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Investigating the Construct of Psychopathy in Lebanese and American Adults

Marie-Anne Issa

*The Graduate Center, City University of New York*

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INVESTIGATING THE CONSTRUCT OF PSYCHOPATHY IN LEBANESE AND AMERICAN ADULTS

by

MARIE-ANNE ISSA

A dissertation submitted to the Graduate Faculty in Psychology in partial fulfillment of the requirements for the degree of Doctor of Philosophy, The City University of New York

2016
Investigating the Construct of Psychopathy in Lebanese and American Adults

By

Marie-Anne Issa

This manuscript has been read and accepted for the Graduate Faculty in Psychology in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy.

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ABSTRACT

Investigating the Construct of Psychopathy in Lebanese and American Adults

By

Marie-Anne Issa

Advisor: Cathy Spatz Widom, PhD

Psychopathy has been primarily investigated in forensic and psychiatric populations in North America. Cross-cultural studies, mainly conducted in Europe, have shown disparities in psychopathy scores and the measures’ psychometric properties, which raise the issue of cultural factors, such as individualism-collectivism, values, and different ways of emotional expression, and the impact of these cultural factors on the construct and its manifestation. Psychopathy has been rarely explored in Arab populations. This dissertation examines the construct of psychopathy among Lebanese adults, to assess its meaning, relevance, and utility among this population and compares the responses of Lebanese to American adults. The design of this study involves: 1) a comparison of Lebanese and American adults on measures of psychopathy and its correlates and 2) an examination of the associations between the affective and behavioral correlates of psychopathy, such as impulsivity, antisocial traits, empathy, contextualism, and trauma, in both the Lebanese and American samples. Participants (N=139) included 53 males and 86 females, 59 Lebanese, 75 American, and 5 with dual-nationality who completed a survey either on-line or in-person. Results showed group differences: Americans scored higher than
Lebanese on psychopathy, all the sub-scales of the Hare Self-Report Psychopathy Scale, antisocial traits, and trauma and lower than Lebanese on empathy. Only in the total sample, and not within the groups, the Callous Trait was found to be a mediator between trauma and psychopathy. Males in both groups scored higher than females on psychopathy and all the Hare Self-Report Psychopathy Scale subscales. Finally, limitations of this research, implications for the utility and relevance of the construct, and directions for future research are addressed.

*Keywords*: Psychopathy, culture, Arab, Lebanese, antisocial
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Investigating the Construct of Psychopathy in Lebanese and American Adults

Introduction

Psychopathy is a clinical construct that comprises a constellation of affective, interpersonal, and behavioral features such as manipulation, deception, irresponsibility, lack of empathy, remorselessness, and antisocial behaviors. Psychopathy is not a mental disorder as per the Diagnostic and Statistical Manual of Mental Disorders, however, it has been found to be associated with violence, recidivism, risk for criminality, and substance abuse (e.g. Cale & Lilienfeld, 2006; Salekin, Rogers, & Sewell, 1996; Widiger, 2006) and is clearly relevant in the clinical and forensic realms. However, psychopaths can actually live successfully without engaging in blatant illegal or violent behaviors (e.g. Hare, 1993; Lykken, 2006).

The constellation of symptoms and personality characteristics associated with psychopathy has been described in the literature across time and cultures (Cooke, Michie, & Hart, 2006). However, psychopathy has been primarily studied in the West, specifically in North American forensic samples and has only rarely been studied in other parts of the world. One exception is the work of Murphy (1976) who found evidence of psychopathy among the Yoruba tribe in Nigeria and the Inuit of North West Alaska. The Eskimos used “kunlangeta”, which means “his mind knows what to do but he does not do it” (Murphy, 1976, p. 1026), to refer to breaking the rules while being aware of it. Similarly, the Yorubas used “arankan” which refers to a person who is full of malice and always goes his own way without regard for others. The healers of the Yoruba tribe did not believe that this individual had “an illness” that can be cured or changed; however, they believed this individual was more prone to “illness” (Murphy, 1976).

The terms used to describe psychopaths refer to aspects of psychopathy as conceptualized in the West; however, do they capture the full construct? Would the psychopath that the Eskimos are referring to be the same as the psychopath in North America? In Arabic, for example, there is
no equivalent or direct translation of the word psychopath or psychopathy. However, there are words that signify criminal, narcissistic, deceitful, and other characteristics that are associated with psychopathy. It is, therefore, important to raise a question that Murphy (1976) previously raised: If we do not name or label a phenomenon, would it be screened out of our perception and/or would it still be relevant?

The overarching purpose of this dissertation research is to investigate the construct of psychopathy among a Lebanese population and to assess its meaning, relevance, and utility among this population. First, the history of the construct and theories of psychopathy are examined. Second, ways of assessing psychopathy and the psychometric properties of the measures are discussed. Third, the role of culture in influencing psychopathy and relevant multicultural studies are reviewed. Fourth, the dissertation research is described, along with the methodology. Finally, the results are discussed, along with the study’s limitations and implications of the findings.
CHAPTER 1: HISTORY OF THE CONSTRUCT

Early Definitions of the Construct

In 1801, Philippe Pinel, a French psychiatrist, first described the construct of psychopathy and used the term “manie sane délire”, which means “mania without delirium” to describe it (Andrade, 2008). Pinel used this term to describe some of his patients, who were not psychotic and exhibited violence, impulsivity, and lack of remorse. While early discussions of the construct were theoretical, in the late nineteenth century, there was a tendency to move towards a more scientific approach (Maughs, 1941). The construct of psychopathy was fused with other constructs, such as those of psychopathology and ‘moral insanity’, the latter coined by James Prichard. Maughs (1941) stated that attempts have started to distinguish psychopathy from these other constructs by the early 1900s. Koch, a German psychiatrist, and his colleagues, shifted the focus of psychopathic traits away from a specific disorder and towards a personality disorder type. For example, Kraepelin (1915) described two types of psychopaths: One group that exhibits obsessiveness, impulsivity, and sexual deviations, and a second one that displays odd or peculiar attributes. However, despite the fact that many researchers were trying to move away from insanity, many still used ‘morally insane’ and ‘psychopathic’ interchangeably (Maughs, 1941). Maughs (1941) also reported that in 1920, researchers were not only challenging the existing definition of the construct, but some of them were calling for more objective criteria. For example, Benjamin Karpman (1948), a psychiatrist, argued that psychopathy is its own mental disease, and that it should be excluded from psychoses, neuroses, and other mental defects and illnesses. Karpman (1948) argued that there are two types of psychopaths: The primary and the secondary psychopath. The secondary psychopath is the ‘symptomatic’ psychopath; this is the one who presents with symptoms of neurosis, psychosis, or
other mental problems. The primary psychopath, the anethopath, is one who is free from mental illness, and who is not involved in criminal behaviors (Karpman, 1948). Karpman (1949) further divided the primary psychopath into two types: An aggressive predatory type and a passive parasitic type. He focused on the anethopath’s selfishness, lack of feelings for others, and his superficial emotional life.

