated that "the data [..] do not begin to reflect the degree to which [..] MENA populations are angry at their governments, furious about their living conditions, and identify the political and social framework as unjust" (Cordesman, Coughlin-Schulte & Yarosh, 2013). We therefore wonder if Lebanese populations are at particularly heightened risk for anger and aggression given their experiences with both historical and current political conflict, corruption, injustice, and instability (Republic of Lebanon Ministry of Finance, 2013; Transparency International, 2014). The Lebanese experienced a 15-year civil war between 1975-1990 that created many lasting adverse effects on their economy, political system, social fabric, and psychological wellbeing (Karam et al., 2008; Republic of Lebanon Ministry of Finance, 2013; Wannis, 2014; World Bank, 2014). The violence continued intermittently following the civil war, through random bombings, assassinations, and the Israeli war in 2006, which displaced many families and severely damaged the country's infrastructure (Republic of Lebanon Ministry of Finance, 2013). The Syrian civil war that broke out in 2011 further strained the situation in Lebanon as it forced more than 1 million Syrians to seek refuge in Lebanon, taxing already limited supplies of electricity, water, housing and employment (UNHCR, 2014; World Bank, 2014). Anger in particular plays a key role in maintaining inter group conflict since it is rather enduring and does not dissipate over time (Halperin & Gross, 2010). It is therefore likely that the Lebanese people continue to experience enduring anger in the wake of a 15-year civil war and intermittent sectarian strife.

CHAPTER II

Predictive Variables for Anger

A. Situational Factors

Situational factors that may trigger an angry response can range from exposure to violence or violent symbols (e.g. such as wars and guns), dealing with daily obstacles or hassles hindering achievement of one's goals (e.g. such as traffic or perceived injustice), to general frustration, which can be a result of any form of pain and discomfort (Anderson & Bushman, 2002). Within the General Aggression Model and emotion appraisal theory framework, the study investigated the following situational factors: 1) War exposure which relates to exposure to violence, and can be considered to correspond to several elements from the emotion appraisal theory: obstacles hindering one's goal, holding others accountable, and unfairness, 2) Daily hassles which corresponds to general discomfort and obstacles hindering one's achievement of goals in the emotion appraisal theory, and 3) System justification which corresponds to obstacle's hindering one's goals and unfairness based on both models.

1. War exposure. Exposure to war related violence, atrocities, and loss is often highly traumatic, because it shocks people and breaks down their normal belief system about the safety of the world, and the fundamental goodness of people (Hunt, 2010).

To date, the number of civilians that are affected by war is increasing. There was only a 10% rate of civilian casualty in World War One (WWI) which rose to 50% in World War Two (WWII) and 90% in the Bosnian war (Hunt, 2010). The Washington based Lebanon Renaissance Foundation analyzed the archives of An-Nahar and As-Safir newspapers from April 13, 1975 to December 31, 2006 and found that the total number of documented casualties from the civil war and the 2006 Israeli war amounted

to 57,481 proclaimed dead and 105,205 wounded (Lebanon Renaissance Foundation, 2014). The 2006 war also displaced almost a quarter of the population (Nassoura et al., 1991; Republic of Lebanon Ministry of Finance, 2013).

Research suggests that across various populations, living in conflict areas and higher war exposure is associated with greater prevalence of anger (Abi Hashem, 2006; Bramsen, Van der Ploeg, Van der Kamp, & Adèr, 2002). Feelings of anger commonly surface because it can become difficult to trust other people and authorities after being exposed to war (Bramsen & Van der Ploeg, 1999). Bramsen et al. (2002) suggested that the worldview of individuals experiencing wartime stress may change to become more negative, priming them to experience more distressing emotions such as anger and anxiety. Furthermore, interviews with those living in areas considered "conflict zones," like Lebanon, suggest they are more prone to behaviors such as impatience and excessive amounts of anger and frustration (Abi Hashem, 2006). This is likely because they may feel trapped and caged by their circumstances, and therefore express this frustration by "lashing out" in public. Furthermore, the coping resources of those living in conflict zones may be further strained by a lack of proper sleep, constant threats, and tight living spaces (Abi-Hashem, 2006).

Traditionally, it was commonly thought that traumatized individuals were mostly scared and helpless; hence fear has been the primary focus of research. More recent research, however, is revealing that anger and hostility may rival helplessness as a consequence of trauma, which paints a more complex picture of how and why people behave the way they do following war trauma (Bratton, 2010; Orth & Wieland, 2006). Chimienti, Nasr and Khalifeh (1989) conducted a study that included 1,039 students (3-9 years old), from major Lebanese cities, and analyzed their reactions to war related

stress during the Lebanese civil war. The study showed that children exposed to violence or war related events such as loss, displacement or demolishment of their homes were 1.7 times more likely to exhibit signs of aggression and nervous behaviors. Moreover, according to their mothers' reports, 77% of children felt anger, 83% experienced fear, and 76% experienced anxiety (Chimienti et al., 1989).

No discussion of war exposure would be complete without noting the role of Post Traumatic Stress Disorder (PTSD), a psychological disorder that can result from various traumatic life events, including war, characterized by intrusive symptoms, avoidance, and hyperarousal. Although not all individuals exposed to war develop PTSD and this study did not measure PTSD, most of the research on war exposure focuses on PTSD as a key psychological outcome. Hence, it will be referred to frequently thereafter. Moreover, extensive research has found PTSD to be highly comorbid with anger and aggression (Meichenbaum, 2005; Worthen & Ahern, 2014).

Assessments of patients diagnosed with PTSD in a British anxiety and trauma clinic revealed that patients struggled more with anger and fear than anxiety (Grey & Holmes, 2008). In addition some evidence indicates that anger in victims of crime and female sexual and physical assault can later be an etiological risk factor in developing PTSD symptoms (Amstadter & Vernon, 2008). Conversely, experiencing intrusive PTSD symptoms that activate a "hotspot" or memories of peak moments of distress from a traumatic experience may trigger feelings of anger (Grey & Holmes, 2008).

Two theories have been proposed to explain the connection between anger and trauma exposure. The "survival mode theory" states that those who suffer from PTSD have a heightened vigilance to threat and will therefore interpret more situations as threatening. In turn, this initiates biological fear and flight or anger and fight reactions

that are highly automatic and occur with minimal reasoning and processing of the threat (Kunst, Winkel, & Bogaerts, 2011; Orth & Wieland, 2006). The anger response may at times be disproportionate to the actual threat, which can impair various aspects of an individual's life (Contractor, Armour, Wang, Forbes, & Elhai, 2014; Worthen & Ahern, 2014). The survival mode theory also suggests that individuals will experience heightened amount of anger when faced with external stimuli reminiscent of the original traumatic event (Kunst et al., 2011). Similarly, the experience of anger itself activates memories of the original traumatic event (Kunst et al., 2011).

The second theory is the "fear avoidance theory" which stipulates that individuals suffering from PTSD want to avoid the feelings of fear, helplessness and traumatization they experienced, and hence anger becomes a welcome distraction and avoidance strategy (Orth & Wieland, 2006).

The Lebanese population has undergone many years and episodes of civil strife, airstrikes, bombings and explosions, which classifies them as a population that has experienced a significant amount of war trauma (Karam et al., 2008; Republic of Lebanon Ministry of Finance, 2013). No investigations, however, have been conducted to test the association between war exposure and anger in the Lebanese population. Yet, a study of the prevalence of mental disorders in connection to war in Lebanon, indicated that more than 25% of those affected by the war met criteria for at least one psychiatric disorder at some time in their life (Karam et al., 2008). Furthermore, the closest disorder related to anger is intermittent explosive disorder, which involves recurrent expression of impulsive aggression (Coccaro, 2000). Karam et al. (2008) found that 1.7% of the Lebanese participants suffered from it.

Research conducted with various forms of trauma suggests that the higher the sense of personal targeting, as with the case of sexual assault, the greater the post traumatic anger because it is more difficult to cope with feelings of personalized victimization in contrast to random accidents or illnesses (Amstadter & Vernon, 2008). This concept may be highly applicable to the Lebanese context where individuals' identities are strongly connected to their sectarian identity, and therefore, any harm done to the group is perceived personally. In fact, blame and anger can persist years after civil strife between different sects due to how personally the traumatizing events are taken (Hadad, 2002). Furthermore, studies suggest that the more individuals identify with a group that they feel has been wronged, the stronger they experience group-based emotions such as anger, as in the examples of war or collective violence (Pennekamp, Doosje, Zebel & Fischer, 2007). Group-based emotions are emotions that are experienced or felt based on an individual's belonging to a certain group. The most common is that of anger, and this occurs when actions from an out-group are viewed as threatening or unjust (de Vos, van Zomeren, Gordijn & Postmes, 2013). Halperin and Gross (2010) similarly discuss how sentiments carried over time could be the main contributor to the enduring anger that can remain between groups. They explored anger responses of Jewish-Israelis towards Palestinians before and after the most recent Gaza war and found that long-term intergroup conflicts are drenched with negative emotions. The reactions that happen in one event such as hatred, perceived injustice, stereotypes and prejudice carry on to the next and become compounded, which further fuels anger (Halperin & Gross, 2010).

2. Daily hassles. Research has consistently demonstrated that major life events and disruptions such as divorce, loss of a job, bereavement, or moving to a new country

can be highly stressful (McIntosh, Gillanders & Rodgers, 2010; Tajalli, Sobhi & Ganbaripanah, 2010). However, research also suggests that stressors do not have to be major to be taxing and in fact, daily stressors and hassles can accrue to create compounded stress, particularly in the absence of positive experiences to balance them out (Almeida, 2005; Kanner, Coyne, Schaefer & Lazarus, 1981; Lavee & Ben-Ari, 2008). A daily hassle can be considered a negative daily interaction with one's surroundings and can include anything that threatens one's comfort or wellbeing, which places a great burden on the individual's resources (Kanner et al., 1981; Lavee & Ben-Ari, 2008; Lazarus, 1984). Hassles therefore can include social and environmental issues. For example, social hassles can include demands of children or aged parents, work overload or too much to do, financial problems, daily interpersonal disputes, and status inequalities between partners (Bolger, DeLongis, Kessler & Schilling, 1989; Kanner et al., 1981; Tajalli et al., 2010). Environmental hassles can include aversive conditions in the environment such as foul odors, cigarette smoke, or traffic jams (Robbins, 2000). More extreme environmental daily hassles also include poverty, living in violent neighborhoods, and living in a culture of fear and hate (Anderson & Huesmann, 2003).

Daily hassles have been found to greatly impact health and psychological wellbeing even more than major life events (DeLongis, Coyne, Dakof, Folkman, & Lazarus, 1982; Falconier, Nussbeck, Bodenmann, Schneider & Bradbury, 2015; Kanner et al. 1981; Stawski, Silwinski, Almeida & Smyth, 2008). Increased number of daily hassles have been associated with more stress and negative affect, more troubles in relationships, less healthy eating habits, higher levels of anxiety and depression and physical health problems such as, diabetes, cardiovascular problems, and immune

system irregularities (Bolger et al., 1989; Cooper, Guthrie, Brown & Metzger, 2011; Falconier et al., 2015; McIntosh et al., 2010; O'Connor, Jones, Connor, McMillan, & Ferguson, 2008; Tajalli et al., 2010).

As with other forms of chronic stress and adversity, daily hassles have also been associated with increased likelihood of emotional and behavioral problems, particularly anger and aggression (Anderson & Huesmann, 2003; Sprague, Verona, Kalkhoff & Kilmer, 2011; Verona, Sadeh & Curtin, 2009). Furthermore, research has shown that compounded stressors can increase the likelihood of physical aggression in relationships (Falconier et al., 2015). This connection between stress and aggression may be partly due to the fact that daily hassles and stressful triggers greatly tax self-control, defined as exercising control over oneself in an attempt to alter the way one would otherwise act, including one's thoughts, feelings or behaviors (Muraven & Baumeister, 2000). As the available "reservoir" of self-control is diminished by repeated exposure to daily hassles and stressors, so is the ability to manage one's behaviors and emotions (Densen, DeWall & Finkel, 2012). Hence, one is more prone to anger or aggression. Moreover, research suggests that chronic stressors of daily living (e.g. job, finances, health) in contrast to interpersonal stressors (e.g. family, romantic) are the stress domains most relevant to the association between stress and aggression (Sprague et al., 2011).

Experimental evidence further supports the link between stressors and aggression. For example, a study conducted by Verona et al. (2009) showed that exposure to impersonal (e.g. environmental factors such as a hot room) and interpersonal stress both stimulated parts of the brain connected with hostile/aggressive inclinations. Additionally, the participants exposed to stress versus the control group demonstrated increased aggressive behavior (Verona et al., 2009). Another study found

that when rats were held in a small place and exposed to aversive stimuli such as electric shocks and loud noises, their reaction was to fight and attack each other (Robbins, 2000). This animal paradigm may hint at a similar pattern with humans and how their physical environment can also affect their stress levels and consequently their levels of anger and aggression (Anderson & Huesmann, 2003).

Lebanese individuals experience numerous stressors on a daily basis including frequent electricity cuts, water shortages, strained infrastructure (Ayoub & Malaeb, 2006; Dagher & Ruble, 2010; World Bank, 2014), looming possibility of war, garbage piling on the streets, lack of job opportunities, and high apartment rentals and pricing (British Broadcasting Corporation, 2015; Human Rights Watch, 2015; UNHCR, 2014; World Bank, 2014). These experiences of cumulative daily stressors are noted to breed more frustration and clashes in the Lebanese population (Abi-Hashem, 2006; Anderson & Huesmann, 2003; Republic of Lebanon Ministry of Finance, 2013).

3. System Justification. The socio-economic class systems found within many societies often riddle them with inequalities and injustices. Such systems, by default, tend to serve some individuals better than others in various domains such as wealth and access to education and healthcare (Dalbert, 2009). Some individuals will adopt beliefs that permit them to justify their current situation and come to terms with the inequalities of the system. According to Lerner (1980), individuals in general, including ones in a disadvantaged situation, have a universal need to believe that what happens in life is fair and individuals receive what they deserve, otherwise, living in a dangerous and unpredictable world would be unbearable (Kay & Jost, 2003). Hence, there is a human urgency to find a way to accept one's situation and uphold a belief in a just world (Dalbert, 2002). Furthermore, if people are in an advantageous position they may

justify their situation by feeling disdain for victims and blaming them for the situation that they are in (Dalbert, 2009). Research suggests that the majority will actually defend the system despite its obvious inequalities (Kay et al., 2007). A belief in the fairness of one's circumstances can act as a buffer against feelings of anger, because those that encounter hardships will reframe their thoughts to believe that there is some form of justice behind it, and hence preserve their psychological well-being (Dalbert, 2002).

The System Justification Theory tackles the human need to see the current social, economic, and political system structures as fair and justified (Kay & Jost, 2003). However, this need is not exclusively rooted in seeking justice, but rather in accepting and protecting the status quo (Kay et al., 2007). Past research and history suggest that this theory holds true even in societies with the harshest of realities (Jost, Pelham, Sheldon, & Sullivan, 2003). For example, a study conducted in Bolivia with highly impoverished populations showed that they still endorsed beliefs supporting the status quo (Henry & Saul, 2006). Although system justification can act as a coping method, in its most extreme form, it can facilitate the existence and preservation of systems such as the Apartheid system in South Africa and societies that accepted slavery (Kay et al., 2007). Kay et al. (2007) illustrates this perspective using the "Sambo" stereotype of African American slaves in Southern fables, which described them as submissive but unreliable, loyal but lazy, childlike, and incapable of taking care of themselves, and therefore needing their "masters." Kay et al. (2007) proposes that the African American slaves in turn internalized these beliefs which blunted their tendency to revolt or hate their oppressors. Furthermore, Jost et al. (2012) investigated collective protest against in-group disadvantage, which refers to the unjust treatment or the unequal opportunities, resources, power or wealth that one group encounters

(Powell, Branscombe, & Schmitt, 2005). They found a negative association between endorsing system justification beliefs and anger. In fact, group based anger was found to mediate the effect of system justification on the willingness to protest. Hence, endorsing system justification beliefs dampens an individual's anger and willingness to protest (Jost et al., 2012).

On the other hand, there are individuals who are no longer seeking to justify or support the status quo because it provides them with no benefit (Jost et al., 2010). This indicates that the individuals are aware of and acknowledge the injustices that the system is responsible for and seek to fight for what they believe to be just (Dalbert, 2009). Accordingly, perceived injustice is defined as a belief that an individual was kept from achieving a particular goal or punished for something they did not do (Berkowitz & Harmon-Jones, 2004; Dalbert, 2002), and anger is a common response to such a situation (Orth & Wieland, 2006). There is a great amount of research that connects anger and the perception of injustice (Barclay, Skarlicki, & Pugh, 2005; Berkowitz & Harmon-Jones, 2004; Miller, 2001; Rebellion, Manasse, Gundy, & Cohn, 2012). In fact, Solomon (1990) states that anger can be considered an "alarm system" that is activated by injustice. Being treated unjustly gives a person a reason to be angry and even justifies aggressive acts (Miller, 2001). Additionally, Rebellion et al. (2012) found that perceiving life stressors and strains as unjust is associated with various negative emotions such as anger, and maladaptive coping mechanisms, such as crime. This link between injustice and anger can similarly be observed in the string of "Arab Spring" revolutions and protests that took place in various countries in the Middle East in 2011, which were fueled by the unfair economic and political situations and corrupt dictators and governmental systems (Bayat, 2013; Sakhawy, 2015). Furthermore, this supports

Jost et al. (2012) findings that group-based anger can encourage willingness to protest by lowering the group's system justification beliefs (Jost et al., 2012).

Lebanon is rampant with examples of social injustice. In addition to the numerous daily hassles and stressors discussed previously, the division between upper and lower socio-economic classes in Lebanon is slowly becoming wider and deeper (Bahous & Nabhani, 2008). This division further widens the gap in access to quality education through private schools and universities that are often far superior to public schools, which struggle with unqualified and burdened teachers (Bahous & Nabhani, 2008). Similarly, health care plans in Lebanon are among the most expensive in the MENA region, and therefore the cost of having health insurance can sometimes drive families into poverty (Salti, Chaaban & Raad, 2010).   Additionally, Lebanon is the world's 8th worst country in terms of gender equality, due to the low number of women in governmental positions, and their lack of political and economic empowerment and participation (World Economic Forum, 2015). Moreover, even the freedom of expression has been greatly curtailed, and legitimate criticism of governmental officials is often silenced as evidenced by arrests of journalists and bloggers accused of defaming the president (Human Rights Watch, 2015). Finally, Lebanon's government scores quite highly on Transparency's International 2013 Corruption Perceptions Index which can shatter the assumption that those that work hard and do right will get what they deserve.

No formal research exists on whether Lebanese citizens tend to exhibit behaviors and beliefs consistent with system justification, therefore it is important to explore to what extent Lebanese individuals endorse system justification given the rampant injustices they experience. However, results from 15 focus groups across greater Beirut suggested that Beirutis veered towards high perception of injustice. This

18

was evidenced by most of them agreeing on the presence of sectarian-based discrimination and current structural injustices in Lebanon that allowed these inequalities to continue (International Center for Transitional Justice, 2014). Furthermore, many felt that the "war was not over," and that gaining justice seemed unlikely (International Center for Transitional Justice, 2014). Additionally, the recent garbage protests, numbering approximately 100,000, suggest that citizens sought to demonstrate their anger, as their patience with injustice has been "stretched to breaking point" (Jay, 2015).

B. Person Factors

Various aspects of a person's background and how they view the world may be associated with their tendency towards anger. Based on the General Aggression Model these aspects can include their beliefs, values, traits and gender (Anderson & Bushman, 2002). The person factors investigated in this study, based on both the general aggression model and the emotional appraisal theories, were: 1) Narcissism, related to self-esteem and personal traits, 2) Helplessness, which tackles beliefs about an individual's capabilities, and 3) Gender.

1. Narcissism. Narcissism is a personality trait revolving around a fascination with the self and a lack of care or interest in others (Firestone & Catlett, 2009). It is characterized by a grandiose sense of self, continuous need for affirmation, showing off talent (Cain, Pincus, & Ansell, 2008; Kernberg, 1998), devaluing or ridiculing others that challenge one's sense of self, self-absorption, and a tendency towards interpersonal exploitation and lack of empathy (Ackerman et al., 2011; Cann & Biaggio, 1989). The above qualities further contribute to a strong sense of entitlement and a superiority complex (Bushman & Huesmann, 2010; Witte, Callahan & Perez-Lopes, 2002). Vanity

is another important characteristic of narcissistic individuals because they have an incessant need to look good in front of people to mask a deep-rooted sense of inadequacy (Firestone & Catlett, 2009). Narcissists become more worried about how they are being seen rather than who they truly are (Firestone & Catlett, 2009). The narcissist's sense of self is two sided; the grandiose and inflated sense of self masks and overcompensates for a fragile, defective sense of self, hence the constant need for others' affirmation (Cain et al., 2008). Narcissism can range in severity from "normal" and subclinical to a full-blown personality disorder as defined by the DSM-V (Foster, Campbell, & Twenge, 2003).

Research has consistently demonstrated a link between narcissism and anger, aggression, and controlling behavior (Ackerman et al., 2011; Cain et al., 2008; Reidy, Zeichner, Foster & Martinez, 2008). Although narcissists have a highly favorable self-appraisal, it is quite unstable and fragile, which makes them highly vigilant and sensitive to anything that threatens their positive self view, and more likely to protect themselves from such threats by acting defensively and aggressively (Baumeister, Bushman & Campbell, 2000; Bushman & Huesmann, 2010; Edwards, Warren, Tubre, Zyphur, & Hoffner-Prillaman, 2013). The narcissism anger link is particularly evident in the case of social rejection, as narcissistic individuals were found to be more aggressive towards an innocent third party individual after facing such a rejection (Twenge & Campbell, 2003). Research has also shown that individuals prone to anger, aggression and violence also scored highly on traits of narcissism, viewed themselves as superior to others, and had a high sense of entitlement and an exploitive nature (Bushman & Huesmann, 2010; Cann & Biaggio, 1989; Reidy et al., 2008; Witte et al., 2002). Furthermore, studies found that prisoners arrested due to violent offenses had

high levels of narcissism, mostly stemming from a high sense of entitlement and superiority (Reidy et al., 2008). Finally, Edwards et al. (2013) demonstrated in an experimental paradigm that car drivers most likely to react aggressively once provoked were those that had elevated narcissistic traits.

Narcissism may be prominent in the Lebanese sample utilized in the study for several reasons. Firstly, there is a connection between narcissism and individualistic cultures, such as Western ones (Foster et al., 2003). In individualistic societies, individuals tend to focus more on their self-esteem and individualism. Their sense of well-being tends to derive more from emotions that distance them from others (e.g. pride), and they are less likely to be self-critical and modest. There focus is more on the self rather than being a part of a group. Therefore, an individualistic society is stipulated to increase the likelihood of individuals possessing narcissistic qualities (Foster et al., 2003). Although Lebanon is considered a collectivistic society, a recent study showed that there may be a shift towards increased focus on individualistic and westernized values (Dirani, 2012). Furthermore, given that many Lebanese speak three languages, Arabic, English, and French, the individual's preferred spoken language may be associated with degree of individualism, whereby individuals that speak English or French tend to endorse more individualistic values (Ayyash-Abdo, 2001). Hence, many Lebanese may possess both individualistic and collectivistic characteristics, and the endorsement of individualistic characteristic may potentially be associated with higher levels of narcissistic qualities. Furthermore, there is great value placed on appearances, social image, and vanity in Lebanon (Doherty, 2008). For example, it is common to witness individuals flaunting their riches and physical beauty to the extent that cosmetic surgery is normative and aspired to by many (Doherty, 2008; Khalaf, 2014). Cosmetic

surgery became so prevalent that a campaign was launched to encourage being unique

and not fall prey to media driven ideals of beauty (Berer, 2010; Doherty, 2008). This

preoccupation with one's appearance and image may be closely tied with the vanity

dimension of narcissism. A review of 65 studies found that one of the most common

psychiatric disorders found in patients seeking plastic surgery is narcissistic personality

disorder (Shridharani, Magarakis, Manson & Rodriguez, 2010).

     2. Helplessness. In response to stressful and traumatic events, some individuals

become passive, numb and incur feelings of helplessness (Peterson & Seligman, 1983).

Helplessness is defined as a condition whereby the individual believes that due to

multiple previous failures, nothing can be done to control or change a negative situation

(Filippello, Sorrenti, Buzzai & Costa, 2015). Research suggests that individuals who

tend to feel helpless in response to adversity have often learned through traumatic or

other adverse experiences in which they had little or no control that their ability to make

a difference in future events will remain null (Seligman, 1975). It is not enough

however, for an individual to go through an experience that is beyond their control, they

must also truly believe that outcomes are not contingent upon their actions (Abramsom,

Seligman & Teasdale, 1978; Barber, 1986). Recent research on the biological

indicators of learned helplessness suggest that giving up after repeated failures is in fact

a survival mechanism to aid an individual in the conservation of energy, which is

consistent with the belief that action is futile. Maier and Seligman (2016) suggest that

individuals can overcome this passivity by learning control.

     Helplessness has two subtypes: universal and personal helplessness. Universal

helplessness occurs when an individual feels helpless but understands that others feel a

lack of control in this specific situation as well, such as when a person is suffering from

cancer. In contrast, personal helplessness occurs when actions can be taken to influence

an outcome, but an individual believes that they, in specific, are incapable of taking the

proper action that will affect this change (Abramsom et al., 1978; Barber, 1986). Janoff-

Bulman and Frieze (1983) explain that helplessness becomes highly personal when a

traumatic or life threatening event engenders a high sense of helplessness and

victimization and therefore shatters assumptions about self, others, and the world. There

are three such assumptions; 1) the belief in personal invulnerability 2) the perception of

the world as meaningful and coherent and 3) the view of ourselves in a positive light,

which ultimately shatters when the first two assumptions shatter (Janoff-Bulman &

Frieze, 1983). Once these assumptions have been shattered, individuals begin seeing

themselves as feeble, helpless, scared, and lacking control (Janoff-Bulman & Frieze,

1983; Peterson & Seligman, 1983).

　　　Learned helplessness is multilayered and influenced by many factors: The

expectancy of control which, can be eroded by repeated failure, rumination and other

coping strategies, and the personal importance of a particular failure to the individual

and how it affects the perception of the self. For example, one coping technique helpless

individuals utilize is avoidance. If an individual feels that they have no control over the

outcome, they will engage in avoidance and detach themselves from the threat of

failure. This in turn alleviates their distress, distances them from negative emotions, and

helps preserve their self-esteem (Mikulincer, 1994).

　　　 In terms of the connection between helplessness and anger, both can be

conceptualized as states of being expressing a lack of control over a situation (Gelbrich,

2010; Thompson & Spacapan, 1991). For example, Gelbrich (2010) compared coping

strategies after being dissatisfied with a company's services and found that angry clients

would express their anger directly in the form of direct complaints, whereas those who felt helpless expressed anger indirectly through badmouthing the company and spreading rumors. Hence, helplessness appears to channel anger through indirect forms, as opposed to direct confrontation (Gelbrich, 2010).

Some research suggests that suppressing anger contributes to greater feelings of helplessness. For example, breast cancer patients that suppressed their anger were one's that felt the most helpless, lacked the needed will to fight the disease and had lower physical health and quality of life (Lieberman & Goldstein, 2006). Additionally Greer (1979) found that many breast cancer patients felt that anger would not help their situation, hence they would suppress it, which led to heightened helplessness and worse physical health (Greer 1979 as cited in Rubin, 1986). Research supports the findings that suppression of anger in maladaptive ways does not lessen the experience of it, but just the expression (Memedovic, Grisham, Densen & Moulds, 2010). In addition, over time because of the effort required to control the anger, it may grow stronger and negatively impact physical health (Memedovic et al., 2010).

Furthermore, learned helplessness is highly connected to the construct of self-efficacy, which describes one's regard of their capabilities in terms of their competence, effectiveness and ability to implement change. A review by Gecas (1989) on self-efficacy and related terms suggests that learned helplessness can be considered an extreme form of a sense of inefficacy. Both helplessness and a sense of inefficacy share the notion that one's actions cannot change the outcome or the situation that they are placed in. Additionally, previous studies have demonstrated that there is a negative correlation between self-efficacy and anger (Ausbrooks, Thomas, & Williams, 1995; Mowlaie, Besharat, Poubohlool, & Azizi, 2011; Wilfong, 2006). Hence, the more a

person feels that they are in control of a situation and themselves, the less anger they will feel.

Yet, anger can be a sign of strength and hence propel an individual to seek control of the situation (Mikulincer, 1994). Furthermore, the relationship between self-efficacy and anger at the group level is more mixed. Tausch et al. (2011) compared three survey studies of student protests in Germany, Indian Muslims' action support relating to in-group disadvantage, and British Muslims' reactions to British foreign policy. They examined the differing relations between anger, self-efficacy and collective action. Results revealed that anger and greater self-efficacy in fact motivate normative collective action or actions taken within lawful manners for the benefit of the group. On the other hand, low levels of self-efficacy can drive more non-normative forms of action, veering more towards violence and harmful manifestations of anger (Tausch et al., 2011).

Moreover, helpless versus angry responses may be moderated by the type of situation. For example, in a study about the impact of the 'War on Terror' on British Muslim's emotions, Ahmed (2015) explained that when individuals feel the victimizer has more power in situations of injustice, they suppress their outrage, which results in feelings of helplessness. No studies directly investigate helplessness as a predictor of anger. Yet, we argue that exploring the association between helplessness and anger is highly salient in the Lebanese context. Lebanese citizens' experience with a protracted 15 -year civil war that threatened their land, safety, and independence (Zahr, 1996) coupled with their current experiences of numerous and repeated uncontrollable stressful and traumatic events such as random bombings, civil strife (Shields, 2008), electricity cuts (Dagher & Ruble, 2009), garbage on the streets (British Broadcasting

25

Corporation, 2015) may have engendered a profound sense of both universal and personal helplessness. Since all of the above research investigates anger and helplessness as possible reactions to specific conditions or circumscribed scenarios or helplessness as a suppressor of anger, it is possible in contrast that chronic helplessness over protracted aversive situations is positively predictive of anger experience and expression.

3. Gender. Research about gender differences in anger demonstrates a clear tendency for men to be more aggressive than women (Felson, Savolainen, & Ellonen, 2015), although this may be moderated by the type of situation or circumstance (Archer & Coyne, 2005).

Many theoretical perspectives have been proposed to account for the increased aggression seen by men (Usta, Farver & Hamieh, 2015). One such perspective is the Social Learning Theory, which stipulates that individuals acquire knowledge through direct experience or observing and modeling the behaviors of others (Bandura, 1971). Furthermore, the environment and reinforcement systems play a large role in the behaviors that persist (Bandura, 1971). For instance, men are usually taught that aggression is more acceptable for them than women, and are expected to be stronger, more aggressive and even violent, which becomes their mark of manhood (Pilcher & Whelehan, 2004). In contrast, there is more emphasis on qualities that embody care and nurturance and behaviors that encourage communal harmony for women (Eagly & Steffen, 1986).

Another perspective is the power-control theory, which applies to homes that are patriarchal and are based upon a clear imbalance of power between men and women. According to this theory, women are governed by more stringent rules in order to

maintain this imbalance (Collet & Lizardo, 2009) and men historically use violence and aggression to remain in power (Haj-Yahia, 1997).

In terms of expression of anger, research shows that women are more likely to suppress their anger, although they frequently discuss their emotional states of anger (Spielberger et al., 1995). On the other hand, men tend to feel more open in expressing their anger in an aggressive manner (Spielberger et al., 1995) and are prone to show both physical and verbal aggression (Buss & Perry, 1992). Men are also ten times more likely than women to commit murder and more than five times as likely to be under supervision for criminal offenses (Craig, 2007). Additionally, men are found to be responsible for about 85% of all violent crimes in the United States, Europe and Australia (Pilcher & Whelehan, 2004). Experimental evidence further suggests that when given the chance to either show control or retaliate, men were more likely to retaliate and at greater intensities than women (Zeichner, Parrot, & Frey, 2003).

Nonetheless, much research suggests that women prefer indirect forms of aggression and may be as aggressive as men when using these forms. Indirect forms include gossip, ruining one's social standing, and disrupting relationships and friendships (Archer & Coyne, 2005). A meta-analytic review demonstrated that men were more likely to show aggression than women in instances where it would cause pain or physical harm as opposed to psychological or social harm (Eagly & Steffen, 1986). This contrast was also observed in children in preschool and elementary school, where girls preferred indirect demonstrations of aggression and boys preferred physical aggression (Bushman & Huesmann, 2010). These findings may be explained by gender socializations that make it less acceptable for women to show direct forms of aggression.

Given the highly patriarchal structure of society and family in Lebanon (Jamali, Sidani & Safieddine, 2005), where men have more domineering roles (Usta et al., 2015), it is likely that men will have a greater sense of entitlement (Bushman & Huesmann, 2010; Witte et al., 2002) and be more aggressive than women. Gender socialization also plays a large role (Bandura, 1971). For example, research conducted in Baalbek, Lebanon found that angry and aggressive behaviors were more accepted for men than women. In contrast, women were expected to have more restricted traits such as obedience and helpfulness (Usta et al., 2015).

CHAPTER III

Aims and Hypotheses

A. Aims

In terms of anger, most clinical research has tended to either favor other emotions and mood states such as anxiety and depression or to focus on outward expressions of anger in the form of aggression or hostility rather than on the emotion of anger itself, even though it's more broad and encompassing (DiGiuseppe & Tafrate, 2007). Few studies focus on environmental or group-based predictors of anger (war exposure and system justification) particularly as related to individual experiences of anger. Moreover, very little research exists, on the experiences of anger-in as the main outcome variable in contexts of war exposure, helplessness, narcissism, great systemic injustices, and the daily hassles associated with them. Furthermore, this study is the first to test the predictive relationship between helplessness and anger and anger-in. Lastly, due to the great injustices and daily hassles that the Lebanese experience due to their political, economic, and social context, an aim of this study was to test whether the Lebanese sample demonstrate high levels of anger.

In its most effective form, anger is an adaptive mechanism that prevents others from impinging upon one's rights and gives an individual the needed motivation to rectify an unjust situation (Robbins, 2000). Yet, outside such contexts, anger can potentially be the doorway to harmful behaviors such as aggression and violence (DiGiuseppe & Tafrate, 2007), is associated with negative mental and physical health symptoms, and is highly co-morbid with a variety of disorders such as PTSD and substance abuse (Meichenbaum, 2005). Hence, a better understanding of anger can aid professionals when diagnosing and treating patients where anger problems are salient

(DiGiuseppe & Tafrate, 2007). Lebanon is a particularly relevant context for the study of anger. The cumulative effect of civil strife, wars with Israel, lack of functional utilities, governmental corruption, and constant threats to safety leave Lebanese citizens vulnerable to frustration, irritability and anger. Since no studies to date have investigated predictors of anger in Lebanon, this study sought to explore environmental and personal predictors of various facets of the experience and expression of anger in a Lebanese sample. The variables of war exposure, daily hassles, system justification, narcissism, helplessness and gender were selected for their particular salience in the Lebanese context.

The following hypotheses were examined.

B. Hypotheses

Studies have demonstrated a link between exposure to traumatic war events and living in conflict zones and anger (Bramsen et al., 2002; Abi Hashem, 2006).

Hypothesis 1. Increased war exposure will positively predict anger.

Daily hassles place a great amount of pressure on an individual's coping resources and self-control (Lazarus, 1984). The more daily hassles and stressful triggers an individual experiences, the less self-control available, and therefore the greater proneness to anger and aggression (Densen et al., 2012; Muraven & Baumeister, 2000). Furthermore, research supports the connection between increased stress or daily hassles with increased emotional and behavioral problems such as anger and aggression (Anderson & Huesmann, 2003; Sprague et al., 2011; Verona et al., 2009).

Hypothesis 2. Increased exposure to daily hassles and stress will positively predict anger.

When individuals feel that the system or status quo no longer serves or benefits them in any way they will begin to acknowledge the injustices that they face (Jost et al., 2010). Research shows that increased perception of unfair or unjust situations breeds anger (Barclay et al., 2005; Berkowitz & Harmon-Jones, 2004; Rebellion et al., 2012).

Hypothesis 3. Low levels of system justification will positively predict anger.

Research demonstrates that individuals prone to anger and aggression score highly on traits of narcissism, view themselves as superior to others, and have a high sense of entitlement and an exploitive nature (Bushman & Huesmann, 2010; Cann & Biaggio, 1989; Reidy et al., 2008; Witte et al., 2002).

Hypothesis 4. Higher levels of Narcissism will positively predict anger.

In terms of gender and anger most research shows men as more angry and aggressive in direct and outward forms of expression than women (Archer & Coyne, 2005).

Hypothesis 5. Men will show significantly higher levels of anger as opposed to women.

C. Exploratory Hypothesis

When an individual experiences anger combined with helplessness, they will most likely suppress this anger, which in turn may translate into physiological symptoms (Lieberman & Goldstein, 2006; Rubin, 1986). There is no empirical evidence to suggest that helplessness predicts anger, nonetheless, there is a strong connection between learned helplessness and inefficacy and research suggests that increased feelings of inefficacy breed more anger (Ausbrooks, Thomas, & Williams, 1995; Mowlaie, Besharat, Poubohlool, & Azizi, 2011; Wilfong, 2006). Furthermore, we

propose that chronic universal and personal helplessness over protracted stressors and

situations, as in the Lebanese context, can breed chronic frustration and anger.

      Hypothesis 1. Higher levels of learned helplessness will positively predict

anger.

CHAPTER IV

Methodology

A. Participants

A total of 141 individuals participated in the study. All participants were Lebanese and are current residents of Lebanon or have lived in Lebanon in the last five years for at least one year. Participants were aged 18 to 72 years (M = 33.06, SD = 11.02) and 63.1% were female. Participants came from various regions in Lebanon, but 58.9% were from Beirut. Most participants were from a middle to upper social class About 20% had monthly income of at least 1,500,000 Lebanese Liras and about 50% had incomes of at least 3,000,000 Lebanese Liras, with about 18% having incomes above 7,500,000 Lebanese Liras. Furthermore, Participants were highly educated, with 76% holding a Master's degree or above. Please see Table 1 below.

Table 1
Sample Descriptives

		N	%
Gender	Male	52	36.9
	Female	89	63.1
Education	High School	3	2.1
	Undergraduate	30	21.4
	Graduate/Masters	93	66.4
	Postgraduate	14	10.0
Income	Less than 500,000 L.L. per month	2	1.4
	500,000 L.L. – 750,000 L.L. per month	1	0.7
	750,000 L.L. – 1,500,000 L.L. per month	14	9.9
	1,500,000 L.L. – 3,000,000 L.L. per month	28	19.9
	3,000,000 L.L. – 7,500,000 L.L. per month	45	31.9
	More than 7,500,000 L.L. per month	25	17.7
	I Prefer Not to Say	26	18.4
The Area in which the participants are from in Lebanon	Beirut	83	58.9
	North	8	5.7
	Mount Lebanon	30	21.3
	Bekaa	5	3.5
	Nabatiye	2	1.4
	South	10	7.1

B. Procedure

The survey was available in both English and Arabic and accessible online through LimeSurvey. The scales were originally in English and were translated by a professional translator into Arabic, back translated into English by a bilingual professional and the two English versions checked for equivalence by a bilingual clinical psychologist. Nonetheless, only two participants out of the 141 filled the survey in Arabic.

To obtain a community sample of participants that varied in age, life experiences, trauma exposure, and other variables of interest to the study, snowball sampling was utilized. All interested participants were either friends of the co-investigator and able to access the link from her Facebook page (Appendix K), or received e-mails from friends and family that had access to this link. Lastly, a few people from around the American University of Beirut campus and Bliss Street received flyers from the co-investigator (Appendix J). The online survey included an informed consent form (Appendix A). The form provided an explanation of the purpose of the study, information about confidentiality, anonymity, and risks and benefits of participation, along with contact information of the research investigators. Participants who agreed to participate were asked to click "Next" which directed them to the study.

C. Measures and Reliability

1. Demographics Questionnaire. This form included questions about the participants' age, gender, level of education, income level, profession, nationality and area of current residence in Lebanon.