Similarly, Hervey Cleckley published the first edition of his book, *The Mask of Sanity*, in 1941. Through his work with psychopaths and his presentation of 13 case examples in his book, Cleckley (1955) identified 16 personality traits, which he argued, presented the basic traits of a psychopath. The following are Cleckley's 16 traits: 1) superficial charm and good “intelligence”; 2) absence of delusions and other signs of irrational thinking; 3) absence of “nervousness” or psychoneurotic manifestations; 4) unreliability; 5) untruthfulness and insincerity; 6) lack of remorse or shame; 7) inadequately motivated antisocial behavior; 8) poor judgment and failure to learn by experience; 9) pathologic egocentricity and incapacity for love; 10) general poverty in major affective reactions; 11) specific loss of insight; 12) unresponsiveness in general interpersonal relations; 13) fantastic and uninviting behavior with drink and sometimes without; 14) suicide rarely carried out; 15) sex life impersonal, trivial, and poorly integrated; and 16) failure to follow any life plan.

Cleckley (1955), like Karpman, differentiated between “insanity” and psychopathy, arguing that insanity is a legal term, and many psychopaths do not really present themselves as an insane person would. He asked “do we not, as matter of fact, have to admit that all of us behave at times with something short of rationality and good judgment?” (p. 20), hinting at the dimensional aspect of psychopathy and that criminality is not an essential criterion for the construct. Cleckley (1955) also reported that the problem of psychopaths must be understood by
lawyers, physicians, teachers, and the general public, if the aim is to effectively deal with them. He reported 13 cases of psychopaths he had interviewed and worked with, including 11 men and two women. Through these cases, Cleckley (1955) offered evidence against the psychopath being psychotic, neurotic, mentally defective, a criminal, a delinquent, or a homosexual. Cleckley’s work remains one of the most important works on psychopathy, and has inspired the work of recent researchers, such as Robert Hare, who built his measure of psychopathy based on Cleckley’s 16 characteristics of psychopathy.

The Second Half of the Twentieth Century

Robins (1978) reported that there was a significant discord between researchers on whether personality or behavioral aspects define psychopathy, which depending on the era, she stated, was used interchangeably with sociopathic personality, antisocial personality, or antisocial reaction type. Robins (1978) defined psychopaths as “non-psychotic and non-retarded adults who have multiple difficulties in many life areas, difficulties broadly characterized as a failure to conform to social rules” (p.255). She stated that researchers rely on behavior to infer some psychological constructs, and that it may be more reliable to depend on behaviors until there are better ways and measures to infer psychological constructs independent of behavior. In her book, Deviant Children Grown up: a Sociological and Psychiatric Study of Sociopathic Personality, Robins (1966) conducted a study investigating sociopathic personality, its trajectory from childhood, and whether it’s immutable or treatable. She used records of 526 patients who were referred to a child guidance clinic when they were children and located approximately 90% of them 30 years later. They were predominantly White males from low income families, and she matched 100 individuals as controls. She found that there was a high level of family dysfunction whereby only one third lived with both parents as children. Also, patients who were primarily
sociopathic had been delinquents as juveniles (O’Neal & Robins, 1958), with the median age of onset of sociopathy being 7 years old (Robins, 1966). Findings also suggested that antisocial behavior in fathers, such as alcoholism and a psychopathy diagnosis, was shown to be one of the predictors of persistent antisocial behavior. However, Robins (1966) stated that this finding in particular does not mean that psychopathy is necessarily genetic, given that antisocial personality was found in children whose parents did not have antisocial personality. She added that a parent with antisocial behavior may have been affected by other social problems, such as poverty or divorce, which may have influenced their offspring. Also, judicial and psychiatric remedial action was not shown to be effective in treating psychopaths.

The DSM criteria. In the first edition of the DSM, in 1952, the term Sociopathic Personality Disturbance was used to describe psychopaths (Andrade, 2008). This was due to the inclination of many researchers at the time to acknowledge the influence of social and environmental factors on the development of psychopathy. The criteria used were based on Cleckley’s work, and emphasized the clinical and personality traits of psychopathy rather than the behavioral or criminal aspects of it. However, with the publication of the DSM-III in 1980, and its revision in 1987, there was a dramatic shift to the more behavioral aspects of the construct, mainly influenced by the work of Robins and her colleagues; it was listed under antisocial personality disorder (ASPD). Hare (1996) reported that while this shift may have contributed to the increased reliability in diagnosing antisocial personality, the validity of the construct of psychopathy was jeopardized given that only violations of norms are considered, while personality and interpersonal aspects of the traditional conception of the construct were overlooked. Furthermore, the DSM-IV (American Psychiatric Association, 1994) included the following statement under ASPD: “this pattern has also been referred to as psychopathy,
sociopathy, or dissocial personality disorder” (p.645). Blackburn (1988) criticized the inclusion of antisocial behaviors in the criteria of psychopathy, and argued that the focus should be on the personality features that would lead the psychopath to engage in criminal behaviors, and not the other way around. Also, while McCord and McCord’s (1964) description of psychopathy included personality and behavioral traits, they underlined the importance of guiltlessness and lovelessness as the two main traits of psychopathy, hence underlying the importance of personality traits over behaviors.

Blackburn (1975) found support for McCord and McCord’s view of psychopathy and for Karpman’s primary and secondary psychopaths. He looked at personality profiles of 79 male offenders and found four profile types. While Type 1 and 2 were psychopathic, Types 3 and 4 were not. The first type, Type 1, was undersocialized, impulsive, aggressive, and relatively lacking in anxiety, which corresponds to McCord and McCord’s view of psychopathy, as well as Karpman’s view of the primary psychopath. Type 2 was anxious, depressed, socially avoidant, and more guilt-prone, which is in line with Karpman’s secondary psychopath. Thus, Blackburn (1975) found two types of psychopaths, distinguished from each other by the presence of anxiety and social avoidance tendencies. Type 1 is more extroverted and not neurotic, while Type 2 is neurotic but not extroverted. Furthermore, Blackburn (1982) stated that psychopathy is a meaningful descriptive concept that distinguishes between groups of offenders, but it is not representative of a homogeneous group. Similar to Blackburn (1975), Widom (1978) found, among a sample of 66 women awaiting trial, comparable personality types. Type 1 female offenders were under-socialized, aggressive and lacking in anxiety, while Type 2, also aggressive, scored higher on depression and anxiety than Type 1 female offenders. Type 1 were labeled primary psychopaths, while Type 2 were labeled secondary psychopaths. Type 3 scored
low on psychopathology, but seemed to underreport it, and Type 4 were also free from psychopathology, and were labeled “normal criminals.”

**The role of Hare’s research and the Psychopathy Checklist.** In 1980, Hare developed the Psychopathy Checklist, a 22-item clinical rating scale completed based on an interview and file information (Hare et al., 1990). It was revised in 1985 and later published in 1991 (Hare, 1996). Items are scored on a 3-point scale and the total score can range from 0 to 40 giving an estimate of the extent that the individual matches the prototype of a psychopath as described mainly by the work of Cleckley (Hare, 1996). The Psychopathy Checklist-Revised (PCL-R; Hare, 2003) is the most widely used assessment measure of psychopathy. Two items were dropped from the original scale because of difficulty with scoring and low correlations with the total score (Hare et al., 1990), and the 20-item scale is used in research, clinical, and forensic settings (Hare & Neumann, 2006). Examples of items that are included in the PCL-R are grandiose sense of self-worth, failure to accept responsibility for own actions, and criminal versatility.

Early factor analyses of the PCL have resulted in a two-factor structure (Hare et al., 1990; Harpur, Hakstian, & Hare, 1988). Factor 1 comprises the interpersonal and affective features of psychopathy (e.g. remorselessness, grandiosity, callousness), and Factor 2 comprises the antisocial behaviors (e.g. impulsivity, juvenile delinquency) (Reidy, Zeichner, Miller, & Martinez, 2007). Recent research however, challenged the two-factor structure of the PCL-R. Cooke and Michie (2001) proposed a three-factor model and Hare proposed a four-facet model that included Interpersonal, Affective, Lifestyle, and Antisocial components, and some evidence shows that Hare’s four-facet model has good external validity (Hare & Neumann, 2006).
Although the PCL-R is considered the gold standard in assessing psychopathy, its completion is time-consuming, and requires the availability of collateral data, which are not always accessible (Uzieblo, Verschuere, & Crombez, 2007). Also, it has been criticized by Skeem and Cook (2010a, 2010b) who raised the issue that many researchers in the field have been equating the PCL-R with the concept of psychopathy itself. In addition, Skeem and Cook (2010a) warned about the over-emphasis on the criminal aspects of psychopathy, and they underlined the importance of examining whether criminal behavior is an element of psychopathy or just a mere downstream correlate of it. More on the PCL-R and other assessment measures of psychopathy will be discussed in chapter 3.

In sum, the second half of the twentieth century saw more empirical work in the field of psychopathy and the development of assessment measures, mainly within forensic samples. However, debates about the core features of psychopathy, i.e., the role of antisocial behaviors versus personality traits, remain. In the next section, theories on the origin and development of psychopathy are discussed.
CHAPTER 2: THEORIES OF PSYCHOPATHY

There have been many different theories about the development and etiology of psychopathy. The following section includes different perspectives on understanding psychopaths, including: learning perspectives, studies on fear and anxiety, neurological, genetic, developmental, and cognitive perspectives.

Learning and the Role of Anxiety, Fear, and Arousal

In his work on psychopathy, Cleckley proposed an inverse relationship between psychopathy and anxiety. He suggested that “it is highly typical for [psychopaths] not only to escape the abnormal anxiety and tension…but also to show a relative immunity from such anxiety and worry as might be judged normal or appropriate” (Cleckley, 1955, p. 206). Lykken expanded on Cleckley’s theory reporting that whereas primary psychopaths would experience low levels of anxiousness, if any, secondary psychopaths would experience high levels of anxiousness (Widiger, 2006). Although much research supports the use of anxiety as an index to distinguish primary from secondary psychopathy (e.g. Lilienfeld & Penna, 2001; Newman, MacCoon, Vaughn, & Sadeh, 2005; Uzieblo, Verschuere, & Crombez, 2007), some studies have not supported this view. Schmitt and Neumann (1999), for example, found no association between different measures of anxiety and the PCL-R, including Factor 2, in a group of incarcerated men. Lykken, however, did not distinguish between anxiety and fear, and called his theory “low-fear hypothesis”. Lykken tested his theory through 1) a questionnaire, the Activity Preference Questionnaire (APQ), designed to assess the effects of fear on one’s behavior, 2) electrodermal hyperactivity studies, and 3) passive avoidance studies. The electrodermal hyperactivity findings have been the best replicated so far (e.g. Fowles, 1993; Hare, 1978; as cited in Fowles & Dindo, 2006). The APQ findings were not replicated, mainly because the
items included in the measure did not differentiate between anxiety and fear (Fowles & Dindo, 2006). The passive avoidance studies have received reasonable support (e.g. Newman, Widom, & Nathan, 1985). In his studies, Lykken originally required the participants to learn a ‘mental maze’, and at different points during the task, the participants had to choose one of four responses: The correct response would lead to progression through the maze, however, one of the four responses led to an electric shock. The main finding was that controls learned to passively avoid the response leading to shock, but the psychopaths made this choice more often, demonstrating poor avoidance of punishment. In their replication, Newman, Widom, and Nathan (1985) found that psychopathic and extroverted participants made passive avoidance responses. Particularly, these participants lacked the learning to inhibit goal-directed behavior in the presence of a cue for reward. The authors noted that these findings may suggest a weak behavioral inhibition system, which is discussed next. It is worth mentioning that some studies failed to replicate these findings (e.g. Scerbo, Raine, O’Brien, Chan, Rhee, & Smiley, 1990).

**Gray’s theory (BIS/BAS).** Jeffrey Gray (1978) proposed that individuals have a behavioral activation system called BAS, which activates behavior when there is a cue that signals response-contingent rewards or safety. On the other hand, the behavioral inhibition system (BIS) inhibits the BAS-activated behavior when there is a cue for response-contingent punishment (also called passive avoidance) in an approach-avoidance situation, or non-reward in an extinction paradigm (Fowles & Dindo, 2006). Therefore, an individual with a weak BIS would give up responding slower than a control BIS in an extinction situation, and would be approach-dominant in conflict situations. Psychopaths, therefore, should have a weak BIS coupled with a normal, or even strong BAS. Gray suggested that psychopaths look for rewards
without fearing punishment and that their antisocial behaviors may indicate insensitivity to punishment (Fowles & Dindo, 2006).

**Theories on the difference between fear and anxiety.** It has been noted that anxiety is more cognitive in nature, while fear is an activation of the flight-or-fight system (Fowles & Dindo, 2006). There have been studies that support the distinction between fear and anxiety. For example, Patrick, Bradley, and Lang (1993) reported that psychopaths do not show normal potentiation of startle with negative pictures, but do with positive pictures. These findings have been replicated (e.g. Levenston, Patrick, Bradley, & Lang, 2000; Vanman, Mejia, Dawson, Shell, & Raine, 2003) and support the selective fear deficit hypothesis, since psychopaths showed normal potentiation with positive pictures; this further points out to the role of the amygdala in psychopathy because of the amygdala’s association with fear responses. In addition, some studies have shown different localizations in brain structures for fear and anxiety responses; for example, the bed nucleus of the stria terminalis has been shown to be involved in anxiety startle rather than fear startle. However, the central nucleus of the amygdala is involved in fear potentiated startle (e.g. Lang, Davis, & Ohman 2000). Furthermore, it has been observed that a deficit in startle potentiation is related to Factor 1 of the PCL-R, which is the affective-interpersonal factor (Patrick et al., 1993); this is consistent with the idea that this core feature of psychopathy is related to low fear. However, fear-potentiation startle is unrelated to Factor 2 of the PCL-R (the impulsive antisocial behaviors); and as previously mentioned, anxiety has been found to be related to Factor 2. These findings offer more support to the distinction between fear and anxiety.