2. Anger. Anger was measured using the Multidimensional Anger Inventory (MAI) (Siegel, 1986). The MAI is a 38-item scale that assesses anger across various dimensions and subscales such as: frequency, duration, magnitude, mode of expression (anger-in and anger-out subscales), and hostile outlook. The items are scored on a 5-point likert scale, ranging from (1) completely undescriptive of me to (5) completely descriptive of me. Convergent validity was tested by comparing the MAI to three anger and hostility inventories. The MAI anger-arousal scale was significantly correlated with the duration and magnitude scores on the Harburg's scale (Harburg et al., 1975) and magnitude score on the Novaco Anger Inventory (Novaco, 1975). The MAI anger-

eliciting situations scale was highly correlated to the Novaco anger-situations scale. The hostile outlook scale of the MAI was highly correlated with the Buss-Durkee Hostility Inventory (Buss & Durkee, 1957). The anger-out scale of the MAI was highly correlated with the anger-out scale of the Harburg Scale; whereas the anger-in scale only showed a marginal significant correlation with its corresponding Harburg scale. The MAI has high internal consistency, with alpha reliability coefficients ranging between .84 to .89 in samples of college students and male factory workers (Siegel, 1986). In the current study, the total scale had very good reliability ($\alpha = .87$). For the purposes of this study, only the anger-in subscale was utilized. This subscale had an alpha reliability of .72 in the original validation study and a moderate reliability $\alpha = .66$ in the current study. The study initially sought to cautiously explore the anger-out subscale as an outcome variable as it had low reliability in the original study ($\alpha = .51$) and was only composed of two items, which is consistent with the True-score theory that more items lead to better representation of the constructs being measured and improves reliability (Eisinga, Grotenhuis, & Pelzer, 2013). The anger-out subscale similarly had poor reliability in the current study ($\alpha = .50$) and it was therefore decided that it would be dropped from subsequent analysis.

3. **War Exposure.** War exposure was measured using the Harvard Trauma Questionnaire (HTQ) (Mollica, McDonald, Massagli, & Silove, 2004). The HTQ is a questionnaire that measures exposure to trauma secondary to war and organized violence. The HTQ has been adapted to many cultures and is widely used among refugee populations (Shoeb, Weinstein & Mollica, 2007). The Arabic version includes four parts: 1) exposure to traumatic events, 2) personal description of events, 3) head injury incidents, and 4) trauma symptoms. This study used the first part to assess war

exposure. The Arabic version was originally adapted for use with Iraqi refugees and the trauma exposure items reflect events related to the Iran/Iraq war and the US invasion and subsequent civil war (Shoeb et al., 2007). Most of the items similarly apply to the Lebanese context and items that did not match were omitted or modified. The first part includes 42 traumatic incidents that are endorsed as "yes" or "no." However, due to modifications that took into consideration time constraints of the participants as well as relevance to the Lebanese context only 14 questions out of the 42 remained. This scale has demonstrated high internal consistency when used with Iraqi refugees in the U.S, with alpha ranges between .93 and .95, based on a sample of 63 Iraqi refugees in the United States (Hijazi et al., 2014). In the current study the reliability analysis indicated that this scale had good reliability (α = .71).

  4. Daily Hassles. The revised version of the Hassles and Uplifts Scale (DeLongis et al., 1982) was used for the current study. The scale originally contains 53 items that can be perceived as either hassles or uplifts. For the purpose this study, only the hassles section was included and one question was omitted due to the sensitivity of the topic. The participants were asked to rate the extent to which they perceived each item to be a hassle on a 4-point scale, ranging from (0) none or non-applicable to (3) a great deal. In addition, the correlation between the hassles section of the scale and the three subscales of the Daily Stress Inventory ranged between .33 and .57, all of which were significant (Brantley, Waggoner, Jones, Rappaport, 1985; Kanner et al., 1981). This scale has been widely used, and was found to have an internal consistency coefficient of .90 in a study with cancer patients (Friedman et al., 1992). In the current study the reliability analysis indicated that this scale had excellent reliability (α = .91).

5. System Justification. System Justification was measured using the General System Justification Scale (Kay & Jost, 2003). This is an 8-item measure of system justification on a 5-point scale ranging from 1 (strongly disagree) to 5 (strongly agree). Questions include "In general, you find society to be fair" (Kay & Jost, 2003). Some items specifically asked about the United States and were replaced with "Lebanon". Furthermore, this scale is significantly correlated with Lipkus' (1991) Global Belief in a Just World scale. The alpha reliability coefficients for various studies using this scale ranged between .75 to .87 (Kay & Jost, 2003). In the current study the reliability analysis indicated that this scale had moderate reliability ($\alpha = .65$).

6. Narcissism. Narcissism was measured using the Narcissistic Personality Inventory (NPI-16) (Ames, Rose & Anderson, 2006). The NPI-16 includes 16 pairs of statements that assess participants' level of narcissism through asking them to choose which statement best describes their feelings and beliefs. The NPI-16 correlated highly with the original NPI-40. Furthermore, both the 16 and 40 item NPI correlate positively with the Big Five personality constructs: Openness to Experience, Conscientiousness and Extraversion and negatively with Agreeableness and Neuroticism (Ames et al., 2006). Both scales also show significant moderate correlations with self-esteem (Ames et al., 2006). The alpha coefficient of the scale was .72 in a sample of 760 undergraduate university students (Ames et al., 2006). In the current study the reliability analysis indicated that the scale had poor reliability ($\alpha = .58$). [1] Nonetheless, according to Kline (1999) scale reliability may be lower than .70 due to the diversity of the constructs being measured.

---

[1] It is noteworthy to mention due to the poor reliability of the narcissism scale, the analysis was run twice, with and without the narcissism variable, the significant predictors nonetheless, remained the same.

7. Learned Helplessness. Learned helplessness was measured using a 20-item scale that assesses attributional styles associated with learned helplessness (Quinless & Nelson, 1988). The scale is scored on a 4-point Likert scale, ranging from (1) strongly agree and (4) indicating strongly disagree. Higher scores reflect more learned helplessness. There is a positive correlation between the LHS and Beck's Hopelessness Scale (HS) and a negative correlation with Rosenberg's Self-Esteem Scale (SES) (Quinless & Nelson, 1988). The scale was found to have a reliability coefficient of .85 in a sample of healthy adults (Quinless & Nelson, 1988). In the current study the reliability analysis indicated that the scale had substantial reliability ($\alpha = .84$).

Table 2 -*Reliability of the Scales and Subscales: Cronbach's alpha*

Scales and Subscales	Cronbach's alpha	N of items
The Multidimensional Anger Inventory (MAI)	.87	38
Anger-In	.66	5
The Harvard Trauma Questionnaire (HTQ)	.71	13
Exposure to traumatic events		
The Hassles and Uplifts Scale	.91	52
System Justification Scale	.65	8
Narcissistic Personality Inventory (NPI-16)	.58	16
The Learned Helplessness Scale (LHS)	.84	20

D. Pilot Study

A pilot study was conducted with five participants to elicit feedback regarding the clarity and cultural relevance of the measures. The recruitment and administration of the survey followed the same procedure described above and was administered online

through LimeSurvey. Nonetheless, no changes were made, as the measures were clear and culturally relevant.

E. Data analysis

Bivariate correlations were conducted to test the relationship between each predictor variable and anger. Two multiple regressions (forced entry) were conducted to explore the effects of the following predictor variables: war exposure, daily hassles, system justification, helplessness, narcissism and gender on the overall anger scale and the anger-in subscale.

CHAPTER V

Results

A. Preliminary Analysis

The preliminary analyses included missing values analysis, analysis of univariate and multivariate outliers, and normality analysis. Two separate analyses were conducted. The first analysis replaced the missing values with an Expectation maximization (EM) imputation and the second left the missing values as is. This was done to compare the results to see if any differences could be found. Only slight differences were found. Therefore, this results section only presents the results with the EM imputation.

1. Missing value analysis. A missing value analysis was conducted on the 146 participants and revealed that all the variables had less than 5% missing values. The data was found to be missing at random because Little's MCAR test was not statistically significant χ^2 (4535) = 4266.86, p = 1.00, *ns*. A total of 35 individuals had not answered at least one question. Out of these 35 only four participants had a significant amount missing from at least one scale. Hence, these four participants were dropped from the analysis, per Tabachnick and Fidell (2013) recommendation for dropping cases if there are only a few that have a substantial amount missing and are missing at random. Once this was completed, 31 cases with a minimal number missing per case remained. Therefore, an EM imputation was used to replace any missing data per Tabachnick and Fidell's (2013) suggestion that if the missing values are low, the EM-imputed data sets can be useful when evaluating assumptions and the interpretation of inferential statistics can be made with caution. Furthermore, as stated above, to test if the EM imputation distorted the results in any way, the analysis was run twice, once

with the imputations and once without. The results for both analyses were extremely similar, with no differences in patterns of correlations and significant predictors in the final regression models. This suggests that the findings were robust and were not affected by missing values. The below results are of the primary analysis that included the EM imputation.

2. Univariate and multivariate outliers. Univariate outliers were analyzed through Z-scores. Any Z-score with a value above ±3.29 standard deviations was considered a univariate outlier. Multivariate outliers were analyzed through the Mahalanobis distance using SPSS syntax.

Only one case (#114) was found to be both a univariate outlier on the system justification variable as well as a multivariate outlier, χ^2 (6) = 24.17, $p < .001$. Due to the fact that it was only one case, and because outliers place undue bias upon the parameter estimates (Fields, 2013), it was therefore deleted from the analysis.

3. Outliers in the Solution. Outliers in the solution are cases that are not greatly anticipated by the regression model, and exert undue influence on the constraints of the regression model. To examine the presence of outliers, standardized residuals were used (Field, 2013). All cases with standardized residuals above ±3.29 significance level are indicative of outliers in the solution.

In the current analysis, the standardized residuals ranged for general anger between -3.17 and 2.17 and between -1.87 and 2.36 for anger-in. Hence, no cases were above ±3.29, indicating that the data did not include any outliers in the solution.

4. Normality. Normality of the variables was examined by observing the z-scores of skewness and kurtosis. The z-skewness was acquired by dividing skewness by the standard error of skewness and the z-kurtosis was obtained by dividing kurtosis by

the standard error of kurtosis. All variables had z-skewness scores and z-kurtosis scores below the ±3.29 significance level, revealing that these variables were normally distributed.

B. Scale Descriptives

As seen in Table 3, the sample endorsed moderate levels of anger and low to moderate levels of anger-in. Participants also experienced moderate to high levels of daily hassles. The hassles on which most participants consistently scored higher than the midpoint (1.5) can be found in bold in Table 4. Participants scored below the midpoint on war exposure, system justification, and narcissism. Furthermore, participants' scores on helplessness were above the midpoint, suggesting moderate to high levels of helplessness.

Table 3
Scale Descriptives

	Mean	Std. Deviation
Anger	114.07	18.78
Anger-In	13.46	4.10
War Exposure	4.07	2.46
Daily Hassles	49.49	21.56
System Justification	1.77	0.56
Narcissism	4.73	2.63
Helplessness	54.77	7.77

Table 4
Descriptive Statistics - Hassles

	Mean	Standard Deviation
1. Your child(ren)	0.38	0.80
2. Your parents or parents-in-law	1.18	1.08
3. Other relative(s)	0.83	0.89
4. Your spouse	0.61	0.90
5. Time spent with family	0.81	0.95
6. Health or well-being of a family member	1.14	1.09
7. Sex	0.52	0.84
8. Intimacy	0.68	0.96
9. Family-related obligations	1.25	0.97
10. Your friend (s)	0.89	0.91
11. Fellow workers	1.11	1.03
12. Clients, customers, patients, etc.	0.94	1.02
13. Your supervisor or employer	1.06	1.05
14. The nature of your work	1.33	1.05
15. Your work load	1.28	1.02
16. Your job security	1.12	1.13
17. Meeting deadlines or goals on the job or at university	1.26	1.11
18. Enough money for necessities (e.g. food, clothing, housing, health care, taxes, insurance)	1.37	1.12
19. Enough money for education	0.79	1.11
20. Enough money for emergencies	1.06	1.11
21. Enough money for extras (e.g., entertainment, recreation, vacations)	1.38	1.09
22. Financial care for someone who doesn't live with you	0.46	0.81
23. Investments	0.56	0.94
24. Your smoking	0.55	0.95
25. Your drinking	0.35	0.75
26. Your physical appearance	1.29	1.02
27. Contraception	0.30	0.74
28. Exercise(s)	1.06	0.94
29. Your medical care	0.94	1.04
30. Your health	1.17	1.01
31. Your physical abilities	0.91	0.88
32. The weather	1.05	1.05
33. News events	1.06	0.99
34. Traffic	**2.09**	**0.96**
35. Your environment (e.g., quality of air, noise level, greenery,	**1.94**	**0.98**

garbage)

36. Political or social issues (such as corruption)	**1.79**	**1.16**
37. Your neighborhood (e.g. neighbors, setting)	1.12	1.07
38. Gas, electricity, water, gasoline, generator	**1.61**	**1.15**
39. Pets	0.36	0.79
40. Cooking	0.56	0.86
41. Housework	0.75	0.91
42. Home repairs	0.78	0.99
43. Car maintenance	0.97	1.02
44. Taking care of paperwork (e.g. paying bills, filling out forms, including governmental documents)	1.01	0.92
45. Home entertainment (e.g. TV, music, reading)	0.44	0.68
46. Amount of free time	0.86	0.95
47. Recreation and entertainment outside the home (e.g. movies, sports, eating out, walking)	0.64	0.78
48. Eating (at home)	0.68	0.83
49. Religious or community organizations	0.46	0.81
50. Legal matters	0.51	0.87
51. Being organized	1.10	0.97
52. Social commitments	1.11	0.93

Minimum = 0 and Maximum = 3; Midpoint = 1.5

C. Correlation between Predictor Variables and Anger and Anger-In

    1. Assumptions of the Pearson Correlation Test.

    a. Variable Type. All the variables were scale variables except for gender which was nominal dichotomous.

    b. Normality of Predictors and Outcome Variables. The variables anger, anger-in, war exposure, daily hassles, system justification, narcissism, and helplessness were normally distributed.

    Pearson Correlation (one-tailed) test was performed to examine the correlation between the predictors: war exposure, daily hassles, narcissism, helplessness, system

justification, gender and the dependent variables anger and anger-in. Pearson

Correlation (one-tailed) test was utilized because the variables were normally

distributed and they required confirmatory hypotheses (Table 5).

2. Main Analysis.

a. Anger. The results of the Pearson correlation (one-tailed) test revealed three

significant correlations. There was a positive medium to large correlation between daily

hassles and anger, a significant negative small to medium correlation between system

justification and anger, and finally, a small to medium negative correlation between

helplessness and anger (Table 5).

b. Anger-In. The results of the Pearson correlation (one-tailed) test revealed that

there were two significant correlations. There was a positive small to medium

correlation between daily hassles and anger-in. Furthermore, a small to medium

negative correlation between helplessness and anger-in was found (Table 5).

Table 5
Pearson Zero Order Correlation Matrix

	War Exposure	Daily Hassles	System Justification	Narcissism	Helplessness	Gender	Anger	Anger-In
War Exposure	-							
Daily Hassles	.16*	-						
System Justification	.01	-.15*	-					
Narcissism	-.00	.12	.12	-				
Helplessness	.02	-.23**	.15*	.15*	-			
Gender	-.05	-.05	-.00	-.11	.12	-		
Anger	-.07	.41**	-.29**	.02	-.23**	.01	-	
Anger-In	-.11	.28**	.01	-.08	-.25**	.04	.74**	-

  * Correlation is significant at the 0.05 level (one-tailed).
** Correlation is significant at the 0.01 level (one-tailed).

D. Regression Analysis: Predictors of Anger and Anger-In

In order to test hypotheses 1 through 5 and the exploratory hypothesis, regarding the predictors of anger and anger-in, two multiple regression analyses were conducted using the forced entry method. The outcome variables were anger and anger-in, and the predictor variables were war exposure, daily hassles, system justification, narcissism, helplessness, and gender. No specific hypotheses were made for anger-in because the literature does not include specific predictors of anger-in.

1. Influential cases. Influential cases can place a great and unnecessary bias on the parameters of the regression model. Influential cases are examined through Cook's Distance and any value above 1 is considered an influential case (Field, 2013). An evaluation of the Cook's distance in the present study revealed that the Cook's distances ranged between .00 and .12 for general anger and .00 and .06 for anger-in. Therefore, no influential cases were found in the data.

2. Outliers in the solution. Outliers in the solution are cases that are not greatly anticipated by the regression model, and exert undue influence on the constraints of the regression model. To examine the presence of outliers, standardized residuals were used (Field, 2013). All cases with standardized residuals above ±3.29 significance level are indicative of outliers in the solution.

In the current analysis the standardized residuals ranged for general anger between -3.17 and 2.17 and between -1.87 and 2.36 for anger-in. Hence, no cases were above ±3.29, indicating that the data did not include any outliers in the solution.

3. Assumptions of regression.

a. Variable type. All the variables were scale variables except gender which was nominal dichotomous.

b. Ratio of cases to IV's. Sample size is one of the most important assumptions for the regression, and it is important to have a sufficient number. A "rule of thumb" per Tabachnick and Fidell (2013), is that for a medium sized relationship between the IV (independent variable) and DV (dependent variable) when conducting multiple correlations and regressions, the sample size (N) must be larger or equal to (50+8m), where m is the number of IVs. Furthermore, when testing individual predictors, the sample size (N) must be larger than (104+m), where m is the number of IVs (predictors). The data used for this research had a sample size of $N = 141$ and 6 independent predictors, therefore, both assumptions were met (50+8(6)= 98, or 104+6= 110).

c. Normality of predictors and outcome variable. The variables anger, anger-in, war exposure, daily hassles, system justification, narcissism and helplessness were all normally distributed.

d. Assumption of no Multicollinearity. Multicollinearity exists when two or more predictor variables are highly correlated. This poses a problem because it weakens the statistical significance of each independent variable (Allen, 1997). To check for multicollinearity; two methods were implemented: checking the correlation matrix between predictors and Variance Inflation Factor (VIF) scores. Any correlation between two independent variables above .8 or .9 should be a cause for concern and denotes a prospective problem of multicollinearity. After examining the correlation matrix between the predictors, no correlations were found that were above .8 ($r > |.80|$). Furthermore, Variance Inflation Factor (VIF) coefficients were observed for both models (anger and anger-in) and if the VIF values were above 10 this would stipulate that there is a problem with multicollinearity. Nonetheless, the current analysis revealed

that the VIF values were all below 10. Overall, both methods indicated that no multicollinearity was present.

    e. Normality of residuals. The dependent variable anger was examined through a histogram to test for the assumption of normality of residuals. Upon observation, it was clear that the distribution was not significantly different from that of the normal bell shaped curve or normal distribution. Therefore, this assumption was met (Figure 1a). However, for the dependent variable anger-in, through examination of the histogram the distribution seemed significantly different from the normal bell shaped curve or normal distribution (Figure 1b). Hence, this assumption was not met. The bootstrapping method was therefore used for the anger-in outcome variable, based on 1000 bootstrap samples, with bias corrected and accelerated 95% confidence intervals. Bootstrapping is considered a robust method against violations of normality (Field, 2013).

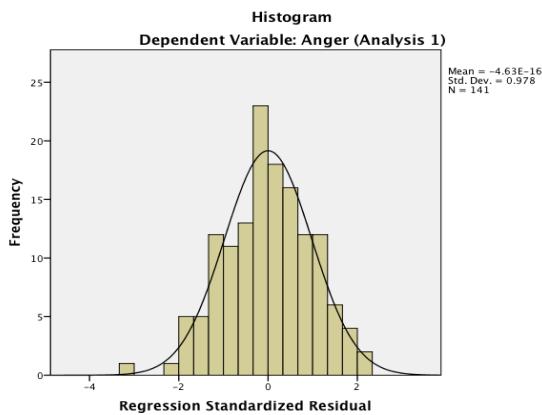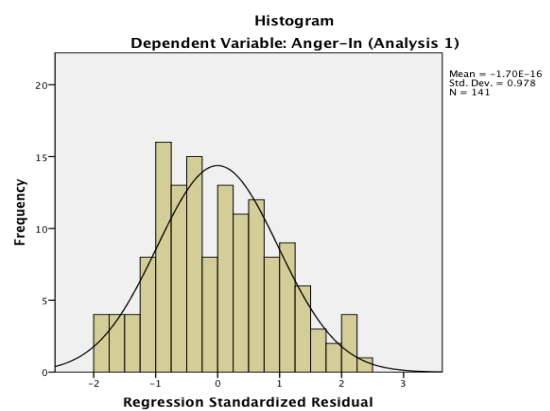Figure 1a   Figure 1b

    f. Independence of errors. The independence of errors assumption states that the errors of prediction are independent of one another, specifically testing whether bordering residuals are correlated (Tabachnik & Fidell, 2013). This assumption is examined using the Durbin-Watson test, the test statistic normally varies between 0 and

4, with a score of 2 indicating that the residuals are not correlated (Field, 2013).

Although 2 is an ideal score, values between 1 and 3 are acceptable, however, anything

above or less than these values should be viewed with caution (Fields, 2013). In the

current analysis, for the general anger model the Durbin Watson value was 2.28, which

is close to 2 and therefore the assumption of independent errors was met. Furthermore,

for the anger-in model the Durbin Watson value was 2.10, which is also close to 2,

hence the assumption of independent errors was met once again.

     g. Homoscedasticity of regression slopes. The residuals scatter plot (ZRESID

vs ZPRED) was examined to test the assumption of homoscedasticity. ZPRED is the

standardized predicted values of the dependent variable based on the model while

ZRESID is the standardized residuals or errors (Field, 2013). The residuals scatter plot

revealed that the residuals were scattered evenly across all scores. Therefore, the

assumption of homoscedasticity was met on both outcome variables (anger and anger-

in) (see Figures 2a and 2b).
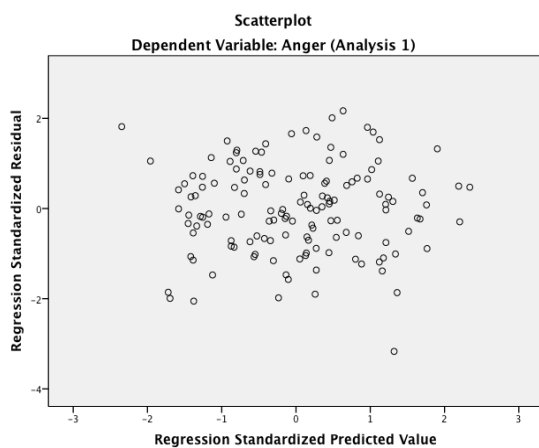
Figure 2a
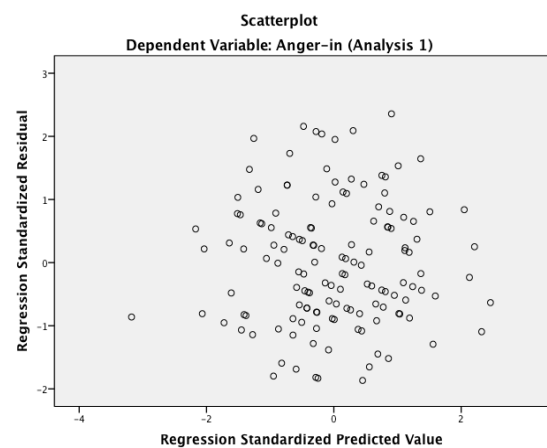
Figure 2b

4.

4. Main analysis for anger forced entry regression. The F-test demonstrated that the regression model, which included the predictors (war exposure, daily hassles, system justification, narcissism, helplessness, and gender), were significantly better than the mean in explaining the variance in the outcome variable (anger), $F (6, 134) = 7.58$, $p < .001$. The predictors explained 25.3% ($R^2 = .253$) of the variance of the outcome variable (anger).

The adjusted R square was $R^2 = .220$, which showed that the final regression model explained 22.2% of the variance of the outcome variable (anger) at the population level. Furthermore, when shifting from the sample to the population, the shrinkage was $\Delta R^2 = 3.3\%$; this reveals that the regression model would generalize well to the population.

As per Table 6, only daily hassles and system justification were significant predictors of anger. Daily hassles was a significant positive medium to large predictor of anger therefore supporting hypothesis 2. System justification was a significant negative small to medium predictor of anger, supporting hypothesis 3.

Lastly, war exposure, narcissism, helplessness, and gender were not significant predictors of anger hence, hypotheses 1, 4, 5, and the exploratory hypothesis, were not supported.

Table 6
Results of Forced Entry Regression – Anger

Model		B	SE B	β	p	t
1	(Constant)	127.06	12.66		.000	10.04
	War Exposure	-0.99	0.58	-.13	.09	-1.71
	Daily Hassles	0.33	0.07	.37***	.000	4.70
	System Justification	-7.41	2.56	-.22**	.004	-2.89
	Narcissism	0.11	0.56	.02	.84	0.20
	Helplessness	-0.27	0.19	-.11	.17	-1.39
	Gender	1.30	2.94	.03	.66	0.44

Note: For model 1; $R^2 = .220$, $\Delta R^2 = .033$, * $p < .05$, ** $p < .01$, *** $p < .001$

5. Main analysis for anger-in forced entry regression. This regression was run using the bootstrapping method that is based on 1000 bootstrap samples, with bias corrected and accelerated 95% confidence intervals. Bootstrapping was used because it is a robust method to account for violations of normality (Fields, 2013).

The F-test demonstrated that the regression model which included the predictors (war exposure, daily hassles, system justification, narcissism, helplessness and gender), were significantly better than the mean in explaining the variance in the outcome variable (anger-in), $F (6, 134) = 4.12$, $p = .001$. The predictors explained 15.6% ($R^2 = .156$) of the variance of the dependent variable (anger-in).

The adjusted R square was $R^2 = .118$, which showed that the final regression model explained 11.8% of the variance of the outcome variable (anger-in) at the population level. Furthermore, when shifting from the sample to the population, the shrinkage was $\Delta R^2 = 3.8\%$ this reveals that the regression model would generalize well to the population.

As per Table 7, three predictors, daily hassles, helplessness, and war exposure, were considered significant predictors of anger-in. Daily hassles was a significant positive small to medium predictor of anger-in. Furthermore, both helplessness and war exposure were significant negative small to medium predictors of anger-in. Lastly, the t-tests revealed that the variables (narcissism, system justification and gender) were not significant predictors of the dependent variable (anger-in).

Table 7
Bootstrapped Results of Force Entry Regression – Anger-In

Model		*B*	Bias	*SE*	*β*	p	t	BCa 95% Confidence Intervals	
								Lower	Upper
1	(Constant)	15.74	-0.03	3.09		.000	5.36	9.78	21.72
	War Exposure	-0.25	-0.00	0.14	-.15*	.04	-1.89	-0.54	0.01
	Daily Hassles	0.06	0.00	0.02	.29**	.002	3.44	0.02	0.09
	System Justification	0.67	-0.02	0.61	.09	.14	1.12	-0.47	1.81
	Narcissism	-0.15	0.01	0.13	-.10	.13	-1.15	-0.42	0.14
	Helplessness	-0.10	0.00	0.05	-.18*	.02	-2.18	-0.19	-0.01
	Gender	0.52	0.03	0.70	.06	.23	0.76	-0.81	1.97

Note: For model 1; $R^2 = .118$, $\Delta R^2 = .038$, * $p < .05$, ** $p < .01$, *** $p < .001$

CHAPTER VI

Discussion

This study explored various personal and environmental predictors of anger and anger-in in a community sample of Lebanese adults. The predictors included war exposure, daily hassles, system justification, narcissism, gender, and helplessness.

A. Discussion of findings for the general anger scale

Our sample had moderate levels of anger because the mean score of the sample was equivalent to the midpoint. This may not be surprising in light of the various injustices and daily hassles that the Lebanese experience, such as garbage on the streets, water shortages, electricity cuts, political instability, and civil strife (British Broadcasting Corporation, 2015, Cordesman, Coughlin-Schulte & Yarosh, 2013; Republic of Lebanon Ministry of Finance, 2013; UNHCR, 2014; World Bank, 2014).

The predictive model we selected accounted for a moderate percentage of the variance in anger. In particular, greater experience of daily hassles was associated with greater anger at both the bivariate level and in the final regression model. Our sample endorsed high levels of daily hassles overall. Moreover, the most highly endorsed hassles include factors such as traffic, the environment (e.g. garbage, noise levels, air quality), political or social issues such as corruption, and issues such as gas, electricity, water, and the electricity generator. The second highest group of hassles related to financial issues such as having enough money for extras (e.g. vacations) or enough money for necessities, and work related issues (e.g. nature of work, workload or meeting deadlines). These results support widely held beliefs that Lebanese individuals are in fact strained by the numerous environmental and service related stressors of the country. Our results may also be consistent with previous findings that chronic

stressors of daily living (e.g. job, finances, health) predict anger and aggression more than interpersonal stressors (e.g. family, romantic) (Sprague et al., 2011). Previous studies have similarly found a strong positive connection between daily hassles and anger (Verona et al., 2009). Muravan and Baumeister (2000) argue that self-control is similar to a reservoir that gets depleted by repeated exposure to stress. It's slow depletion without the space to replenish it before the occurrence of subsequent daily hassles greatly raises the likelihood of experiencing anger. The association between anger and daily hassles in our sample also makes sense within the extensively documented link between daily hassles and more interpersonal problems, less healthy eating habits, and higher levels of anxiety, depression, and physical health problems. In fact, cumulative daily hassles are found to impact overall health and psychological well-being more than major life events (DeLongis et al., 1982; Kanner et al. 1981; Stawski et al., 2008).

There was also a negative association between system justification and anger at both the bivariate level and in the final regression model. These findings are consistent with previous research indicating a strong connection between injustice and anger, where the less an individual endorses system justifying beliefs, the more injustice they perceive, and therefore, the more anger prone they are (Barclay et al., 2005; Berkowitz & Harmon-Jones, 2004; Miller, 2001; Rebellion et al., 2012). Overall, our sample scored quite low on system justification, suggesting that they are less likely to believe that that the system is fair or that justifying it will benefit them, but rather that it needed to be radically restructured. We find this interesting as research suggests that most societies, including highly impoverished ones, tend to endorse high rates of system justification (Jost et al., 2003).

Moreover, we were curious about this finding given that most of the sample came from middle socioeconomic levels where 50% made at least 3,000,000 L.L. per month or above. Additionally, the participants were highly educated, with 75% holding a Masters degree or above. Various studies have demonstrated that individuals in socially and economically advantaged positions are more likely to justify the system (Shenlong, Yongyu, Xiayong, Shouli & Jing, 2016; Wiederkehr, Bonnot, Krauth-Gruber & Damon, 2015). On the other hand, many system justification theorists hold that those in a disadvantaged situation may work harder to uphold this belief (Jost, Banaji, & Nosek, 2004). For example, students from a lower socioeconomic background believe that chances of success depend on hard work and skill rather than outside factors (e.g. money or connections). Such beliefs may be essential for these students' survival; otherwise they may become extremely demotivated (Wiederkehr et al., 2015). Hence, these students become less likely to challenge the system (Jost et al., 2004; Jost et al., 2003). Brandt (2013) found contrary evidence by testing the status-legitimacy hypothesis through three representative sets from the American National Election Studies and General Social Surveys. The results showed that those in disadvantaged situations do not necessarily justify the system more than those in advantageous situations. Perhaps there are other moderating variables to account for the mixed relationship between coming from a disadvantaged background and system justification.

Another possible explanation for such low rates of system justification is that this study took place following a period of high civic engagement and dissatisfaction with the government. For example, the garbage protests in the summer of 2015 gathered about 100,000 followers who protested a range of injustices, including lack of garbage

collection, water shortages, electricity cuts, and corrupt political processes. Additionally, in the Spring of 2016, various Lebanese individuals opposing governmental corruption assembled in an alternative campaign, called Beirut Madinati that ran in the elections for the Municipal Council seats in Beirut. The group set up a program to tackle issues such as the rising rates of unemployment and urban poverty (El Mufti, 2016). Although the findings are mixed (Harb, 2010), some findings suggest that the Lebanese tend to not identify with Lebanon as a whole, but instead with their own personal sect or political group (Hadad, 2002). Hence, it is conceivable that the Lebanese would find it easier criticizing the system in general (Lebanon) as opposed to the specific sect they belong to.

Helplessness was negatively associated with anger at the bivariate level, but lost this significant association in the final model predicting anger. Since no previous research directly investigated the association between helplessness and anger, our hypotheses about their association was exploratory. It was speculated that helplessness and anger would have a positive association because helplessness resembles the variable of self-efficacy (Gecas, 1989). In turn, lower levels of self-efficacy are associated with more anger (Ausbrooks, Thomas, & Williams, 1995; Mowlaie, Besharat, Poubohlool, & Azizi, 2011; Wilfong, 2006). However, our findings suggest the converse, where higher levels of helplessness were associated with lower levels of anger. It may be that individuals who experience anger feel more active and empowered and that their anger may fuel their actions for change. In contrast, individuals who feel helpless may believe that no matter what they do, the outcome will never alter. Therefore, their helplessness may be associated with different states such as sadness, loss, anxiety, or depression. Furthermore, it is possible that helplessness lost its significant association with anger in

the final regression model because the other variables in the model better explained the variance in anger.

On the other hand, the hypothesis that war exposure would significantly predict anger was not supported. It is possible that the final version of the scale used, which only retained half of the original items, limited our ability to find an effect. Alternatively, the moderate and narrow range of exposure in the sample may have also made it difficult to find an association between anger and war exposure. Finally, perhaps mere war exposure is not enough to predict the emotional state of an individual unless it is mediated by psychological distress, such as in the case of posttraumatic stress symptoms. The extensively established connection in the literature is between PTSD and anger, rather than between anger and trauma exposure (Meichenbaum, 2005; Worthen & Ahern, 2014).

Contrary to our hypotheses as well, neither narcissism nor gender were significantly associated with anger at either the bivariate level or in the final regression model. Our sample demonstrated rather low levels of narcissism, which may have made it difficult to find an association with anger. Although we explained earlier that we speculate that our sample would have high narcissism levels, there is actually no data on levels of narcissism in Lebanese samples to guide us in contextualizing and understanding the low levels of narcissism in our sample.

Our finding that there was no association between gender and anger contrasts with the extensively established theoretical link between male gender and anger (Collet & Lizardo, 2009; Eagly & Steffen, 1986; Felson, Savolainen, & Ellonen, 2015; Usta, Farver & Hamieh, 2015). However, some studies suggest that males and females in fact do not differ in their experience or expression of anger (Archer & Coyne, 2005; Kopper

58

& Epperson, 1991; Sharkin, 1993; Thomas, 1989), but perhaps in their willingness to talk about their feelings and seek help (Thomas, 1989). Additionally, it is possible that because the women in the sample were highly educated and high earning, they were less likely to ascribe to the traditional gender prohibitions against anger (Fisher, Rodriguez-Mosquera, Vianen, & Manstead, 2004 as cited in Kocur & Deffenbacher 2013). Finally, we wondered if men and women's scores on the two main predictors of anger in our sample could shed further light on our null finding. As seen in table 5, there were no significant correlations between gender, daily hassles and system justification, indicating that men and women in our sample experienced similar levels of daily hassles and system justification. Perhaps given such pervasive systemic hassles and high perceptions of injustice, it would be difficult for any individual not to react in anger.

In comparing the environmental factors versus the personal factors in predicting anger, the results suggest that the environmental factors of daily hassles and low system justification influenced anger more than the personal factors (e.g. narcissism, gender). It is conceivable that the environmental aspects are quite powerful and can greatly contribute to higher levels of anger in a way that over shadows personal variables.

B. Discussion of findings for the Anger-In subscale

Whereas general anger is all encompassing and includes frequency, duration, magnitude, and modes of expression, Anger-in focuses solely on the mode of expression. Anger-in describes anger that is kept internally or not directed towards the source. Furthermore, individuals that score high on anger-in are not able to let go of their anger quickly and unable to express their anger in healthy ways (e.g. talking about it), but rather hold grudges and find it difficult to forgive. As with the regression model for general anger, daily hassles remained the largest significant predictor for anger-in.

No research connects anger-in specifically to daily hassles. However, we understand this finding in light of the extensive association between general anger and daily hassles discussed above. Furthermore, it is conceivable that similar to general anger, anger-in is affected by self-control. As mentioned above, self-control decreases with greater exposure to daily hassles and hence undermines an individual's ability to deal with their anger in adaptive ways, thereby making it more likely that individuals hold anger in. Similarly, perhaps daily hassles decrease individuals' willingness and energy to engage in adaptive interpersonal conversations and negotiations to resolve conflict, which leaves them holding grudges and not being able to forgive instead.

Helplessness negatively predicted anger-in and was the second largest significant predictor. Several of the anger-in items describe a difficulty in forgetting about anger, harboring grudges, hiding feelings but still thinking about them, and even seeking revenge; all of which can be conceptualized as a difficulty letting go of anger. Helpless individuals may therefore feel less anger-in, because they may have given up in a sense, or believe that nothing they can do will change a situation. In fact, in their study with women who have just discovered they have cancer, Watson et al. (1991) found that those women who experienced helplessness found ways to control their emotions of anger and anxiety because they felt that getting angry would serve no purpose and they were personally incapable of changing their situation. Therefore, the more helplessness an individual feels, perhaps the more they tend to less activating emotions like grief, sadness, or anxiety.

Furthermore, exposure to war became a negative small to medium predictor of anger-in in the regression model, though it was not significant at the bivariate level. This was contrary to findings that war exposure would positively predict anger. For

example, Bramsen et al. (2002) suggested that the worldview of individuals experiencing wartime stress may change to become more negative, priming them to experience more distressing emotions such as anger and anxiety. Yet, as discussed above, the questions of the anger-in subscale may be less about a general state of negative affect, and more about holding in one's anger in response to specific triggering situations. Perhaps, war exposure was significant in the regression model and not at the bivariate level due to suppression effects (Tabachnick & Fidell, 2013). The presence of a suppressor variable in a regression model may enhance the effects of other predictive variables, for it "suppresses variance that is irrelevant to the prediction of the DV" (Tabachnick & Fidell, 2013).

System justification was not a significant predictor of anger-in. This differed from the association between the overall anger scale and system justification in the study as well as from the association between lower system justification and anger found in various studies (Barclay, Skarlicki & Pugh, 2005; Berkowitz & Harmon-Jones, 2004; Dalbert, 2002; Jost et al., 2012; Rebellion et al., 2012). A possible explanation is that the construct of anger-in as measured by our scale seems more relevant to specific interpersonal contexts rather than to general situations or systemic factors, as measured by the system justification scale. For example, some of the items include: "I harbor grudges that I don't tell anyone about" or "when I hide my anger from others, I think about it for a long time." In contrast, the general anger items are more encompassing, with a combination of both personal and general situations. It is conceivable that low system justification is more connected with the constructs of anger-out and general anger. Jost et al. (2012) for example discusses how anger leads individuals to reduce their system justification and increases their willingness to protest.

C. Limitations

The main limitation of this study is that the community sample was attained through snowball and convenience sampling, limiting generalizability to the overall Lebanese population. Furthermore, the sample size was relatively small for a community sample and was not fully representative of a range of educational levels, socioeconomic backgrounds, and geographic areas in Lebanon. For instance, most of the participants had a master's level education or higher.

The trauma exposure scale used was cut down significantly from its original form due to time and Institutional Review Board (IRB) restrictions. Such a shortened form with more limited range of items may have influenced the results of the study. Additionally, the narcissism scale showed poor reliability, which may have influenced the results of the study. Furthermore, the outcome variable, anger-in, did not meet assumptions of normality of residuals, which may affect the results (Fields, 2013). However, a large enough sample is usually robust against such a violation and bootstrapping was implemented to redress this violation.

Another possible limitation is that counterbalancing was not used and the survey was more than 150 questions, hence individuals may have grown fatigued towards the end of the survey. Counterbalancing is one of the best ways to avoid bias in the order of questions and to prevent rater fatigue (Israelski & Lenoble, 1982).

Finally, the study utilized a correlational cross sectional design. Therefore, no casual inferences can be made about the association between anger and its various predictors investigated in the study (Christensen, Johnson & Turner, 2011).

D. Future Directions

Many aspects of the study can be taken further. One reason that investigating the experience of anger is more encompassing than aggression and violence, is that it focuses not only on the expression of anger (anger-out) but anger-in as well, which describes the suppression of anger and having difficulty letting go of it or talking about it adaptively. The overall experience of anger is less frequently studied than aggression and violence, and the sub dimension of anger-in is even more infrequently studied. Future research could investigate anger-in as a primary outcome variable and to test whether there would be similar predictors for anger-in versus general anger.

Secondly, our hypothesis that helplessness would predict general anger was not supported, but helplessness was associated with anger-in. It may be helpful to explore why helpless individuals have lower levels of anger-in and why this is different from general anger. Future research may seek to explore whether the relationship between helplessness and anger is mediated by a third variable, such as perceived control and self-efficacy.