Also, Eysenck (1996) suggested that personality mediates between genetic and environmental factors on one hand, and the criminal and psychopathic behavior on the other. He
proposed that learning trajectories are involved in the failure of some individuals to develop a conscience; either because wrong experiences are reinforced by society or because a permissive society fails to adequately condition the conscience, and it ends up being inadequate or missing. Eysenck (1996) stated that psychopaths tend to be high on psychoticism and extroversion, and secondary psychopaths are also high on neuroticism, but as a group, psychopaths and criminals tend to be weak on proneness to conditioning. This makes them less able to learn to develop a conscience, which makes them more likely to be psychopathic.

**Neurological Perspectives and Brain-Imaging Studies**

There is some empirical evidence supporting a dysfunction in the amygdala in psychopaths (e.g. Blair, Morris, Faith, Perett, & Dolan, 1999; Patrick, 1994). The findings are consistent with the literature supporting the association of the amygdala with instrumental aggression, aversive conditioning, and fear (Vien & Beech, 2006). Kiehl et al. (2001) found that criminal psychopaths had less affect-related activity in their amygdala when compared to criminals who were not psychopaths and non-criminal controls. Also, some findings support a deficit in psychopaths’ orbitofrontal cortex (OFC) (Blair, 2004); however, evidence is more supportive of the amygdala deficit while studies about the OFC seem inconclusive (Vien & Beech, 2006). It seems that psychopaths also fail to demonstrate appropriate neural differentiation between abstract and concrete stimuli, which according to Kiehl, Smith, Mendrek, Forster, Hare, and Liddle (2004) suggests some dysfunction in the right hemisphere, specifically in both language and emotional processing. In line with this, Intrator et al. (1997) found that psychopaths showed greater activation for emotional stimuli as measured by cerebral blood flow, which suggests that they require greater resources in order to process emotions. Hare and Jutai (1988) also found problems with linguistic processing in psychopaths; however, their findings
have not been replicated (Hiatt, Lorenz, & Newman, 2004). Blair (2003) also suggested that it was not clear whether the dysfunction in the right hemisphere leads psychopaths to have these neurological characteristics, or is it that their lifestyle may exacerbate these neurological impairments. Furthermore, there is evidence suggesting a poor inter-hemispheric integration in the psychopath’s brain. Raine et al. (2003) found that psychopaths and individuals diagnosed with antisocial personality disorder show impairments in their corpus collosum, whereby they had an increase in white matter and length compared to controls. Williamson, Harpur, and Hare (1991) found that non-psychopaths made faster lexical decisions and demonstrated larger ERPs to affective than to neutral words as compared to psychopaths; they suggested that there may be ineffective intra and inter-hemispheric distribution of cognitive and affective resources in psychopaths. These differences in linguistic and emotional processing may be central to psychopaths’ behaviors; however, neurological research in this field is still nascent and results are inconclusive.

Genetic Perspectives

In a recent review of behavioral genetics in antisocial spectrum disorders, Gunter, Vaughn, and Philibert (2010) reported that family, twin, and adoption studies have all pointed to genetic contributions to antisocial behaviors. Genetic factors seem to account for approximately half the variance in both twin and adoption studies that look into antisocial behaviors (Gunter et al., 2010). Waldman and Rhee (2006) conducted a meta-analysis of 51 twin and adoption studies and found that different variables, such as how antisocial behaviors and psychopathy were operationalized, assessment methods, age of the participants, as well as the zygosity determination methods accounted for the differences in genetic and environmental influences on antisocial behavior. When they investigated psychopathy alone, without the antisocial behaviors,
Waldman and Rhee (2006) found that genetic factors explained 49% of the variance in psychopathy and psychopathic traits, while the remaining 51% of the variance was due to non-shared environmental factors. In addition, in a recent study by Beaver, Rowland, Schwartz, and Nedelec (2011), having a criminal biological father increased the likelihood that a male adoptee scores high on psychopathic traits, in a sample of adoptees from the National Longitudinal Study of Adolescent Health. However, having a criminal mother did not have an effect. These findings were only seen in male adoptees and not females.

**Developmental Perspectives**

While the following studies focus on antisocial behaviors rather than psychopathy, they are important given that psychopathy has been conceptualized to include antisocial behaviors. Moffitt (1993) distinguished between adolescence-limited and life-course persistent antisocial behavior. Children who start to exhibit defiant and oppositional behaviors since childhood are more likely to exhibit these behaviors in more severe form in late childhood and adolescence; however, the adolescence-onset group does not show these behaviors in childhood, and their antisocial behaviors are probably an exaggerated form of adolescence rebelliousness. Moffitt also proposed different trajectories for them; children in the child-onset group may have been difficult or vulnerable children (impulsive, difficult temperament), who grew up in an inadequate rearing environment (neglecting parents). This transaction between the child and the environment leads to a poor socialization process and antisocial behaviors may ensue. However, those who are in the adolescence-onset group engage in these behaviors as a form of rebellion and in an attempt to obtain a sense of autonomy from their caregivers. Their antisocial behaviors are less likely to persist in adulthood. This distinction between the two types has been consistent in research (e.g. Moffitt & Caspi, 2001).
Patterson, DeGarmo, and Knutson (2000) have also investigated the interaction of the child’s temperament with the parent’s rearing style. The researchers have reported that coercive parent-child interactions influence the development of antisocial behaviors. Patterson et al. (2000) noted that a difficult child who interacts with an insufficiently responsive parent results in a distressed child, who by age two, has escalated his/her antisocial behavior and may exhibit social skills that characterize a child who is diagnosed with ADHD or conduct disorder.

In another relevant longitudinal research, Kochanska (1997, 2002) found that inhibitory/effortful control at a toddler age directly impacted development of a conscience at a preschool and early school age. However, a fearful temperament interacted with parenting style to predict conscience development at age 4 and 5. For fearful but not fearless children, internalized conscience was predicted by a mother’s gentle disciplinary methods. However, for fearless but not fearful children, internalized conscience was predicted by positive and reciprocal mother-child relationship. It seems that the combination of lack of fear and lack of positive relationship with a caregiver results in failure of the child to internalize conscience, and then possibly, an antisocial behavior trajectory. The failure of the child to develop a conscience may lead to remorselessness, which is conceptualized as a key affective aspect of psychopathy.

Kernberg (1996) also proposed that psychopaths have a history of trauma or a type of disturbance in their early experiences and growing up they protect themselves in a dangerous world through grandiosity and devaluation of the other person. Their superego becomes dependent on external cues and self-interest in order to regulate their interpersonal behaviors (Kernberg, 1996). Studies of abuse and neglect in early childhood have shown that children who are maltreated are at increased risk of developing antisocial personality disorder. For example, Widom (1998) found that both men and women who were abused or neglected as children were
more likely to develop antisocial personality disorder. In another study, Luntz and Widom (1996) reported that individuals with histories of childhood abuse and neglect were at increased risk for psychopathy by adulthood, compared to matched controls.