Thirdly, environmental factors were more important in predicting anger than personal variables in our sample. Thus, it is possible that in contexts with high social, economic, and political stressors like Lebanon, such factors play a particularly significant role in the individual experience of anger. To further explore this, future research could compare these contextual factors with a different set of personal attributes that may also predict anger (e.g. personality traits such as extroversion or neuroticism). Future research could also contrast the individual experience of anger, which may describe a general affective state with findings from the social-psychological literature where the focus is on anger directed at specific targets, groups, or situations.

E. Implications

The findings of this study suggest that this specific Lebanese sample had moderate levels of anger. Given the role that environmental and contextual factors may have played in contributing to their anger, it may be important to educate people on how to channel their anger and use it as a force to implement positive change. It may be helpful to set up programs, such as within educational institutions, to help individuals find solutions to environmental and social problems (e.g. community initiatives such as recycling). These programs can also help individuals identify ways to work on changing and reforming the systemic structures that contribute to the daily hassles and perceived injustices observed in the study. Angry individuals may seek a sense of control over their situation, and helping them feel that they are active in creating change may help in alleviating this feeling of lack of control and anger.

Finally, results of this study can aid professionals in better understanding the experiences of angry clients and the role that the environment may play in their anger.

References

Abi-Hashem, N. (2006). The agony, silent grief, and deep frustration of many communities in the Middle East: Challenges for coping and survival. In P.T.P, Wong & L.C.J., Lilian (Eds.) *Handbook of Multicultural Perspectives on Stress and Coping* (pp. 457-486). New York: Springer Science Business Media.

Abramson, L.Y., Seligman, M.E.P., & Teasdale, J.D. (1978). Learned helplessness in humans: critique and reformulation. *Journal of Abnormal Psychology*, 87 (1), 49-74.

Ackerman, R.A., Witt, E.A., Donnellan, M.B., Trzesniewski, K.H., Robins, R.W., & Kashy, D.A. (2011). What does the narcissistic personality inventory really measure? *Assessment*,18 (1), 67-87. doi: 10.1177/1073191110382845.

Ahmed, S. (2015). The 'emotionalization of the "war on terror"': counterterrorism, fear, risk, insecurity and helplessness. *Criminology & Criminal Justice*, 15 (5), 545-560. doi: 10.1177/1748895815572161.

Allen, M. P. (1997). *Understanding regression analysis*. New York: Plenum Press.

Almeida, D. M. (2005). Resilience and vulnerability to daily stressors assessed via diary methods. *Current Directions in Psychological Science*, 14 (2), 64-68.

Amstadter, A. B., & Vernon, L. L (2008). Emotional reactions during and after trauma: A comparison of trauma types. *Journal of Aggression, Maltreatment & Trauma*, 16, 391- 408.

Ames, D. R., Rose, P., & Anderson, C.P. (2006). The NPI-16 as a short measure of narcissism. *Journal of Research in Personality*, 40, 440-450. doi: 10.1016/j.jrp.2005.03.002.

Anderson, C.A., & Bushman, B.J. (2002). Human aggression. *Annual Review of Psychology*, 53, 27-51.

Anderson, C. A., & Huesmann, L. R. (2003). Human aggression: a social-cognitive view. In M. A. Hogg & J. Cooper (Eds.), *The Sage Handbook of Social Psychology* (pp. 296-323). Thousand Oaks, CA: Sage Publications.

Aquino, K., Douglas, S., & Martinko, M.J. (2004). Overt anger in response to victimization: attributional style and organizational norms as moderators. *Journal of Occupational Health Psychology*, 9 (2), 152-164. doi: 10.1037/1076-8998.9.2.152.

Archer, J., & Coyne, S.M. (2005). An integrated review of indirect, relational, and social aggression. *Personality and Social Psychology Review*, 9 (3), 212-230.

Ausbrooks, E.P., Thomas, S.P., Williams, R.L. (1995). Relationships among self-efficacy, optimism, trait anger, and anger expression. *Health Values: The Journal of Health Behavior, Education & Promotion,* 19 (4), 46-54.

Ayyash-Abdo, H. (2001). Individualism and collectivism: the case of Lebanon. *Social Behavior and Personality*, 29 (5), 503-518.

Ayoub, G. M. & Malaeb, L. (2006). Impact of intermittent water supply on water quality in Lebanon. *Journal of Environment and Pollution*, 26 (4), 379-397. doi: 10.1504/IJEP.2006.009328

Azevedo, F.B., Wang, Y., Goulart, A.C., Lotufo, P.A., & Bensenor, I.M. (2010). Application of the Spielberger's state-trait anger expression inventory in clinical patients. *Arq Neuropsiquiatr*, 68 (2), 231-234.

Bahous, R., & Nabhani, M. (2008). Improving schools for social justice in Lebanon. *Improving Schools*, 11 (2), 127-141. doi: 10.1177/1365480208091105.
Bandura, A. (1971). *Social learning theory*. New York: General Learning Press.

Barber, J.G. (1986). The promise and the pitfalls of learned helplessness theory for social work practice. *The British Journal of Social Work*, 16 (5), 557-570.

Barclay, L.J., Skarlicki, D.P., & Pugh, S.D. (2005). Exploring the role of emotions in injustice perceptions and retaliation. *Journal of Applied Psychology*, 90 (4), 629-643. doi: 10.1037/0021-9010.90.4.629.

Barrio, V., Aluja, A., & Spielberger, C. (2004). Anger assessment with the STAXI-CA: psychometric properties of a new instrument for children and adolescents. *Personality and Individual Differences*, 37 (2), 227-244. doi: 10.1016/j.paid.2003.08.014.

Baumeister, R.F., Bushman, B.J., & Campbell, W.K. (2000). Self-esteem, narcissism, and aggression: does violence result from low self-esteem or from threatened egotism? *Current Directions in Psychological Science*, 9 (1), 26-29.

Bayat, A. (2013). The Arab spring and its surprises. *Development and Change*, 44 (3), 587-601. doi: 10.1111/dech.12030.

Berer, M. (2010). Cosmetic surgery, body image and sexuality. *Reproductive Health Matters*, 18 (35), 4-10.

Berkowitz, L., & Harmon-Jones, E. (2004). Toward an understanding of the determinants of anger. *Emotion*, 4 (2), 107-130. doi: 10.1037/1528-3542.4.2.107.

Bolger, N., DeLongis, A., Kessler, R.C., & Schilling, E.A. (1989). Effects of daily stress on negative mood. *Journal of Personality and Social Psychology*, 57 (5), 808-818.

Boman, P., Curtis, D., Furlong, M. J., & Smith, D. C. (2006). Cross-validation and rasch analyses of the Australian version of the multidimensional school anger inventory – revised. *Journal of Psychoeducational Assessment*, 24(3), 225–242. doi:10.1177/0734282906288472.

Bramsen, I., & Van der Ploeg, H. M. (1999). Fifty years later: the long-term psychological adjustment of aging world war II survivors. *Acta Psychiatrica Scandinavica*, 100, 350-358.

Bramsen, I., Van der Ploeg, H.M., Van der Kamp, L.J.TH, & Adèr, H.J. (2002). Exposure to traumatic war events and neuroticisim: the mediating role of attributing meaning. *Personality and Individual Differences*, 32(4), 747-760. doi:10.1016/S0191-8869(01)00077-0.

Brandt, M.J. (2013). Do the disadvantaged legitimize the social system? A large-scale test of the status-legitimacy hypothesis. *Journal of Personality and Social Psychology*, 104 (5), 765-785. doi: 10.1037/a0031751.

Brantley, P.J., Waggoner, C.D., Jones, G.N. & Rappaport, N.B. (1985). A daily stress inventory: development, reliability, and validity. *Journal of Behavioral Medicine*, 10 (1), 61-74.

Bratton, K. L. (2010). *Shame, guilt, anger, and seeking psychological treatment among a trauma exposed population* (Unpublished doctoral dissertation). The University of Montana Missoula.

British Broadcasting Corporation (BBC) (2015, September 9). Lebanon rubbish crisis: Cabinet agrees to resume waste disposal. Retrieved from http://www.bbc.com/news/world-middle-east-34203165.

Bushman, B. J., & Huesmann, R. (2010). Aggression. In S. T. Fiske, D. T. Gilbert, & G. Lindzey (Authors), *Handbook of Social Psychology* (5th ed., Vol. 2, pp. 833-863). John Wiley & Sons.

Buss, A.H., & Durkee, A. (1957). An inventory for assessing different kinds of hostility. *Journal of Consulting Psychology*, 21, 343-349.

Buss, A. H., & Perry, M. (1992). The aggression questionnaire. *Journal of Personality and Social Psychology*, 63, 452-459.

Cain, N.M., Pincus, A.L., & Ansell, E.B. (2008). Narcissism at the crossroads: phenotypic description of pathological narcissism across clinical theory, social/personality psychology, and psychiatric diagnosis. *Clinical Psychology Review*, 28 (4), 638-656. doi:10.1016/j.cpr.2007.09.006.

Cann, J.T. & Biaggio, M.K. (1989). Narcissistic personality features and self-reported anger. *Psychological Reports*, 64, 55-58.

Chimienti, G., Nasr, J. A., & Khalifeh, I. (1989). Children's reactions to war-related stress: affective symptoms and behaviour problems. *Social Psychiatry and Psychiatric Epidemiology*, 24, 282–287.

Christensen, L. B., Johnson, B., & Turner, L. A. (2011). *Research methods, design, and analysis* (pp. 1-539). Allyn & Bacon.

Coccaro, E.F. (2000). Intermittent explosive disorder. *Current Psychiatry Reports*, 2 (1), 67-71. doi: 10.1007/s11920-000-0045-z

Collett, J.L., & Lizardo, O. (2009). A power-control theory of gender and religiosity. *Journal for the Scientific Study of Religion*, 48 (2), 213-231. doi: 10.1111/j.1468-5906.2009.01441.x.

Contractor, A. A., Armour, C., Wang, X., Forbes, D., & Elhai, J. D. (2014). The mediating role of anger in the relationship between PTSD symptoms and impulsivity. *Psychological Trauma: Theory, Research, Practice, and Policy*, 7(2), 138-145. doi: 10.1037/a0037112.

Cooper, S. M., Guthrie, B.J., Brown, C., & Metzger, I. (2011). Daily hassles and African American adolescent females' psychological functioning: direct and interactive associations with gender role orientation. *Sex Roles*, 65, 397-409. doi: 10.1007/s11199-011-0019-0.

Cordesman, A.H., Coughlin-Schulte, C., & Yarosh, N.S. (2013). The underlying causes of the crises and upheavals in the Middle East and North Africa: an analytic survey. Center for Strategic & International Studies, (4).

Cortina, J.M. (1993). What is coefficient alpha? An examination of theory and applications. *Journal of Applied Psychology*, 78 (1), 98 -104.

Craig, I. W. (2007). The importance of stress and genetic variation in human aggression. *BioEssays*, 29 (3), 227-236. doi: 10.1002/bies.20538.

Dagher, L., & Ruble, I. (2010). Challenges for CO_2 mitigation in the Lebanese electric-power sector. *Energy Policy*, 38 (2), 912 – 918. doi 10.1016/j.enpol.2009.10.042.

Dalbert, C. (2002). Beliefs in a just world as a buffer against anger. *Social Justice Research*, 15 (2), 123-145.

Dalbert, C. (2009). Belief in a just world. In M. R. Leary & R. H. Hoyle (Eds.), *Handbook of Individual Differences in Social Behavior* (pp. 288-297). New York: Guilford Publications.

Daou, R. (2009, February 3). Lebanese adaptation of 'Twelve Angry Men' provides outlet for inmates at Rumieh prison. *The Daily Star Lebanon*. Retrieved from http://www.dailystar.com.lb/News/Lebanon-News/2009/Feb-03/52952-lebanese-adaptation-of-twelve-angry-men-provides-outlet-for-inmates-at-rumieh-prison.ashx

DeLongis, A., Coyne, J.C., Dakof, G., Folkman, S., & Lazarus, R.S. (1982). Relationship of daily hassles, uplifts, and major life events to health status. *Health Psychology*, 1 (2), 119-136.

Densen, T.F., DeWall, C.N., Finkel, E.J. (2012). Self-control and aggression. *Current Directions in Psychological Science*, 21 (1), 20-25. doi: 10.1177/0963721411429451.

de Vos, B., van Zomeren, M., Gordijn, E.H., & Postmes, T. (2013). The communication of 'pure' group-based anger reduces tendencies toward intergroup conflict because it increases out-group empathy. *Personality and Social Psychology Bulletin*, 39 (8), 1043-1052. doi: 10.1177/0146167213489140.

DiGiuseppe, R., & Tafrate, R. (2007). *Understanding anger disorders*. Oxford: Oxford University Press.

Dirani, K.M. (2012). Professional training as a strategy for staff development. *European Journal of Training and Development*, 36 (2/3), 158-178. doi: 10.1108/03090591211204698.

Doherty, S.B. (2008). Cosmetic surgery and the beauty regime in Lebanon. *Middle East Report*, 249, 28-31.

Eagly, A.H. & Steffen, V.J. (1986). Gender and aggressive behavior: a meta-analytic review of the social psychological literature. *Psychological Bulletin*, 100 (3), 309-330.

Eisinga, R., Grotenhuis, M.T., & Pelzer, B. (2013). The reliability of a two-item scale: Pearson, Cronbach, or Spearman-Brown? *International Journal of Public Health*, 58, 637-642. doi: 10.1007/s00038-012-0416-3.

El Mufti, K. (2016, May 3). Beirut Madinati change at the tip of your vote. *Executive*. Retrieved from http://www.executive-magazine.com/opinion/beirut-madinati.

Edwards, B.D., Warren, C.R., Tubre, T.C., Zyphur, M.J., & Hoffner-Prillaman, R. (2013). The validity of narcissism and driving anger in predicting aggressive driving in a sample of young drivers. *Human Performance*, 26, 191-210. doi: 10.1080/08959285.2013.795961.

Falconier, M.K., Nussbeck, F., Bodenmann, G., Schneider, H., & Bradbury, T. (2015). Stress from daily hassles in couples: its effects on intradyadic stress, relationship satisfaction, and physical and psychological well-being. *Journal of Marital and Family Therapy*, 41 (2), 221-235. doi: 10.1111/jmft.12073.

Felson, R. B., Savolainen, J., & Ellonen, N. (2015). Gender, provocation, and intimate partner aggression. *Partner Abuse*, 6 (2), 180-196.
Field, A. (2013). *Discovering statistics using IBM SPSS statistics*. London: Sage Publications.

Filippello, P., Sorrenti, L., Buzzai, C., & Costa, S. (2015). Perceived parental psychological control and learned helplessness: the role of school self-efficacy. *School Mental Health*, 7 (4), 298-310.

Fischer, A.H., Rodriguez-Mosquera, P.M. Van., Vianen, A. E.M., & Manstead, A.S.R. (2004). Gender and culture differences in emotion. *Emotion*, 4, 87 – 94.
Firestone, R., & Catlett, J. (2009). *The ethics of interpersonal relationships*. London: Karnac.

Foster, J.D., Campbell, W.K., & Twenge, J.M. (2003). Individual differences in narcissism: inflated self-views across the lifespan and around the world. *Journal of Research in Personality*, 37, 469-486. doi: 10.1016/S0092-6566(03)00026-6.

Friedman, L.C., Nelson, D.V., Baer, P.E., Lane, M., Smith, F.E., & Dworkin, R.J. (1992). The relationship of dispositional optimism, daily life stress, and domestic environment to coping methods used by cancer patients. *Journal of Behavioral Medicine*, 15 (2), 127-141.

Gecas, V. (1989). The social psychology of self-efficacy. *Annual Review of Sociology*, 15, 291-316.

Gelbrich, K. (2010). Anger, frustration, and helplessness after service failure: coping strategies and effective informational support. *Journal of the Academy of Marketing Science*, 38, 567-585. doi: 10.1007/s11747-009-0169-6.

Greer, S. (1979). Psychological enquiry: a contribution to cancer research. *Psychological Medicine*, 81-89.

Grey, N., & Holmes, E. (2008). "Hotspots" in trauma memories in the treatment of post-traumatic stress disorder: A replication. *Memory*, 16 (7), 788-796.

Hadad, S. (2002). Cultural diversity and sectarian attitudes in postwar Lebanon. *Journal of Ethnic and Migration Studies*, 28 (2), 291-306. doi: 10.1080/13691830220124341.

Haj-Yahia, M. M. (1997). Predicting beliefs about wife beating among engaged Arab men in Israel. *Journal of Interpersonal Violence*, 12(4), 530-545.

Halperin, E., & Gross, J.J. (2010). Intergroup anger in intractable conflict: long-term sentiments predict anger responses during the Gaza war. *Group Processes & Intergroup Relations*, 14 (4), 477-488. doi: 10.1177/1368430210377459.

Hamdan-Mansour, A.M., Dardas, L.A., Nawafleh, H., & Abu Asba, M. H. (2011). Psychosocial predictors of anger among university students. *Children and Youth Services Review*, 34, 474-479. doi:10.1016/j.childyouth.2011.12.004.

Harb, C. (2010). *Describing the Lebanese youth: a national and psycho-social survey* (pp. 1-30, Working paper No. 3). Beirut: Issam Fares Institute for Public Policy and International Affairs, AUB.

Hatem, Y. (2013, March 1). Ten things I hate about driving in Lebanon. Retrieved from https://now.mmedia.me/lb/en/lebanon/ten-things-i-hate-about-driving-in-lebanon.

Henry, P.J., & Saul, A. (2006). The development of system justification in developing world. *Social Justice Research*, 19 (3). doi: 10.1007/s11211-006-0012-x.

Hijazi, A.M., Lumley, M.A., Ziadni, M.S., Haddad, L., Rapport, L.J., & Arnetz, B.B. (2014). *Journal of Traumatic Stress*, 27, 314-322. doi: 10.1002/jts.21922.
Human Rights Watch (2015). World report: 2015.
Hunt, N. (2010). *Memory, war and trauma*. New York: Cambridge University Press.

International Center for Transitional Justice (ICTJ). (2014). How people to about the Lebanon wars: a study of the perceptions and expectations of residents in greater Beirut.

Israelski, E.W., & Lenoble, J.S. (1982). Rater fatigue in job analysis surveys. *Proceedings of the Human Factors Society, 26th Annual Meeting.*

Jamali, D., Sidani, Y., & Safieddine, A. (2005). Constraints facing working women in Lebanon: an insider view. *Women in Management Review*, 20 (8), 581-594.

Janoff-Bulman, R., & Frieze, I.H. (1983). A theoretical perspective for understanding reactions to victimization. *Journal of Social Issues*, 39 (2), 1-17.

Jay, M. (2015, October 22). Speaking to the organisers of Beirut's You Stink group. *The National*, pp. 1-2. Retrieved from http://www.thenational.ae/arts-lifestyle/the-review/speaking-to-the-organisers-of-beiruts-you-stink-group#page1.

Jost, J.T., Banaji, M.R., & Nosek, B.A. (2004). A decade of system justification theory: accumulated evidence of conscious and unconscious bolstering of the status quo. *Political Psychology*, 25 (6), 881-919.

Jost, J.T., Chaikalis-Petritsis, V., Abrams, D., Sidanius, J., van der Toorn, J., & Bratt, C. (2012). Why men (and women) do and don't rebel: effects of system justification on willingness to protest. *Personality and Social Psychology Bulletin*, 38 (2), 197-208. doi: 10.1177/0146167211422544.

Jost, J. T., Liviatan, I., van der Toorn, J., Ledgerwood, A., Mandisodza, A., & Nosek, B. A. (2010). System Justification: How do we know it's motivated. In R. Bobocel et al. (Eds.), *The Psychology of justice and legitimacy: The Ontario symposium* (Vol. 11, pp. 173-203). Hillsdale, NJ: Erlbaum.

Jost, J.T., Pelham, B.W., Sheldon, O., & Sullivan, B.N. (2003). Social inequality and the reduction of ideological dissonance on behalf of the system: evidence of enhanced system justification among the disadvantaged. *European Journal of Social Psychology*, 33, 13-36. doi: 10.1002/ejsp.127.

Kanner, A.D., Coyne, J.C., Schaefer, C., & Lazarus, R.S. (1981). Comparison of two modes of stress measurement: daily hassles and uplifts versus major life events. *Journal of Behavioral Medicine*, 4 (1), 1- 39.

Karam, E. G., Mneimneh, Z. N., Dimassi, H., Fayyad, J.A., Karam, A. N., Nasser, S.C., Chatterji, S., & Kessler, R.C. (2008). Lifetime prevalence of mental disorders in Lebanon: first onset, treatment, and exposure to war. *PLOS Medicine*, 5 (4), 579-586.