**Cognitive Perspectives**

**Gough’s Role-Taking Theory.** Researchers have proposed some type of deficiency in role-taking ability that may explain the behavior of psychopaths. Specifically, the theory is that psychopaths behave the way they do because they are not able to foresee the consequences of their actions and are, therefore, unable to judge the effect of their behavior from another person’s point of view. Just like Cleckley who saw the psychopath as socially insensitive, Gough (1948) proposed that this is primarily a cognitive rather than an affective/emotional deficit. There are a few studies that tested this theory directly, and found support (e.g. Reed & Cuadra, 1957).

Widom (1976a) compared interpersonal behaviors in primary and secondary psychopaths to a group of matched controls. She found that while psychopaths did not necessarily act more selfishly or irresponsibly than controls, especially when stakes were high, they were less accurate in predicting the other person’s behavior, especially secondary psychopaths. In another paper, Widom (1976b) reported that psychopaths made few distinctions between their own view of situations and those of others; also, they tended to view situations as more dull rather than exciting, and did not acknowledge that others view situations differently.

**Beck’s theory: Cognitive distortions.** Beck’s view is that the psychopath views himself as a strong, independent loner, and others as exploitative and deserving to be exploited, or as weak and deserving to be preyed upon (Beck, Freeman, & Davis, 2006). According to this view, the psychopaths’ core beliefs include looking out for oneself, avoiding victimization, and a sense of entitlement especially to break rules. Their worldview is personal rather than interpersonal,
and they cannot hold another person’s point of view at the same time as their own (Beck, Freeman, & Davis, 2006). These cognitive biases have been supported (e.g. Widom, 1976b). Also, Beck et al. (2006) reported that the typical affect of a psychopath would be anger, given the perception that others are hostile. Serin (1991) found that violent psychopathic inmates reported more anger and made more attributions of hostile intent than their non-psychopathic counterparts in response to vignettes about different levels of provocative situations.

**Blackburn: Interpersonal style.** Blackburn (1998) proposed a cognitive-interpersonal model of psychopathy that argued that a coercive style of relating to others is central to the construct. This model was supported in a group of forensic psychiatric patients, who were asked about social expectations, including if others avoid them, criticize them, or behave with hostility towards them. Those who were high on hostility and dominance, including psychopaths, expected others to also be hostile-dominant (Blackburn, 1998). Serin (1991)’s findings support the model; also, Kosson, Steuerwald, Forth, and Kirkhart (1997) found that participants who scored high on the PCL-Screening Version rated others and themselves higher on dominance and hostility.

In sum, there are different theories on psychopathy. Learning theories highlight the interplay between fear, anxiety, and conditioning. Remorselessness may be influenced by learning trajectories, whereby the psychopath may have failed to be conditioned to develop a conscience. Also, psychopaths have been found to be more reward-driven and less sensitive to punishment. Neuropsychological evidence suggests a possible dysfunction in the amygdala in psychopaths and differences in emotional and linguistic processing in the brain. Genetic studies have found that antisocial behaviors may have a genetic component, while cognitive theories suggest cognitive biases, especially with regard to viewing others as hostile, and problems with
role-taking ability. Psychopaths have been found to be less accurate in predicting others’ behaviors and may not be able to differentiate their own perceptions of situations from others’ perception.

While all these theories have their advantages and disadvantages, it is important to note that the interaction of multiple factors most likely leads to psychopathy. Biological tendencies (such as temperament) could interact with learning experiences (less sensitivity to punishment) and other environmental and social factors (poor parenting), which may lead to psychopathy.
CHAPTER 3: ASSESSMENT OF PSYCHOPATHY

The Psychopathy Checklist-Revised (PCL-R; Hare, 2003) is the most widely used assessment measure of psychopathy. The PCL-R, a 20-item scale, uses a semi-structured interview as well as collateral data, and is used in research, clinical, and forensic settings (Hare & Neumann, 2006). The 20 items included in the PCL-R are: 1) glibness/superficial charm; 2) grandiose sense of self-worth; 3) need for stimulation/proneness to boredom; 4) pathological boredom; 5) pathological lying; 6) conning/manipulative; 7) shallow affect; 8) callous/lack of empathy; 9) parasitic lifestyle; 10) poor behavioral controls; 11) promiscuous sexual behavior; 12) early behavioral problems; 13) lack of realistic, long-term goals; 14) impulsivity; 15) irresponsibility; 16) failure to accept responsibility for own actions; 17) many short-term marital relationships; 18) juvenile delinquent; 19) revocation of conditional release; and 20) criminal versatility.

As mentioned earlier in chapter 1, early studies supported a two-factor structure of the PCL-R; also, PCL-R total scores were found to have some predictive utility (Skeem, Poythress, Edens, Lilienfeld, & Cale, 2003). Factor 1 comprises the interpersonal and affective features of psychopathy (e.g. remorselessness, grandiosity, callousness), and Factor 2 comprises the antisocial behaviors (e.g. impulsivity, juvenile delinquency) (Reidy, Zeichner, Miller, & Martinez, 2007). However, Cooke and Michie (2001), for example, found that the PCL-R’s two-factor structure did not fit within their Scottish sample, and instead a three factor-structure, composed of Arrogant and Deceitful Interpersonal Style, Deficient Affective Experience, and Impulsive and Irresponsible Behavior, fit better. Also, Hare and Neumann (2006) reported more recent support for a four-factor model of psychopathy comprised of an Interpersonal factor (glib/superficial; grandiose; pathological lying; conning/manipulative), an Affective factor (lack
remorse or guilt; shallow affect; callous/lack of empathy; irresponsible), a Lifestyle factor (stimulation seeking; impulsive; irresponsible; parasitic; lack realistic goals), and an Antisocial factor (poor behavioral control; early behavioral problems; juvenile delinquency; criminal behaviors and versatility). For example, Neumann, Hare, and Newman (2007) found support for the four-factor structure in a large sample of male and female offenders, as well as a forensic psychiatric sample. Figure 1 is taken from Hare and Neumann (2006) and illustrates the items loading on the four factors.

The PCL-R is time-consuming and requires collateral data; also, it was initially developed and normed with forensic samples. Therefore, other efficient and practical assessment tools were developed to be used with non-incarcerated populations. For example, the Psychopathic Personality Inventory (PPI) was initially developed by Lilienfeld in 1991 as a time-efficient assessment tool to detect psychopathic traits among clinical and non-clinical populations (Lilienfeld & Andrews, 1996; Lilienfeld & Widows, 2005). The PPI-R, which is the revised version, was introduced in 2005. The PPI-R was normed on a community sample of males and females, 18 to 86 years old, as well as male inmates, 18 to 57 years old (Lilienfeld & Widows, 2005). The PPI-R is a self-report measure of psychopathy that consists of 154 items and 8 content scales. The items are rated on a 4-point-Likert-type scale, ranging from 1 “False” to 4 “True”. An example of an item is: “To be honest, I try not to help people unless there’s something in it for me”. Table 1 includes the content scales, their description, and the factors loadings.

Seven of the eight content scales load on two factors, while Coldheartedness does not load highly on either factors, and is left as a factor by itself (Lilienfeld & Widows, 2005). There is evidence that the PPI-I and the PPI-II are not correlated and considered to be orthogonal
factors (e.g. Edens, Poythress, Lilienfeld, Patrick, & Test, 2008; Lilienfeld & Widows, 2005; Marcus, Edens, & Fulton, 2012).

Benning, Patrick, Hicks, Blonigen, and Krueger (2003) found a two-factor structure to the PPI that is similar to that of the PCL-R. The PPI-I factor (Fearless Dominance) has been found to correlate with Factor 1 of the PCL-R and the PPI-II (Self-Centered Impulsivity) with Factor 2 of the PCL-R in a sample of female inmates (Berardino, Meloy, Sherman, & Jacobs, 2005), and in a group of inmates and drug treatment offenders (Skeem & Lilienfeld, 2004; as cited in Lilienfeld & Widows, 2005). In addition, Factors 1 and 2 of these measures were correlated with indices that measure primary and secondary psychopathy respectively (e.g. Benning et al. 2003; Skeem, Kerr, Johansson, Andershed, & Eno Louden, 2007). Specifically, Benning et al. (2003) found that the PCL-R Factor 2 and PPI-II were positively correlated to measures of antisocial behaviors, impulsiveness, and substance abuse. PCL-R Factor 1 and PPI-I were positively related to social potency, but negatively related to harm avoidance and stress reaction. Therefore, the Factor 2 of PCL-R and PPI-II were more related to features of secondary psychopathy, while Factor 1 of the PCL-R and PPI-I were more related to features of primary psychopathy.

Test-retest reliability coefficients of the PPI-R have been reported as ranging from .82 to .95 (Lilienfeld & Widows, 2005). The original PPI has shown convergent and discriminant validity with self-report measures of antisocial personality disorder and psychopathy (e.g. MMPI-2 Antisocial Practices scale; $r = .58$, and the CPI Socialization scale; $r = -.59$) (Lilienfeld & Widows, 2005). A meta-analysis conducted by Marcus, Fulton, and Edens (2012) found that both factors are weakly correlated, and sometimes not correlated in some samples that used offenders. Also, Fearless Dominance (FD; PPI-I) was moderately correlated with PCL-R Factor
1 and LSRP primary psychopathy, while Self-Centered Impulsivity (ScI; PPI-II) was highly correlated with Factor 2 of the PCL-R and LSRP. Also, PPI-II was associated with antisocial personality disorder measures, but not PPI-I (Marcus, Fulton, & Edens, 2012). In general, PPI-I did not seem to reflect maladaptive traits. So, high levels of PPI-I did not seem to reflect pathology; however, high levels of PPI-II seem problematic. Another meta-analysis conducted by Miller and Lynam (2012) also highlighted the problem with PPI–I (or Fearless Dominance) of the PPI-R. The authors stated that while there is evidence to support the validity of the PPI-II factor, it remains unclear what the PPI-I factor is measuring. It appears that PPI-I does not correlate with measures that test constructs typically found to correlate with psychopathy such as substance use and antisocial behavior. However, PPI-I seems to correlate with measures of psychological distress, internalizing disorders, and positive emotionality (Miller & Lynam, 2012).

Other self-report measures include the Levenson Primary and Secondary Psychopathy Scale (LPSP; Levenson, Kiehl, & Fitzpatrick, 1995), which was developed to measure psychopathy in non-institutionalized individuals. It contains 26 items that are scored on a 4-point Likert-type scale (Lilienfeld & Fowler, 2006). The LPSP was found to have a factor structure that mirrors the PCL; however, its construct validity has been criticized as both its factors were correlated. Also, the factor that was intended to measure primary psychopathy was correlated with anxiety and antisocial behaviors, which should be correlated with secondary psychopathy characteristics instead (Lilienfeld & Fowler, 2006). For example, Lilienfeld, Skeem, and Poythress (2004) found that LPSP Primary scale was correlated with factor 2 of the PPI (when it is expected to correlate with factor 1), and it was also correlated with a measure of antisocial personality disorder (as cited in Lilienfeld & Fowler, 2006).
Hare and his colleagues also developed the Self-Report Psychopathy Scale (SRP) in 1985, which has two factors that are supposed to mirror the PCL factors (Neal & Selbom, 2012). Previous versions of the SRP, now in its third revision, had poor internal consistency reliabilities and inability to capture the factor structure as conceptualized in the literature (Williams, Paulhus, & Hare, 2007). Neal and Selbom (2012) reported that the latest version, referred to as the Hare Self-Report Psychopathy Scale (HSRP; Paulhus, Neumann, & Hare, in press) has 64 items rated on a 5-point Likert-type scale. The HSRP comprises four subscales and each one consists of 16 items: Interpersonal Manipulation, Callous Affect, Erratic Lifestyle, and Criminal Tendencies. These four factors mirror the four-factor structure of the PCL-R. Neal and Selbom (2012) reported 1) good criterion-related validity, as the HSRP was significantly correlated with the Inventory of Callous-Unemotional Traits ($r = .63$) and the Antisocial Process Screening Device ($r = .53$); 2) good convergent validity, as the HSRP total score was significantly correlated with scales measuring constructs such as impulsiveness, narcissism, excitement seeking, and externalizing behavior; and 3) good internal consistency coefficients ranging from .75 to .82 for the subscales and .92 for the total score. There is evidence in Neal and Selbom’s 2012 study that the HSRP may not tap into the boldness aspect of psychopathy (stress immunity, fearlessness, and dominance), given that the measure did not correlate with measures of fear or assertiveness. Patrick, Fowles, and Krueger (2009) proposed that psychopathy has three main elements--meanness, boldness and disinhibition -- that appear in the conceptualization of the construct. It appears that the HSRP is not capturing the boldness aspect.

In sum, because the PCL-R is not always convenient or practical to use, three major self-report assessment measures have been developed to assess psychopathy. However, each of these measures has limitations. The PPI’s validity especially for the Fearless Dominance factor
(PPI-I) has been questioned. The LPSP’s primary psychopathy scale seems to lack discriminant validity. The HSRP seems to have good validity and reliability so far; however, the latest version and its manual are not yet published and more studies are needed to further assess its psychometric properties.