Kay, A.C., & Jost, J.T. (2003). Complementary justice: effects of 'poor but happy' and 'poor but honest' stereotype exemplars on system justification and implicit activation of the justice motive. *Journal of Personality and Social Psychology*, 85 (5), 823-837. doi: 10.1037/0022-3514.85.5.823.

Kay, A. C., Jost, J. T., Mandisodza, A. N., Sherman, S. J., Petrocelli, J. V., & Johnson, A. L. (2007). Panglossian ideology in the service of system justification: How complementary stereotypes help us to rationalize inequality. In M. P. Zanna (Ed.), *Advances in Experimental Social Psychology* (Vol. 39, pp. 305-358). Academic Press.

Kernberg, O.F. (1998). Pathological narcissism and narcissistic personality disorder: theoretical background and diagnostic classification. In E.F. Ronningstam (Ed.), *Disorders of narcissism: Diagnostic, clinical, and empirical implications* (pp. 29-51). Arlington, VA: American Psychiatric Association.

Khalaf, R.S. (2014). Lebanese youth narratives: a bleak post-war landscape. *Compare: A Journal of Comparative and International Education*, 44 (1), 97-116. doi: 10.1080/03057925.2013.859899.

Kline, P. (1999). The handbook of psychological testing (2nd ed). London: Routledge.

Kocur, J.L., & Deffenbacher, J.L. (2014). Anger and anger's expression generally and in romantic relationships. *Contemporary Family Therapy*, 36 (1), 120 -134. doi: 10.1007/s10591-013-9271-5.

Kopper, B.A., & Epperson, D.L. (1991). Sex and sex-role comparisons in the expression of anger. *Psychology of Women Quarterly*, 15 (1), 7 -14. doi: 10.1111/j.1471-6402.1991.tb00474.x.

Kunst, M., Winkel, F., & Bogaerts, S. (2011). Postraumatic anger, recalled peritraumatic emotions, and PTSD in victims of violent crime. *Journal of Interpersonal Violence*, 26 (17), 3561-3579. doi: 10.1177/0886260511403753.

Kuppens, P., Mechelen, I.V., Smits, D.J., Boeck, P., & Ceulemans, E. (2007). Individual differences in patterns of appraisal and anger experience. *Cognition and Emotion*, 21 (4), 689-713. doi: 10.1080/02699930600859219.

Lavee, Y., & Ben-Ari, A. (2008). The association of daily hassles and uplifts with family and life satisfaction: does cultural orientation make a difference? *American Journal of Community Psychology*, 41 (1), 89-98.

Lazarus, R.S. (1984). Puzzles in the study of daily hassles. *Journal of Behavioral Medicine*, 7 (4), 375-389.
Lebanese Renaissance Foundation (2014). Casualties of wars Lebanon 1975-2006 survey 2014.

Lerner, M. J. (1980). *The belief in a just world: A fundamental delusion*. New York: Plenum Press.

Lieberman, M.A., & Goldstein, B.A. (2006). Not all negative emotions are equal: the role of emotional expression in online support groups for women with breast cancer. *Psycho-Oncology*, 15 (2), 160-168. doi: 10.1002/pon.932.

Lipkus, I. (1991). The construction and preliminary validation of a global belief in a just world scale and the exploratory analysis of the multidimensional belief in a just world scale. *Personality and Individual Differences*, 12 (11), 1171-1178.

Maier, S.F., & Seligman, M.E.P. (2016). Learned helplessness at fifty: insights from neuroscience. *Psychological Review*, 123 (4), 349 – 367.

McIntosh, E., Gillanders, D., & Rodgers, S. (2010). Rumination, goal linking, daily hassles, and life events in major depression. *Clinical Psychology and Psychotherapy*, 17, 33-43. doi: 10.1002/cpp.611.

Meichenbaum, D. (2005). Anger Control Problems. *Encyclopedia of Cognitive Behavior Therapy,* 23-26. doi:10.1007/b99240.

Memedovic, S., Grisham, J. R., Denson, T. F., & Moulds, M. L. (2010). The effects of trait reappraisal and suppression on anger and blood pressure in response to provocation. *Journal of Research in Personality*, 44, 540-543.

Mikulincer, M. (1994). *Human learned helplessness: a coping perspective.* New York: Plenum Press.

Miller, D. T. (2001). Disrespect and the experience of injustice. *Annual Review of Psychology*, 52, 527-553.

Mollica, R., McDonald, L., Massagli, M., & Silove, D. (2004). *Measuring trauma, measuring torture: Instructions and guidance on the utilization of the Harvard Program in Refugee Trauma's versions of the Hopkins Symptom Checklist-25 (HSCL-25) and the Harvard Trauma Questionnaire (HTQ).* Cambridge, MA: Harvard Program in Refugee Trauma.

Morgan, J. (2004). *Focus on aggression research* (p. 125). Hauppauge, N.Y.: Nova Science.

Mowlaie, M., Besharat, M.A., Pourbohlool, S., & Azizi, L. (2011). The mediation effects of self-confidence and sport self-efficacy on the relationship between dimensions of anger and anger control with sport performance. *Procedia – Social and Behavioral Sci*ences, 30, 138-142.

Muraven, M., & Baumeister, R.F. (2000). Self-regulation and depletion of limited resources: does self-control resemble a muscle? *Psychological Bulletin*, 126 (2), 247-259.

Nassoura, Z., Hajj, H., Dajani, O., Jabbour, N., Ismail, M., Tarazi, T., Khoury, G., & Najjar, F. (1991). Trauma management in a war zone: the Lebanese war experience. *The Journal of Trauma*, 31 (12), 1596 – 1599.

Novaco, R.W. (1975). *Anger control: the development and evaluation of an experimental treatment*. Lexington, MA: D.C. Health and Co.

O'Connor, D.B., Jones, F., Conner, M., McMillan, B., & Ferguson, E. (2008). Effects of daily hassles and eating style on eating behavior. *Health Psychology*, 27 (1 Suppl.), S20-S31. doi: 10.1037/0278-6133.27.1(Suppl.).S20.

Orth, U., & Wieland, E. (2006). Anger, hostility, and posttraumatic stress disorder in trauma-exposed adults: A meta-analysis. *Journal of Consulting and Clinical Psychology*, 74, 698-706.

Pennekamp, S.F., Doosje, B., Zebel, S., & Fischer, A.H. (2007). The past and the pending: the antecedents and consequences of group-based anger in historically and currently disadvantaged groups. *Group Processes & Intergroup Relations*, 10 (1), 41- 55. doi: 10.1177/1368430207071339.

Peterson, C., & Seligman, M. E. P. (1983). Learned helplessness and victimization. *Journal of Social Issues*, 39, 103-116.

Pilcher, J., & Whelehan, I. (2004). *Fifty key concepts in gender studies*. London: Sage Publications.

Powell, A. A., Branscombe, N.R., & Schmitt, M.T. (2005). Inequality as ingroup privilege or outgroup disadvantage: the impact of group focus on collective guilt and interracial attitudes. *Personality and Social Psychology Bulletin*, 31 (4), 508-521. doi: 10.1177/0146167204271713

Quinless, F.W., & Nelson, M.A. (1988). Development of a measure of learned helplessness. *Nursing Research and Practice*, 37 (1), 11-15.

Ramirez, J. M., & Andreu, J. M. (2005, April 19). Aggression, and some related psychological constructs (anger, hostility, and impulsivity); some comments from a research project [Scholarly project].

Rebellion, C.J., Manasse, M.E., Van Gundy, K.T., & Cohn, E.S. (2012). Perceived injustice and delinquency: a test of general strain theory. *Journal of Criminal Justice*, 40 (3), 230-237.

Reidy, D.E., Zeichner, A., Foster, J.D., & Martinez, M.A. (2008). Effects of narcissistic entitlement and exploitativeness on human physical aggression. *Personality and Individual Differences*, 44, 865-875. doi: 10.1016/j.paid.2007.10.015.
Republic of Lebanon Ministry of Finance (2013). Lebanon country profile 2013.

Robbins, P. (2000). *Anger, aggression, and violence: an interdisciplinary approach*. Jefferson NC: McFarland.

Rubin, J. (1986), The emotion of anger: some conceptual and theoretical issues. *Professional Psychology: Research and Practice*, 17 (2), 115-124.

Sakhawy, A.E. (2015). Is the Arab spring enough? *Peace Review: A Journal of Social Justice*, 27 (3), 363-370. doi: 10.1080/10402659.2015.1063381.

Salti, N., Chaaban, J., & Raad, F. (2010). Health equity in Lebanon: a microeconomic analysis. *International Journal for Equity in Health*, 9 (11), 1-21.

Seligman, M. E. P. (1975). *Helplessness: On depression, development and death*. San Francisco: Freeman.

Sharkin, B.S. (1993). Anger and gender: theory, research and implications. *Journal of Counseling & Development*, 71 (4), 386 – 389. doi: 10.1002/j.1556-6676.1993.tb02653.x.

Shenlong, Y., Yongyu, G., Xiaoyong, H.U., Shouli, S., & Jing, L.I. (2016). Do lower class individuals possess higher levels of system justification? an examination from the social cognitive perspectives. *Acta Psychologica Sinica,* 48 (11), 1467-1478. doi: 10.3724/SP.J.1041.2016.01467.

Shields, V.E. (2008). Political reform in Lebanon: has the cedar revolution failed? *The Journal of Legislative Studies*, 14 (4), 474-487. doi: 10.1080/13572330802442881.

Shoeb, M., Weinstein, H. & Mollica, R. (2007). The Harvard trauma questionnaire: adapting a cross-cultural instrument for measuring torture, trauma and posttraumatic stress disorder in Iraqi refugees. *International Journal of Social Psychiatry*, 53 (5), 447-463. doi: 10.1177/0020764007078362.

Shridharani, S.M., Magarakis, M., Manson, P.N., & Rodriguez, E.D. (2010). Psychology of plastic and reconstructive surgery: a systematic clinical review. *Plastic and Reconstructive Surgery*, 126 (6), 2243 – 2251. doi: 10.1097/PRS.0b013e3181f445ae.

Shrout, P.E. (1998). Measurement reliability and agreement in psychiatry. *Statistical Methods in Medical Research*, 7 (3), 301 – 317. doi: 10.1177/096228029800700306.

Siegel, J.M. (1986). The multidimensional anger inventory. *Journal of Personality and Social Psychology*, 51 (1), 191-200.

Solomon, R.C. (1990). *A passion for justice: emotions and the origins of the social contract*. Reading, MA: Addison-Wesley.

Spielberger, C.D., & Reheiser, E.C. (2009). Assessment of emotions: anxiety, anger, depression, and curiosity. *Applied Psychology: Health and Well-Being*, 1 (3), 271-301. doi: 10.1111/j.1758-0854.2009.01017.x.

Spielberger, C.D., Reheiser, E.C. & Sydeman, S.J. (1995). Measuring the experience, expression, and control of anger. *Issues in Comprehensive Pediatric Nursing*, 18, 207-232.

Sprague, J., Verona, E., Kalkhoff, W., & Kilmer, A. (2011). Moderators and mediators of the stress-aggression relationship: executive function and state anger. *Emotion*, 11 (1), 61-73. doi: 10.1037/a0021788.

Stawski, R. S., Silwinski, M.J., Almeida, D.M., & Smyth, J.M. (2008). Reported exposure and emotional reactivity to daily stressors: The roles of adult age and global perceived stress. *Psychology and Aging*, 23 (1), 52-61. doi: 10.1037/0882-7974.23.1.52.

Tajalli, P., Sobhi, A. & Ganbaripanah, A. (2010). The relationship between daily hassles and social support on mental health of university students. *Procedia Social and Behavioral Sciences*, 5, 99 – 103. doi:10.1016/j.sbspro.2010.07.058.

Tabachnick, B. G., and Fidell, L. S. (2013). *Using Multivariate Statistics*, *6th ed*. Boston: Pearson.

Tausch, N., Becker, J.C., Spears, R., Christ, O., Saab, R., Singh, P., & Siddiqui, R.N. (2011). Explaining radical group behavior: developing emotion and efficacy routes to normative and nonnormative collective action. *Journal of Personality and Social Psychology*, 101 (1), 129-148. doi: 10.1037/a0022728.

Taylor, S.E. (1979). Hospital patient behavior: reaction, helplessness, or control. *Journal of Social Issues*, 35 (1), 156-184.

The Office of the United Nations High Commissioner for Refugees (UNHCR) (2014). Housing, land & property issues in Lebanon: Implications of the Syrian refugee crisis.

Thomas, S. P. (1989). Gender differences in anger expression: health implications. *Research in Nursing and Health*, 12 (6), 389–398. doi: 10.1002/nur.4770120609.

Thompson, S.C., & Spacapan, S. (1991). Perceptions of control in vulnerable populations. *Journal of Social Issues*, 47, 1-22. doi: 10.1111/j.1540-4560.1991.tb01831.x.

Transparency International (2014). Visualising the corruption perceptions index 2014.

Twenge, J.M., & Campbell, W.K. (2003). "Isn't it fun to get the respect that we're going to deserve?" narcissism, social rejection, and aggression. *Personality and Social Psychology Bulletin*, 29 (2), 261-272. doi: 10.1177/0146167202239051.

United Nations High Commissioner for Refugees (UNHCR) (2015). Refugees from Syria: Lebanon. 1 – 17.

Usta, J., Farver, J.M., & Hamieh, C.S. (2015). Effects of socialization on gender discrimination and violence against women in Lebanon. *Violence Against Women*, 22 (4), 415-431. doi: 10.1177/1077801215603509.

Vecchio, T.D., & O'Leary, K.D. (2004). Effectiveness of anger treatments for specific anger problems: a meta-analytic review. *Clinical Psychology Review*, 24 (1), 15-34. doi: 10.1016/j.cpr.2003.09.006.

Verona, E., Sadeh, N., Curtin, J.J. (2009). Stress-induced frontal brain activity and aggression risk. *Journal of Abnormal Psychology*, 118 (1), 131-145. doi: 10.1037/a0014376.

Wannis, H. (2014). Security threat perceptions in Lebanon. *International Alert*.

Watson, M., Greer, S., Rowden, L., Gorman, C., Robertson, B., Bliss, J.M., & Tunmore, R. (1991). Relationships between emotional control, adjustment to cancer and depression and anxiety in breast cancer patients. *Psychological Medicine*, 21 (1), 51- 57.

Wiederkehr, V., Bonnot, V., Krauth-Gruber, S., & Damon, C. (2015). Belief in school meritocracy as a system-justifying tool for low status students. *Frontiers in Psychology*, 6, 1053. doi: 10.3389/fpsyg.2015.01053.

Wiseman, H., Metzl, E., & Barber, J.P. (2006). Anger, guilt, and intergenerational communication of trauma in the interpersonal narratives of second generation holocaust survivors. *American Journal of Orthopsychiatry*, 76 (2), 176-184. doi: 10.1037/0002-9432.76.2.176.

Wilfong, J.D. (2006). Computer anxiety and anger: the impact of computer use, computer experience, and self-efficacy beliefs. *Computers in Human Behavior*, 22 (6), 1001-1011.

Witte, T.H., Callahan, K.L. & Perez-Lopez, M. (2002). Narcissism and anger: an exploration of underlying correlates. *Psychological Reports*, 90, 871-875. World Bank (2014). Lebanon economic monitor: downside risks materialize. World Economic Forum (2014). The global gender gap report 2014.

Worthen, M., & Ahern, J. (2014). The causes, course, and consequences of anger problems in veterans returning to civilian life. *Journal of Loss and Trauma*, 19, 355-363. doi: 10.1080/15325024.2013.788945.

Zahr, L.K. (1996). Effects of war on the behavior of Lebanese preschool children: influence of home environment and family functioning. *American Journal of Orthopsychiatry*, 66 (3), 401 – 408.

Zeichner, A., Parrot, D.J., & Frey, F.C. (2003). Gender differences in laboratory aggression under response choice conditions. *Aggressive Behavior*, 29, 95-106. doi: 10.1002/ab.10030.

Appendix A

Consent Form

CONSENT TO PARTICIPATE IN AN ONLINE RESEARCH PROJECT

Project Title: Situational and personal predictors of anger in a Lebanese sample

Project Director and Research Investigator: Alaa M. Hijazi, Ph.D.
Assistant Professor, Department of
Psychology, American University of Beirut
ah177@aub.edu.lb
01-350000 Ext. 4370

Research Collaborator (Co-investigator): Marwa Itani, Graduate Student of
Psychology, Department of Psychology,
American University of Beirut
moi01@aub.edu.lb

Nature and Purpose of the Project:

You are invited to participate in a research study that seeks to understand situational and personal factors that contribute to anger in the Lebanese population. A better understanding of the factors contributing to anger can aid in creating strategies that reduce aggression and unhealthy expressions of anger. Lebanese people have undergone many situational factors that can create stress and discomfort placing great strain on them, which can breed frustration and anger. Findings from this study will not only contribute to local literature on this topic, but will also guide professionals in understanding and helping individuals deal with anger.

Explanation of Procedures:

As a research participant, you will read this consent form and carefully consider your participation, participation is completely voluntary. If you do agree to participate you will just need to click "Next" in order to proceed to the questionnaire. The questionnaire will ask you about your anger levels, various stressors you have experienced in your life, and aspects of your personality. Some of the questions might be sensitive (such as war exposure), and might make you feel uncomfortable. You have the right to discontinue your participation at any time.

You will not be asked to provide your name or any identifying information during your participation. Only the primary investigator will have access to the anonymous data collected from this study. The data will be kept on a password protected computer in the primary investigator's office.

It is expected that your participation in this survey will last no more than 30 minutes.

Potential Benefits:

A potential benefit of participating in this study is contributing to our understanding of anger in the Lebanese population, where there is a scarcity of research on this topic. This information can provide helpful insights for professionals treating individuals with anger.

Your participation in this survey incurs no costs and there are no monetary incentives.

Potential Risks:

There are no more than minimal risks associated with participation in this survey. Some of the questions might be sensitive, and might make you feel uncomfortable.

Termination of Participation:

The project investigators may disregard your answers if the results show that you have not abided by the instructions given at the top of each set of questions or if the answers appear not to be truthful. You may choose to terminate your participation at any point by simply exiting the online survey.

Confidentiality:

The results of your participation will be kept fully confidential. This means that only the project director and co-investigator will have access to the data, which will be anonymous, as no identifying information would be linked to the data you provided. Only information that cannot be traced to you will be used in reports or manuscripts published or presented by the director or investigator. Furthermore, the data will be kept on a password protected computer in the primary investigators office three years after the completion of the study. Once the three years have elapsed, the data will be deleted.

In addition, the results of the survey will be published in a thesis report available in printed form and electronically from AUB libraries.

Withdrawal from the Project:

Your participation in this survey is completely voluntary. You may withdraw your consent to participate in this research at any point without any explanation and

without any penalty. You are also free to stop filling the questionnaires at any point in time without any explanation.

Who to Call if You Have Any Questions:

The approval stamp on this consent form indicates that this project has been reviewed and approved for the period indicated by the American University of Beirut (AUB) Institutional Review Board for the Protection of Human Participants in Research and Research Related Activities.

If you have any questions about your rights as a research participant, or to report a research related injury, you may call:

IRB, AUB: 01-350000 Ext. 5543 or 5540

If you have any concerns or questions about the conduct of this research project, you may contact:

Dr. Alaa Hijazi:
Email: ah177@aub.edu.lb
Phone number: 01-350000 Ext. 4370

OR

Marwa Itani:
E-mail: moi01@aub.edu.lb
Phone number: 03-837884

Debriefing:

If you are interested in learning about the outcome of the study, you may contact Marwa Itani. After data analysis is completed, a summary of the results can be emailed to you upon request.

Consent to Participate in this Research Project:

If you accept the above statements and you are willing to participate, please click on "Next." By continuing you indicate your consent to participate in the study and authorize the researchers to use your data. You can refuse to participate or withdraw your participation in this study at anytime without penalty.