Lilienfeld and Fowler (2006) discussed advantages and disadvantages of using self-report measures of psychopathy. Some advantages of self-report measures of psychopathy they included were: 1) they are brief and easy to administer; 2) they require no training; and 3) they could assess response style by including validity scales in the measure itself. However, Lilienfeld and Fowler (2006) also noted disadvantages to these measures: First, lack of insight could influence the accuracy of the responses, given that it has been argued that psychopaths may be unable to perceive themselves as others perceive them. Second, to ask individuals to report on an emotion or the lack thereof when they have never experienced this emotion could be problematic; Lilienfeld and Fowler called this a semantic aphasia-related problem. Third, psychopaths may be more prone to lying, so their responses on self-report may be dishonest. However, Lilienfeld and Fowler (2006) noted that self-report measures of psychopathy have been negatively correlated with measures of positive impression management and social desirability, citing work by Hare (1982) and Ray and Ray (1982). Also, Edens, Buffington, and Tomicic (2000) found, among 143 college students, that PPI scores were not related to malingering success (as cited in Lilienfeld & Fowler, 2006). Fourth, the main disadvantage is the low correlation between the different measures that aim to assess the same construct (psychopathy and its correlates), and the fact that the measures of psychopathy appear to be non-specific measures of behavioral deviance, including antisocial and criminal behaviors, rather than fully representative of the construct with its affective and interpersonal aspects. The latter
disadvantage raises an important issue with regard to the role of antisocial behaviors in psychopathy.

**The Role of Antisocial Behaviors**

Many confuse psychopathy with antisocial personality disorder (ASPD) or use the terms interchangeably, e.g., the DSM-IV equates psychopathy with ASPD (Hare & Neumann, 2006). To be diagnosed with ASPD, since the age of 15, a person needs to exhibit a pattern of behaviors, such as disregard for others, lack of remorse, deceitfulness, impulsivity, and antisocial behavior (American Psychological Association, 1994), which are all characteristics of psychopathy. However, ASPD is marked mainly by behavioral features, while psychopathy is indicated by both behavioral and personality features (Cale & Lilienfeld, 2002). Also, empirical evidence has supported a distinction between the two constructs since in criminal populations the base rate of psychopathy is 15-25% compared to 40 to 80% for ASPD (Cale & Lilienfeld, 2002). There have been debates on whether antisocial traits are part of the core psychopathic features or whether they are a consequence of psychopathy. Cooke, Michie, and Hart (2006) presented evidence suggesting that antisocial behaviors are a consequence of other affective and interpersonal symptoms that are more diagnostic of the construct. For example, using item response theory, they found that the PCL items have different slopes, which means that they discriminate differently between low or high levels of the trait, i.e. between psychopathic and non-psychopathic individuals. Therefore, items with steeper slopes would better discriminate psychopathic versus non-psychopathic individuals, and would be considered more useful and relevant. Promiscuous sexual behaviors, impulsive acts, and criminal versatile behaviors have been found to have shallow slopes, meaning they do not discriminate well between psychopathic and non-psychopathic individuals; callousness and lack of empathy, lack of remorse and
grandiosity seem to have steeper slopes. In addition, Cooke, Michie, and Hart (2006) reported that symptoms related to the Impulsive and Irresponsible factor seem to be most diagnostic at the lowest levels of psychopathy, while those related to the Deficient Affective Experience factor seems to be diagnostic at moderate levels, and those related to the Arrogant and Deceitful factor seem to be the most diagnostic at the highest levels of psychopathy. This suggests that affective and lifestyle symptoms may be more meaningful in diagnosing psychopathy than criminal and antisocial ones. Therefore, individuals who score high on psychopathy tend to score high on affective and interpersonal items, and consequently, may also score high on antisocial items, but those who score high on poor impulse control and antisocial items do not necessarily score high on interpersonal and affective items.

On the other hand, researchers, such as Neumann, Schmitt, Carter, Embley, and Hare (2012), have argued that antisociality seems to be central to psychopathy. And while the issue of the role of antisocial behaviors at the present time remains inconclusive, it is important to consider the effect of the available assessment tools. Measures of criminal and antisocial behaviors may be more reliable, especially with the availability of arrest and criminal records. However, findings based on measures of affective and personality characteristics may be more variable and less reliable, given the different tools used in different studies in addition to the different operational definitions of these affective and personality characteristics.
CHAPTER 4: PSYCHOPATHY AND CULTURE

Most psychopathy research has been conducted using North American forensic samples and most of the existing cross-cultural research compares North American to European samples using the PCL-R as an assessment tool (Sullivan & Kosson, 2006). In order to ensure the cultural relevance and the cultural equivalence of the measures used (in most cases, the PCL-R), Cooke, Michie, Hart, and Clark (2005) recommended factor analysis and assessing construct validity when the PCL-R is used in other cultures. Existing cross-cultural studies of the PCL-R have supported the two-factor structure of the measure, with a few exceptions (e.g. Cooke & Michie, 2001). For example, Cooke and Michie (2001) found that the PCL-R’s two-factor structure did not fit within a Scottish sample, and instead a three-factor structure, consisting of Arrogant and Deceitful Interpersonal Style, Deficient Affective Experience, and Impulsive and Irresponsible Behavior, fit better. Sullivan and Kosson (2006) concluded that most studies support the cross-cultural construct validity of psychopathy whereby the relationship between psychopathy and psychiatric disorders (such as ASPD), self-report personality measures (such as those measuring aggression and sensation-seeking), criminal behavior, and prediction of violence and recidivism in international samples mirror the relationships reported in American samples (e.g. Hobson & Shine, 1998; Pham, 1998). Sullivan and Kosson (2006) noted that although the two-factor structure has been mostly supported and that internal consistency coefficients were overall good, the PCL Factor 2 typically accounted for more variance in the total PCL scores of the international samples than Factor 1 when compared to the North American samples.

To investigate the international prevalence of psychopathy, Sullivan and Kosson (2006) analyzed data from 19 samples of forensic offenders, prisoners, and psychiatric patients who were referred for evaluation in 10 different countries other than the United States. The authors
found that the average mean PCL-R total scores were significantly lower in their international than in the North American samples. Similarly, Cooke et al. (2005) found that when comparing European forensic psychiatric patients and male offenders from six different countries to their American counterparts, the PCL-R total, factor and item scores were lower in the European sample. This may suggest problems with the measures used, or a cultural influence on psychopathy.

Researchers have proposed different theories to explain the cross-cultural differences in psychopathy. First, it seems that affective characteristics such as lack of empathy, shallow affect, and callousness, which are associated with primary psychopathy, appear to be similar across cultures (Wernke & Huss, 2008). For example, Bodholdt, Richards, and Gacono (2000) found that items of Factor 1 of the PCL were more discriminating than items from Factor 2 in a multicultural sample. However, the behavioral aspects of psychopathy are more likely to vary with societal factors. Cooke et al. (2005) found that most differences in the PCL-R scores, using the three-factor model, were among the interpersonal and behavioral items, whereas the affective items showed the least difference. The authors explained that the affective items are the least culturally sensitive, and might hold the “pan-cultural core of psychopathy”.