مُوافقة على المشاركة في مشروع بحث الكتروني

عنوان المشروع: متنبّئات الغضب الظرفيّة والشخصيّة لدى عيّنة من اللبنانيين

مديرة المشروع والمحقّقة في الأبحاث: دكتورة آلاء م. حجازي
بروفسورة مساعدة، قسم علم النّفس،
الجامعة الأميركية في بيروت
ah177@aub.edu.lb
01-350000، رقم فرعي: 4370

المساعدة في الأبحاث (محقّقة مساعدة): مروه عيتاني، خرّيجة في علم النّفس،
قسم علم النّفس، الجامعة الأميركية في بيروت
moi01@aub.edu.lb

طبيعة وغرض هذا المشروع:

ندعوكم للمشاركة في دراسة تسعى لفهم العوامل الظرفيّة والشخصيّة التي تحقن شعور الغضب لدى الشعب اللبناني. لذلك فإنّ التوصّل إلى فهم أعمق للعوامل المساهمة في إشعال الغضب قد يساعد على وضع استراتيجيّات قادرة على تخفيف العدائيّة والمظاهر غير الصحّيّة للغضب. اختبر اللبنانيّون عددًا كبيرًا من الضغوطات الحياتية، ممّا يؤدّي إلى شعور دائم بالإحباط وربّما أيضًا بالغضب. لن تقتصر نتائج هذه الدراسة على توثيق هذا الموضوع، بل ستوجّه أيضًا المتخصّصين في فهم ومساعدة الأفراد على التعامل مع مشاعر الغضب.

شرح العمليّة:

بصِفَتكم مشاركين في البحث، يتوجّب عليكم قراءة نموذج الموافقة هذا والتّفكير مليًّا بمسألة مشاركتكم. مشاركتكم طوعية تمامًا. سوف تحصلون على رابط الكتروني للدراسة. في حال موافقتكم على المشاركة، لا يتوجب عليكم سوى الضغط على زر" التالي" لبلوغ الاستطلاع. يشمل الاستطلاع أسئلة حول مستويات الغضب لديكم وحول مختلف العوامل التي أنجمت لديكم الغضب في حياتكم وحول جوانب من شخصيّتكم. قد تكون بعض الأسئلة حسّاسة وقد تنزعجون من بعضِها. يحقّ لكم تخطّي أيّ سؤال تجدونه مُزعِجًا، كما يمكنكم التوقف عن المشاركة في أيّ وقت كان. لن نطلب منكم اسمكم أو أيّ معلومات تعرّف عنكم أثناء مشاركتكم، ولن يطّلع أحد سوى المحقّق الرئيسي على البيانات المجموعة في هذه الدراسة من دون أسماء. سوف يتمّ حفظ البيانات على حاسوب محميّ بكلمة سرّ في مكتب المحقّق الرئيسي.

نتوقّع ألّا تتخطّى مدّة مشاركتكم في هذه الدراسة أكثر من 30 دقيقة.

<u>ضمانًا لسرّيّتكم، نحثّكم على عدم الإفصاح عن أيّ معلومات متعلّقة بمدّة أو مضمون الدراسة.</u>

المنافِع المُحتَمَلة:

يُعتَبَر أحد المنافِع المُحتَمَلة للمشاركة في هذه الدراسة المساهَمة في فهم الغضب لدى اللبنانيين، نظرًا لندرة الأبحاث حول هذا الموضوع. يمكن أن تساعد هذه المعلومات المتخصّصين على معالجة الأشخاص الذين يعانون من الغضب.

لا يتوجّب عليكم أيّ كلفة وليس هناك حافز ماليّ.

المخاطِر المُحتَمَلة:

لا توجد سوى مخاطر ضعيفة مرتبطة بالمشاركة بهذه الدراسة. قد تكون بعض الأسئلة حسّاسة ومن الممكن أن تُزعِجَكم.

البدائل عن المشاركة:

ليس هناك من بدائل عن المشاركة في حال قرّرتم عدم المشاركة في هذه الدراسة.

إيقاف المشاركة:

يمكن للمحقّقين غضّ النّظر عن إجاباتكم في حال أظهرت النتائج أنّكم لم تلتزموا بالإرشادات المحدّدة في أعلى كلّ مجموعة من الأسئلة أو في حال تراءى أنّ الإجابات غير صادقة. يمكنكم أن توقفوا مشاركتكم في أيّ وقت كان عبر التواصل مع مديرة المشروع أو المحقّقة المساعِدة أو بكلّ بساطة عبر مغادرة صفحة الدراسة على الإنترنت.

السرّيّة:

سيتمّ الحفاظ على السرّيّة الكاملة لنتائج مشاركتكم، ممّا يعني أنّ مديرة المشروع والمحقّقة المساعِدة وحدهما ستكونان مطّلعتين على البيانات التي ستكون دون أسماء، نظرًا لأنّ البيانات التي ستقدّمونها لن تكون مرتبطة بأيّ معلومات تعرّف عنكم. سيتمّ حصريًا استخدام المعلومات التي لا يمكن ربطها بكم في التقارير أو المطبوعات المنشورة أو المقدّمة من قِبَل المديرة أو المحقّقة. سوف يتمّ حفظ البيانات على حاسوب محميّ بكلمة سرّ في مكتب المحقّق الرئيسي لمدّة ثلاث سنوات اعتبارًا من تاريخ إيقاف الدراسة. عند انقضاء مدّة ثلاث سنوات، سيتمّ حذف البيانات.

نتائج هذا البحث سوف تنشر في تقرير رسالة الماجستير، الذي سيكون متاح من خلال نسخ مطبوعة و نسخ الكترونية في مكتبة الجامعة الأمريكية.

الانسحاب من المشروع:

إنّ مشاركتكم في هذه الدراسة هي طوعيّة تمامًا. يمكنكم سحب موافقتكم على المشاركة في هذا البحث في أيّ وقت كان، دون تقديم تبرير ودون أيّ جَزاء. كما يمكنكم التوقّف عن الإجابة عن الأسئلة في أيّ وقت كان دون تقديم تبرير.

للإجابة عن أسئلتكم:

يشير خَتم الموافقة على هذا المستند إلى أنّ هذا المشروع قد خضع للمراجعة والموافقة للفترة المحدّدة من قِبَل مجلس الأبحاث لحماية المشاركين في الأبحاث والأنشطة المرتبطة بالأبحاث التابع للجامعة الأميركية في بيروت.

للإجابة عن أسئلتكم حول حقوقكم كمشاركين في البحث أو للتبليغ عن ضرر ناجم عن البحث، يمكنكم الاتصال بالمجلس على الرقم التالي:
350000-01، رقم فرعي: 5543 أو 5540

إن كان لديكم أيّ أسئلة حول طريقة إجراء هذا المشروع، يمكنكم الاتصال بالأرقام التالية:

دكتورة آلاء حجازي:
بريد إلكتروني: ah177@aub.edu.lb
هاتف: 350000-01، رقم فرعي: 4370

أو

مروه عيتاني:
بريد إلكتروني: moi01@aub.edu.lb
هاتف: 837884-03

استخلاص المعلومات:

إن كنتم مهتمّين بالاطّلاع على نتائج الدراسة، يمكنكم الاتصال بالآنسة مروى عيتاني. عند الانتهاء من تحليل البيانات، سيقوم فريق العمل بإرسال ملخّص عن النتائج لكم عبر البريد الإلكتروني في حال طلَبتم ذلك.

موافقة على المشاركة في هذا مشروع البحث:

إن كنتم تقبلون ما ورد أعلاه وكنتم تريدون المشاركة، نرجو منكم الضغط على زر" التالي" . حين تنتقلون إلى قسم الأسئلة، تكونون أكّدتم موافقتكم على المشاركة في الدراسة وسمَحتم للباحثين باستخدام بياناتكم. يمكنكم رفض المشاركة أو سحب مشاركتكم في هذه الدراسة في أيّ وقت كان دون أيّ جزاء.

Appendix B

Demographics Questionnaire

Please fill in the following information:

1- Age:

2- Gender:

3- Highest level of education reached: (If you are still studying, please select the level you are currently at):

- o High school
- o Undergraduate
- o Graduate/Masters
- o Postgraduate/Ph.D

4- Household income:

- o Less than 500,000L.L per month
- o 500,000L.L - 750,000L.L per month
- o 750,000L.L – 1,500,000 L.L per month
- o 1,500,000 L.L. – 3,000,000 L.L per moth
- o 3,000,000 L.L. – 7,500,000 L.L per month
- o More than 7,500,000 L.L per month
- o I Prefer not to say

5- What is your occupation (if applicable) (If you are a student please mention it here)?

6- Are you Lebanese?

7-Are you living in Lebanon or have lived in Lebanon within the last 5 years?

8- If you are Lebanese, what area are you from and currently living in?

الرجاء ملء المعلومات التالية:

1- العمر :

2- الجنس :

3- أعلى مستوى علمي (في حال كنت لا تزال طالبًا، الرجاء تحديد المستوى العلمي الحالي):

- التعليم الثانوي
- التعليم الجامعي – غير متخرّج
- التعليم الجامعي – متخرّج / شهادة ماستر
- التعليم الجامعي – دراسات عليا / شهادة دكتوراه

4 دخل الأسرة:

- أقل من 500000 ل.ل شهريا
- 500000 ل.ل -- 750000 ل.ل شهريا
- 750000 ل.ل -- 1500000 ل.ل شهريا
- 1500000 ل.ل. -- 3000000 ل.ل شهريا
- 3000000 ل.ل. -- 7500000 ل.ل شهريا
- أكثر من 7500000 ل.ل شهريا
- افضل ان لا اقول

5- ما هي مهنتك (إن وجدت) (في حال كنت طالبًا، الرجاء تحديد ذلك هنا)؟

_____

6- هل أنت لبنانيّ؟

_____

7- هل تعيش في لبنان أو هل عشت في لبنان في خلال السنوات الخمس الأخيرة؟

_____

8- إن كنت لبنانيًّا، من أيّ منطقة أنت وأين تعيش حاليًّا؟

_____

Appendix C
Multidimensional Anger Inventory (MAI)

Everybody gets angry from time to time. A number of statements that people have used to describe the times that they get angry are included below. Read each statement and circle the number to the right of the statement that best describes you. There are no right or wrong answers.

If the statement is <u>completely undescriptive</u> of you, circle a 1.

If the statement is <u>mostly undescriptive</u> of you, circle a 2.

If the statement is <u>partly undescriptive</u> and partly descriptive of you, circle a 3.

If the statement is <u>mostly descriptive</u> of you, circle *a <u>4</u>*.

If the statement is <u>completely descriptive</u> of you, circle a <u>5</u>.

Please answer every item.

	Completely <u>Undescriptive</u>	Mostly <u>Undescriptive</u>	Partly Undescriptive/ Partly Descriptive	Mostly <u>Descriptive</u>	Completely <u>Descriptive</u>
1. I tend to get angry more frequently than most people.	1	2	3	4	5
2. Other people seem to get angrier than I do in similar circumstances.	1	2	3	4	5
3. I harbor grudges that I don't tell anyone about.	1	2	3	4	5
4. I try to get even when I am angry with someone.	1	2	3	4	5
5. I am secretly quite critical of others.	1	2	3	4	5
6. It is easy to make me angry.	1	2	3	4	5

	Completely Undescriptive	Mostly Undescriptive	Partly Undescriptive/ Partly Descriptive	Mostly Descriptive	Completely Descriptive
7. When I am angry with someone, I let that person know.	1	2	3	4	5
8. I have met many people who are supposed to be experts who are no better than I.	1	2	3	4	5
9. Something makes me angry almost every day.	1	2	3	4	5
10. I often feel angrier than I think I should.	1	2	3	4	5
11. I feel guilty about expressing my anger.	1	2	3	4	5
12. When I am angry with someone, I take it out on whoever is around.	1	2	3	4	5
13. Some of my friends have habits that annoy and bother me very much.	1	2	3	4	5
14. I am surprised at how often I feel angry.	1	2	3	4	5
15. Once I let people know I'm angry, I can put it out of my mind.	1	2	3	4	5
16. People talk about me behind my back.	1	2	3	4	5

	Completely Undescriptive	Mostly Undescriptive	Partly Undescriptive/ Partly Descriptive	Mostly Descriptive	Completely Descriptive
17. At times, I feel angry for no specific reason.	1	2	3	4	5
18. I can make myself angry about something in the past just by thinking about it.	1	2	3	4	5
19. Even after I have expressed my anger, I have trouble forgetting about it.	1	2	3	4	5
20. When I hide my anger from others, I think about it for a long time.	1	2	3	4	5
21. People can bother me just by being around.	1	2	3	4	5
22. When I get angry, I stay angry for hours.	1	2	3	4	5
23. When I hide my anger from others, I forget about it pretty quickly.	1	2	3	4	5
24. I try to talk over problems with people without letting them know I'm angry.	1	2	3	4	5
25. When I get angry, I calm down faster than most people do.	1	2	3	4	5

	Completely Undescriptive	Mostly Undescriptive	Partly Undescriptive/ Partly Descriptive	Mostly Descriptive	Completely Descriptive
26. I get so angry I feel like I might lose control.	1	2	3	4	5
27. If I let people see the way I feel, I would be considered a hard person to get along with.	1	2	3	4	5
28. I am on my guard with people who are friendlier than I expected.	1	2	3	4	5
29. It is difficult for me to let people know I'm angry.	1	2	3	4	5
30. I get angry when:	1	2	3	4	5
a. Someone lets me down.	1	2	3	4	5
b. People are unfair.	1	2	3	4	5
c. Something blocks my plans.	1	2	3	4	5
d. I am delayed.	1	2	3	4	5
e. Someone embarrasses me.	1	2	3	4	5
f. I have to take orders from someone less capable than I.	1	2	3	4	5

	Completely Undescriptive	Mostly Undescriptive	Partly Undescriptive/ Partly Descriptive	Mostly Descriptive	Completely Descriptive
g. I have to work with incompetent people.	1	2	3	4	5
h. I do something stupid.	1	2	3	4	5
i. I am not given credit for something that I have done.	1	2	3	4	5

كلّنا نشعر بالغضب أو الاغتياظ من حين إلى آخر... في ما يلي مجموعة من الأقوال التي استخدمها أفراد لوصف الحالات التي يشعرون فيها بالغضب. نرجو منكم قراءة كلّ من الأقوال ثمّ وضع دائرة حول الرقم الموجود على يمين كلّ قول والذي يمثّل وضعكم بأفضل شكل. ليس هناك من إجابات صحيحة أو خاطئة.

إن كان القول <u>لا يصِفك على الإطلاق</u>، ضع دائرة حول الرقم <u>1</u>.

إن كان القول <u>لا يصِفك لدرجة كبيرة</u>، ضع دائرة حول الرقم <u>2</u>.

إن كان القول <u>يَصِفك جزئيًا/لا يَصِفك جزئيًا</u>، ضع دائرة حول الرقم <u>3</u>.

إن كان القول <u>يصِفك لدرجة كبيرة</u>، ضع دائرة حول الرقم <u>4</u>.

إن كان القول <u>يصِفك تمامًا</u>، ضع دائرة حول الرقم <u>5</u>.

الرجاء الإجابة على كافة الأقوال

يصِفك تمامًا	يصِفك لدرجة كبيرة	يَصِف جزئيًا/لا يصِفك جزئيًا	لا يصِفك لدرجة كبيرة	لا يصِفك على الإطلاق	
5	4	3	2	1	1. أغضب عدد مرّات أكثر من معظم الناس
5	4	3	2	1	2. يبدو لي أن الآخرين يغضبون أكثر مني في حالات مشابهة
5	4	3	2	1	3. أحقُد دون أن أُخبر أحدًا
5	4	3	2	1	4. أحاول أن أنتقم حين أغضب من أحد ما
5	4	3	2	1	5. أنتقد الآخرين كثيرًا بالسرّ
5	4	3	2	1	6. يمكن إغضابي بسهولة

يصِفك تمامًا	يصِف لدرجة كبيرة	يَصِف جزئيًا/لا يصِفك جزئيًا	لا يصِفك على لدرجة كبيرة	لا يصِفك على الإطلاق	
5	4	3	2	1	7. حين أغضب من أحد ما، أُعلِمه بذلك
5	4	3	2	1	8. تعرّفت على الكثيرين الذين من المفترض أن يكونوا خبراء ولكن لم يكونوا أفضل مني
5	4	3	2	1	9. يوجد ما يُغضِبني كل يوم تقريبًا
5	4	3	2	1	10. أعتقد أنني أشعر عادةً بالغضب أكثر من اللزوم
5	4	3	2	1	11. أشعر بالذنب حيال التعبير عن غضبي
5	4	3	2	1	12. حين أغضب من أحد ما، أصبّ غضبي على أيّ شخص حولي
5	4	3	2	1	13. لدى بعض أصدقائي عادات تزعجني وتضايقني كثيرًا
5	4	3	2	1	14. أتعجّب من كثرة المرات التي أشعر فيها بالغضب
5	4	3	2	1	15. حين أُخبر الآخرين أنني غاضب، أتمكّن من تناسي الموضوع
5	4	3	2	1	16. يتكلّم عني الآخرون دون عِلمي

يصِفك تمامًا	يصِفك لدرجة كبيرة	يَصِف جزئيًا/لا يصِفك جزئيًا	لا يصِفك على لدرجة كبيرة	لا يصِفك على الإطلاق	
5	4	3	2	1	17.أشعر بالغضب أحيانًا دون سبب محدد
5	4	3	2	1	18.أتمكّن من إشعار نفسي بالغضب حيال أمر في الماضي بمجرّد التفكير به
5	4	3	2	1	19.أعاني من صعوبة في تناسي الغضب، حتى بعد أن أعبّر عنه
5	4	3	2	1	20.حين أخفي غضبي عن الآخرين، أفكّر به لفترة طويلة
5	4	3	2	1	21.يمكن للآخرين أن يزعجوني بمجرّد تواجدهم بالقرب مني
5	4	3	2	1	22.حين أغضب أبقى غاضبًا لساعات طويلة
5	4	3	2	1	23.بإمكاني تناسي غضبي حين أخفيه عن الاخرين
5	4	3	2	1	24.أحاول مناقشة المشاكل مع الآخرين دون أن أعلمهم أني غاضب
5	4	3	2	1	25.في حال الغضب، أتمكن من الهدوء بشكل أسرع من معظم الأشخاص

يصِفك تمامًا	يصِفك لدرجة كبيرة	يَصِف جزئيًا/لا يصِفك جزئيًا	لا يصِفك لدرجة كبيرة	لا يصِفك على الإطلاق	
5	4	3	2	1	26. أغضب لدرجة الشعور بأنني قد أفقد السيطرة على نفسي
5	4	3	2	1	27. إذا عرف الاخرين عن مشاعري سيعتبرونني شخصًا يصعب الانسجام معه
5	4	3	2	1	28. أكون حَذِرًا مع الأشخاص الذين يكونون أكثر ودّية من المتوقّع
5	4	3	2	1	29. يصعب عليّ أن أدع الآخرين أن يعرفوا أنني غاضب
5	4	3	2	1	30. أشعر بالغضب حين:
5	4	3	2	1	أ. يخذلني أحد ما
5	4	3	2	1	ب. لا يكون الأشخاص عادلين
5	4	3	2	1	ج. يعيق شيء ما مخططاتي
5	4	3	2	1	د. يتم تأخيري
5	4	3	2	1	ه. يُحرجني أحد ما

يصِفك تمامًا	يصِفك لدرجة كبيرة	يَصِف جزئيًا/لا يصِفك جزئيًا	لا يصِفك لدرجة كبيرة	لا يصِفك على الإطلاق	
5	4	3	2	1	و. يجب أن أتلقّى أوامر من أحد أقلّ جدارة منّي
5	4	3	2	1	ز. يجب أن أعمل مع أشخاص غير مؤهلين
5	4	3	2	1	ح. أقوم بحماقة ما
5	4	3	2	1	ط. لا أحصل على الثناء الذي أستحقه على أمر قمت به

Appendix D

Harvard War Trauma Questionnaire

Please indicate whether you have experienced any of the following events (check "YES" or "NO" for each column).

		YES	NO
1	Oppressed because of ethnicity, religion, or sect		
2	Searched arbitrarily (e.g. checkpoints)		
3	Property looted, confiscated, or destroyed		
4	Forced to flee your country or home		
5	Witnessed shelling, burning, or razing of residential areas		
6	Exposed to combat situation (explosions, artillery fire, shelling) or landmine.		
7	Serious physical injury from combat situation or landmine		
8	Serious physical injury of family member or friend from combat situation or landmine		
9	Confined to home because of chaos and violence outside		
10	Violent death of family member (child, spouse, etc.) or friend		
11	Disappearance or kidnapping of a family member (child, spouse, etc.) or friend		
12	Physically harmed (beaten, knifed, etc.)		
13	Kidnapped or taken as a hostage		
14	Please specify any other situation that was very frightening or in which you felt your life was in danger:		

نرجو أن تذكر إن كنت قد تعرضت لأي من الحوادث التالية (ضع علامة √) في العمود المناسب تحت "نعم" أو "لا"

لا	نعم	
		1.ـ هل تعرضت للاضطهاد بسبب عرقك، دينك، أو مذهبك
		2.ـ هل فتشت اعتباطا (مثلاً عند حاجز أمني)
		3.ـهل تم نهب ممتلكاتك الشخصية أو مصادرتها أو تدميرها
		4. هل اضطررت للهروب من منزلك او من بلدك
		5.ـ هل شاهدت قصف الأماكن السكنية أو إحراقها أو تدميرها
		6.ـ هل تعرضت لأجواء القتال\حالة حرب (انفجارات، قصف ، شظايا) أو للألغام
		7.ـ هل أصبت إصابة جسمية خطيرة بسبب التعرض لأجواء القتال\حالة حرب\ ألغام
		8.ـ هل أصيب أحد أفراد عائلتك أو أصدقائك إصابة جسمية خطيرة بسبب أجواء قتال\حالة حرب أو ألغام
		9.ـ هل أجبرت على البقاء في الدار بسبب الفوضى و العنف في الخارج
		10. وفاة أحد أفراد عائلتك (طفلك، زوجك، الخ) أو صديقك نتيجة العنف
		11.ـ هل اختفى أو اختطف أحد أفراد عائلتك (طفلك، زوجك، أو صديقك..الخ)
		12.ـ هل تعرضت للأذى الجسمي (الضرب، الطعن، ..ألخ)
		13.ـ هل اختطفت أو أخذت كرهينة
		14.ـ نرجو أن تحدد أي مواقف أخرى مخيفة أو شعرت عندها أن حياتك معرضة للخطر

The Hassles and Uplifts Scale

HASSLES are irritants, things that annoy or bother you; they can make you upset or angry. Some hassles occur on a fairly regular basis and others are relatively rare. Some have only a slight effect, others have a strong effect. This questionnaire lists things that can be hassles in day-to-day-life.

Directions: Please think about how much of a hassle each item was for you in the past two weeks and circle the number that best describes your answer.

0 = None or not applicable, 1 = Somewhat, 2 = Quite a bit, 3 = A great deal

0 1 2 3	1. Your child(ren)
0 1 2 3	2. Your parents or parents-in-law
0 1 2 3	3. Other relative(s)
0 1 2 3	4. Your spouse
0 1 2 3	5. Time spent with family
0 1 2 3	6. Health or well-being of a family member
0 1 2 3	7. Sex
0 1 2 3	8. Intimacy
0 1 2 3	9. Family-related obligations
0 1 2 3	10. Your friend(s)
0 1 2 3	11. Fellow workers
0 1 2 3	12. Clients, customers, patients, etc.
0 1 2 3	13. Your supervisor or employer
0 1 2 3	14. The nature of your work
0 1 2 3	15. Your work load
0 1 2 3	16. Your job security

0 1 2 3	17. Meeting deadlines or goals on the job or at university
0 1 2 3	18. Enough money for necessities (e.g. food, clothing, housing, health care, taxes, insurance)
0 1 2 3	19. Enough money for education
0 1 2 3	20. Enough money for emergencies
0 1 2 3	21. Enough money for extras (e.g., entertainment, recreation, vacations)
0 1 2 3	22. Financial care for someone who doesn't live with you
0 1 2 3	23. Investments
0 1 2 3	24. Your smoking
0 1 2 3	25. Your drinking
0 1 2 3	26. Your physical appearance
0 1 2 3	27. Contraception
0 1 2 3	28. Exercise(s)
0 1 2 3	29. Your medical care
0 1 2 3	30. Your health
0 1 2 3	31. Your physical abilities
0 1 2 3	32. The weather
0 1 2 3	33. News events
0 1 2 3	34. Traffic
0 1 2 3	35. Your environment (e.g., quality of air, noise level, greenery, garbage)
0 1 2 3	36. Political or social issues (such as corruption)
0 1 2 3	37. Your neighborhood (e.g. neighbors, setting)
0 1 2 3	38. Gas, electricity, water, gasoline, generator
0 1 2 3	39. Pets

0 1 2 3	40. Cooking
0 1 2 3	41. Housework
0 1 2 3	42. Home repairs
0 1 2 3	43. Car maintenance
0 1 2 3	44. Taking care of paperwork (e.g. paying bills, filling out forms, including governmental documents)
0 1 2 3	45. Home entertainment (e.g. TV, music, reading)
0 1 2 3	46. Amount of free time
0 1 2 3	47. Recreation and entertainment outside the home (e.g. movies, sports, eating out, walking)
0 1 2 3	48. Eating (at home)
0 1 2 3	49. Religious or community organizations
0 1 2 3	50. Legal matters
0 1 2 3	51. Being organized
0 1 2 3	52. Social commitments

تُعتَبر مصادر الإزعاج كلّ ما قد يضايقكم أو يُغضِبكم. يمكن أن تكون هذه المصادر متكرّرة أو نادرة نسبيًّا، ويكون لبعضها تأثير طفيف ولبعضها الآخر تأثير كبير. ستجدون في ما يلي أسئلة حول أمور قد تكون مصادر إزعاج في الحياة اليوميّة.

إرشادات: الرجاء التفكير حول مدى تأثير كلّ من مصادر الإزعاج التالية على حياتكم في خلال الأسبوعَين الماضِيين، ثم وضع دائرة حول الرقم الذي يمثّل إجابتكم بأفضل شكل.

0= أبدًا أو لا ينطبق عليّ   1= نوعًا ما   2= نعم، لدرجة معيّنة   3= كثيرًا

3 2 1 0	1. طفلك/أطفالك
3 2 1 0	2. أهلك أو أهل زوجك/زوجتك
3 2 1 0	3. الأقرباء
3 2 1 0	4. زوجك/زوجتك
3 2 1 0	5. تمضية الوقت مع العائلة
3 2 1 0	6. صحّة أو سعادة أحد أفراد العائلة
3 2 1 0	7. العلاقات الجنسية
3 2 1 0	8. الحميميّة
3 2 1 0	9. الالتزامات العائليّة
3 2 1 0	10. الأصدقاء
3 2 1 0	11. الزملاء
3 2 1 0	12. الزبائن، العملاء، المرضى، الخ
3 2 1 0	13. المشرف أو المدير في مكان عملك
3 2 1 0	14. طبيعة عملك
3 2 1 0	15. كمّيّة العمل
3 2 1 0	16. الثبات في وظيفتك

3 2 1 0	17. احترام المواعيد النهائية أو الأهداف في العمل أو الجامعة
3 2 1 0	18. المال الكافي لشراء الضروريّات (مثل الطعام والملابس والسكن والطبابة والضرائب والتأمين)
3 2 1 0	19. المال الكافي للدراسة
3 2 1 0	20. المال الكافي للطوارئ
3 2 1 0	21. المال الكافي للكماليّات (مثل التسلية والعُطَل)
3 2 1 0	22. الدعم المالي لشخص لا يسكن معك
3 2 1 0	23. الاستثمارات
3 2 1 0	24. التدخين
3 2 1 0	25. شرب الكحول
3 2 1 0	26. الاهتمام بمنظرك
3 2 1 0	27. وسائل منع الحمل
3 2 1 0	28. ممارسة الرياضة
3 2 1 0	29. رعايتك الصحية
3 2 1 0	30. صحّتك
3 2 1 0	31. قدراتك الجسدية
3 2 1 0	32. الطقس
3 2 1 0	33. الأحداث العامة
3 2 1 0	34. زحمة السّير
3 2 1 0	35. بيئتك (مثل نوعيّة الهواء ومستوى الضجيج والمساحات الخضراء والنفايات)
3 2 1 0	36. مسائل سياسية أو اجتماعية (مثل الفساد)

3 2 1 0	37. الحيّ الذي تسكن فيه (مثل الجيران والموقع)
3 2 1 0	38. الغاز، الكهرباء، المياه، البنزين، المولّد
3 2 1 0	39. الحيوانات الأليفة في المنزل
3 2 1 0	40. الطبخ
3 2 1 0	41. أعمال المنزل
3 2 1 0	42. إصلاحات المنزل
3 2 1 0	43. صيانة السيارة
3 2 1 0	44. العمل الكتابي (مثل دفع الفواتير وتعبئة النماذج كالمستندات الحكومية)
3 2 1 0	45. التسلية المنزلية (مثل التلفاز والموسيقى والقراءة)
3 2 1 0	46. كمّيّة وقت الفراغ
3 2 1 0	47. التسلية والترفيه خارج المنزل (مثل السينما والرياضة والمطاعم والتنزّه)
3 2 1 0	48. الأكل (في المنزل)
3 2 1 0	49. الجماعات الدينيّة
3 2 1 0	50. الشؤون القانونيّة
3 2 1 0	51. التنظيم في الحياة اليوميّة
3 2 1 0	52. الحياة الاجتماعية

Appendix F

The General System Justification Scale

Please indicate your degree of agreement or disagreement with each item on a 5-point scale ranging from 5 (strongly agree) to 1 (strongly disagree).

	SD	D	N	A	SA
1. In general, I find society to be fair.	1	2	3	4	5
2. In general, the Lebanese political system operates as it should.	1	2	3	4	5
3. Lebanese society needs to be radically restructured.	1	2	3	4	5
4. Lebanon is the best country in the world to live in.	1	2	3	4	5
5. Most policies serve the greater good.	1	2	3	4	5
6. Everyone has a fair shot at wealth and happiness.	1	2	3	4	5
7. Our society is getting worse every year.	1	2	3	4	5
8. Society is set up so that people usually get what they deserve.	1	2	3	4	5

الرجاء تحديد درجة موافقتكم أو معارضتكم من 5 (أوافق بشدّة) إلى 1 (أعارض بشدّة) على كلّ من النقاط التالية.

أوافق بشدّة	أوافق	حيادي	أعارض	أعارض بشدّة	
5	4	3	2	1	1. بشكلٍ عامّ، أجد أنّ المجتمع منصف/عادل.
5	4	3	2	1	2. بشكلٍ عامّ، النّظام السّياسي في لبنان يعمل كما ينبغي.
5	4	3	2	1	3. يحتاج المجتمع اللبناني إلى إعادة هيكلة جذريّة.
5	4	3	2	1	4. لبنان هو أفضل بلد في العالم للعيش فيه.
5	4	3	2	1	5. معظم السّياسات تخدم الصّالح العام.
5	4	3	2	1	6. الجميع لديه فرصة عادلة لتحقيق الثّروة والسّعادة.
5	4	3	2	1	7. يزداد مجتمعنا سوءاً كلّ عام.
5	4	3	2	1	8. المجتمع مركّب بحيث يحصل النّاس عادةً على ما يستحقّون.

Appendix G

The Narcissistic Personality Inventory (NPI-16)

Read each pair of statements below and place an "X" by the one that comes closest to describing your feelings and beliefs about yourself. You may feel that neither statement describes you well, but pick the one that comes closest. **Please complete all pairs.**

1. ___ I really like to be the center of attention
   ___ It makes me uncomfortable to be the center of attention

2. ___ I am no better or no worse than most people
   ___ I think I am a special person

3. ___ Everybody likes to hear my stories
   ___ Sometimes I tell good stories

4. ___ I usually get the respect that I deserve
   ___ I insist upon getting the respect that is due me

5. ___ I don't mind following orders
   ___ I like having authority over people

6. ___ I am going to be a great person
   ___ I hope I am going to be successful

7. ___ People sometimes believe what I tell them
   ___ I can make anybody believe anything I want them to

8. ___ I expect a great deal from other people
   ___ I like to do things for other people

9. ___ I like to be the center of attention
   ___ I prefer to blend in with the crowd

10. ___ I am much like everybody else
    ___ I am an extraordinary person

11. ___ I always know what I am doing
    ___ Sometimes I am not sure of what I am doing

12. ___ I don't like it when I find myself manipulating people
    ___ I find it easy to manipulate people

13. ___ Being an authority doesn't mean that much to me
    ___ People always seem to recognize my authority

14. ___ I know that I am good because everybody keeps telling me so
    ___ When people compliment me I sometimes get embarrassed

15. ___ I try not to be a show off
    ___ I am apt to show off if I get the chance

16. ___ I am more capable than other people
    ___ There is a lot that I can learn from other people

الرجاء قراءة كلّ زوج من الأقوال أدناه ووضع إشارة X بجانب القول الذي يصف بشكل أفضل مشاعركم وآراءكم حول نفسكم. قد تشعرون بأنّ لا واحد من القَولين يَصِفكم بشكل جيد، لكن الرجاء اختيار الإجابة الأقرب إلى الواقع. **الرجاء إتمام كلّ النقاط.**

1. ___ أحب كثيرًا أن يكون الانتباه مصبوبًا عليّ
   ___ أشعر بالانزعاج حين يكون الانتباه مصبوبًا عليّ

2. ___ لست أفضل أو أسوأ من معظم الأشخاص
   ___ أعتقد أنني شخص مميّز

3. ___ يحبّ الجميع الاستماع إلى قِصصي
   ___ أُخبر أحيانًا قِصصًا جيّدة

4. ___ أحصل عادةً على الاحترام الذي أستحقّه
   ___ أصرّ على الحصول على الاحترام الذي أستحقّه

5. ___ لا أمانع اتّباع الأوامر
   ___ أحبّ أن يكون لديّ سُلطة على الآخرين

6. ___ سوف أصبح شخصًا رائعًا
   ___ آمل أن أصبح ناجحًا

7. ___ يصدّق الناس أحيانًا ما أقوله لهم
   ___ يمكنني أن أجعل أيّ شخص يصدّق أيّ شيء أقوله له

8. ___ لديّ توقّعات كثيرة من الآخرين
   ___ أحبّ أن أخدم الآخرين

9. ___ أحبّ أن أكون محور الانتباه
   ___ أفضّل أن أختلط مع الآخرين

10. ___ أنا لا أتميّز عن غيري نسبيًا
    ___ أنا شخص مُدهِش

11. ___ أعرف دائمًا ما أفعله
    ___ أحيانًا لا أكون واثقًا مما أفعله

12. ___ لا أحبّ أن أجد نفسي أتلاعب بالآخرين
___ أجد سهولة في التلاعب بالآخرين

13. ___ لا يهمّني حقًّا أن يكون لديّ سُلطة
___ يبدو أنّ الآخرين يعترفون دائمًا بسُلطتي

14. ___ أعرف أنني إنسان صالح لأنّ الجميع يقول لي ذلك
___ أخجل أحيانًا حين يقوم أشخاص بمَدحي

15. ___ أحاول ألّا أتباهى
___ من الممكن أن أتباهى حين تتسنّى لي الفرصة لذلك

16. ___ أنا أكثر قدرة من الآخرين
___ يمكنني أن أتعلّم الكثير من الأمور من الآخرين

Appendix H

Learned Helplessness Scale (LHS)

Please read the following statements carefully. Place a check mark (✔) in the box which most closely describes you and your feelings about yourself.

		Strongly Agree (1)	Agree (2)	Disagree (3)	Strongly Disagree (4)
1.	No matter how much energy I put into a task, I feel I have no control over the outcome.				
2.	I feel that my ability to solve problems is the cause of my success.				
3.	I can find solutions to difficult problems				
4.	I don't place myself in situations in which I cannot predict the outcome.				
5.	If I complete a task successfully, it is probably because of my ability.				
6.	I have the ability to solve most of life's problems.				
7.	When I do not succeed at a task, I do not attempt any similar tasks because I feel that I would fail them also.				
8.	When something doesn't turn out the way I planned, I know it is because I didn't have the ability to start with.				

9.	Other people have more control over their success and/or failure than I do.				
10.	I try new tasks if I have failed similar ones in the past.				
11.	When I perform poorly, it is because I don't have the ability to perform better.				
12.	I accept tasks even if I am not sure that I will succeed at them.				
13.	I feel that I have little control over the outcomes of my work.				
14.	I am successful at most tasks I try.				
15.	I feel that anyone else could be better than me in most tasks				
16.	I am able to reach my goals in life.				
17.	When I don't succeed at a task, I find myself blaming my own stupidity for my failure.				
18.	No matter how hard I try, things never seem to work out the way I want them to.				
19.	I feel that my success reflects my ability, not chance.				
20.	My behavior seems to influence the success of a work group.				

الرجاء قراءة الأقوال التالية بتأنّي ووضع إشارة ✓ في المربع الذي يصف بأفضل شكل مشاعركم حول نفسكم.

أعارض بشدّة (4)	أعارض (3)	أوافق (2)	أوافق بشدّة (1)		
				مَهما بذلت من مجهود في عمل ما، أشعر بأنني لا أسيطر أبدًا على النتيجة	1.
				أشعر بأنّ قدرتي على حلّ المشاكل هي سبب نجاحي	2.
				يمكنني إيجاد حلول للمشاكل الصعبة	3.
				لا أضع نفسي في مواقف لا يمكنني توقع نتيجتها	4.
				قدرتي هي السبب في تمكّني من إتمام أعمالي بنجاح	5.
				لديّ القدرة على حلّ معظم معضلات الحياة	6.
				حين لا أنجح في عمل ما، لا أجرّب أيّ أعمال مشابهة لأنني أشعر بأنني سأفشل فيها أيضًا	7.
				حين لا تجري الأمور كما أتوقعها، أعرف بأنّ السبب هو أنني لم أملك القدرة على القيام بها	8.
				يتحكم الآخرون بنجاحهم و/أو فشلهم بشكل أفضل مني	9.

				أجرّب أعمالًا جديدة بعد أن أكون فشلت بأعمال شبيهة بها	10.
				حين يكون أدائي سيّئًا، فالسبب هو أنني لا أملك القدرة على الأداء بشكل أفضل	11.
				أقبل المهامّ حتى وإن لم أكن واثقًا من أنني سأنجح بها	12.
				أشعر بأنّني لا أتحكّم حقًا بنتائج أعمالي	13.
				أنجح في معظم الأعمال التي أجرّبها	14.
				أشعر بأنّ بإمكان أيّ شخص آخر أن يكون أفضل منّي في أداء معظم المهامّ	15.
				أنا قادر على تحقيق أهدافي في الحياة	16.
				حين لا أنجح في مهمّة ما، ألاحظ أنني ألوم غبائي على الفشل	17.
				مهما حاولتُ، يبدو أن الأمور لا تجري كما أريد	18.
				أشعر بأنّ نجاحي يعكس قدرتي لا حظّي	19.
				يبدو أنّ تصرّفاتي تؤثّر على نجاح مجموعة عمل	20.

Appendix I

Addition at the end of the survey

Many people struggle with intense feelings of anger. Moreover, given the many stressors that the Lebanese endure on a daily basis, we anticipate that high levels of anger is a common experience. If you feel that your level of anger is interfering with your life, below is a list of professionals that could be of service:

http://lpalebanon.org/en/find-a-therapist.html

الكثير من الناس يعانون من مشاعر الغضب الشديد. كما أن اللبنانيّون يتحملون يومياً عدداً كبيراً من الضغوطات، ممّا يؤدّي إلى انتشار الشعور بالغضب. إذا شعرت بأن مستوى غضبك يؤثر على حياتك، ستجد أدناه لائحة من الأخصائين لخدمتك:

http://lpalebanon.org/en/find-a-therapist.html

<u>Invitation to Participate in a Research Study</u>

This notice is for an AUB-IRB Approved Research Study

for Dr. Alaa Hijazi at the American University of Beirut.

ah177@aub.edu.lb; 01-350000 Ext. 4370

♦ I am inviting you to participate in a research study about situational and personal predictors of anger in a Lebanese sample.

♦ You are invited because we are targeting Lebanese living in Lebanon and above the age of 18.

♦ You will be asked to complete an anonymous online survey on the AUB server. Questions include brief demographic information and other scales related to the topic.

♦ The estimated time to complete this survey is approximately 30 minutes.

♦ This study will aid in contributing to our understanding of anger in the Lebanese population, and can provide helpful insights for professionals treating individuals with anger.

♦ Please read the consent form and consider whether you want to be involved in the study.

To participate in the survey please click on the following link:
< LINK>

If you have any questions about this study, you may contact the co-investigator:

Marwa Itani (moi01@aub.edu.lb)

115

Appendix K

Facebook Advertisement

Dear Friends,

I could use your help!

Are you Lebanese (living in Lebanon) and above the age of 18? I am conducting research for my thesis project with Dr. Alaa Hijazi (Assistant Professor at the American University of Beirut) about the predictors of Anger in a Lebanese sample. If you fit the criteria above and are interested in participating (it would be greatly appreciated) please click on the link below:

<link to survey>

If you have any questions or comments please feel free to message me.