Second, Cooke and his colleagues have proposed that enculturation and socialization play a pivotal factor in the expression of psychopathy. For example, Cooke and Michie (1999) reported that one of the means of understanding cross-cultural pathology is the concept of individualism-collectivism (I-C). Collectivist societies are mainly characterized by interdependence, concern for others, and a sense of harmony. Drawing on the work of Hui and Triandis (1986), Cooke and Michie suggested that other characteristics of collectivist societies include concern by the individuals with the effect of their actions on the collective, sharing
benefits and resources, and accepting opinions of others. Therefore, the goal of the individual is
less important than that of the group; the individual wants to gain the approval of the group, and
would feel ashamed if she/he would not be able to obtain it (Hui & Triandis, 1986). These
collectivist societies promote conformity and compliance. However, individualistic societies
promote independence and competitiveness, and an individualist answers to him/herself.
Regarding psychopathy, individualism might promote manipulation of others, deception, and
even criminal behavior (Cooke et al., 2005), while a collectivist person’s concern for others
might hinder any selfish act that opposes the desires of the group. Cooke et al. (2005) also
presented empirical evidence comparing epidemiological data for Taiwan and the United States
where the prevalence of antisocial personality disorder was 1.49% to 5.66% in the American
sample vs. 0.1% to 0.22% in the Taiwanese sample. According to these researchers, the way
antisocial personality disorder manifests itself in an individualistic culture might be different. It
could be assumed that the expression of behaviors in collectivist people might take more
conforming and less threatening routes so individuals can maintain harmony. Kim, Kam,
Sharkey, and Singelis (2008) found among students from Hong Kong, Hawaii, and California
that higher levels of interdependence –defined as seeing the self connected to others- were
associated with a higher tendency to use deception, while higher levels of independence –
defined as seeing the self separate from others- were associated with lower use of deception. In
interdependent and collectivist societies, it seems that people tend to deceive out of concern for
others (Example: A female telling her co-worker that her shirt is nice even when she thinks it is
actually not); however, in the independent societies, people deceive more to benefit the self
(Example: Someone saying “I did not go to her party because I was sick”, when they were not
sick). Therefore, it seems that deceptive communication is more tolerated in interdependent
societies since people often use it to maintain good relationships with the group. Hence, one could argue that interdependent people who deceive would not feel guilty since they do it knowing that it is for the good of others (Kim et al., 2008). Considering these findings with regard to the behavior of a psychopath in a collectivist society would be interesting: Would the psychopath still be lying for the benefit of the group in a collectivist society?

Another relevant finding is the nature of the emotional themes in individualist versus collectivist cultures. Kitayama, Mesquita, and Karasawa (2006) asked Japanese and American students to rate the intensity of 27 emotions after “an emotional episode” they experienced on 14 consecutive days. These authors found that the Japanese participants showed higher engaging emotions (such as friendly feelings) than their American counterparts, who showed a higher tendency to experience disengaging feelings (such as pride). Also, both positive disengaging feelings (pride) and positive engaging feelings (friendly feelings) were found to promote well-being in individualist and collectivist cultures, respectively. Therefore, one cannot understand emotional experiences of psychopaths (or the lack of) without considering how culture influences these experiences and the motivations behind them.

On a related note, and using data from 73 countries, Schwartz (2006) conducted several studies on value orientations across cultures and found that the Western/European culture emphasizes intellectual autonomy, egalitarianism, and harmony. Intellectual autonomy involves encouraging individuals to pursue their own ideas and goals irrespective of the collective; egalitarianism involves people appreciating each other as moral equals, who share basic rights and interests, while harmony involves fitting into the world as it is rather than trying to change it or exploit it. However, Schwartz (2006) found that cultural groups from the Middle East and African samples seem to mostly value embeddedness, with low affective and intellectual
autonomy. Embeddedness involves seeing the individual as embedded in the collective, and therefore appreciating social relationships and shared goals. Affective autonomy involves the individual seeking positive feelings affectively, such as excitement and pleasure. Schwartz (2006) explained further that cultures that emphasize embeddedness and hierarchy (unequal distribution of power and roles) value unconditional respect for family and religion, and show low tolerance for behaviors that threaten traditions and any practices that differ from their own. Also, it seems that these groups -high on embeddedness and hierarchy- do not readily accept immigrants and people with criminal records (Schwartz, 2006). In light of Schwartz’s findings, it is interesting to investigate how psychopathy manifests itself in a society that does not tolerate criminal, odd, or selfish behavior.

It is important to note that the constructs of individualism and collectivism have been extensively revised in recent years. Brewer and Chen (2007) reported that most conceptualizations of I-C confound different aspects, such as self-representations (questions about self), values (what one aspires to), and beliefs (questions about the world), and hence, are too broad, ill-defined, or lack clarity. Another concern with I-C is whether individualism and collectivism are culture-level or individual-level variables. In addition, Oyserman, Coon, and Kemmelmeier (2002) conducted a meta-analysis of 83 studies and found that American samples, who would often score high on individualism, were found to be no less collectivistic than East Asian samples. The differences depended on how collectivism was measured. Oyersman et al. (2002) further compared the samples and found that Americans as compared to Japanese, for example, scored high on some collectivistic items such as “seeking others’ advice” and lower on other collectivistic items, such as “valuing group harmony.” In line with this, Brewer and Chen
(2007) reported that cross-cultural studies have found that American participants show no less in-group favoritism than do East Asians.

One of the main issues with the construct of collectivism is that large social groups are rarely the focus of collectivism measures and that an individual’s orientation to relational others seems to be the focus instead (Brewer & Chen, 2007). Brewer and Gardner (1996) proposed three different levels of the self: Individual, relational, and social. The relational self is the self defined in terms of significant others, such as close friends and family members. The collective self is the self defined in terms of properties that are shared among members of a common in-group such as networks or large symbolic groups (church, college, etc.). What differs between individuals is the salience and priority of these different selves (Brewer & Chen, 2007), and this difference is not always captured in the I-C measures which could lead to confounding results.

Also, Oyserman et al. (2002) performed content analyses on items from 27 different scales measuring I-C and sorted them into seven components of individualism (independence, individual goal striving, competition, uniqueness, self-privacy, self-knowledge, and direct communication) and eight components of collectivism (relatedness, group belonging, duty, harmony, seeking advice from others, contextualization, hierarchy, and preference for group work). Looking at these components, they found that they are not parallel, which suggests that the conceptualization of collectivism and individualism is different. Brewer and Chen (2007) noted that these components suggest that collectivism may be conceptualized more as a value system (shared norms and beliefs about what is important) and individualism may be conceptualized as beliefs about self and systems. Therefore, the two are not parallel constructs or two ends of a continuum; rather they are orthogonal factors (Brewer & Chen, 2007).
Most recently, Owe et al. (2013) emphasized the construct of contextualism, which specifically refers to “the perceived importance of the context in understanding people. This includes social and relational contexts, such as family, social groups, and social positions, but also physical environments.” (p.27). Owe et al. (2013) conducted two studies using an international sample from 37 national groups to develop a contextualism scale that would consider a range of contexts, such as family, position in society, occupation, workspace, and social groups. Scores on the scale were correlated with in-group collectivism, and also predicted in-group collectivism, differential trust, and corruption.

In addition to individualism and collectivism, Wernke and Huss (2008) offered alternative explanations to cultural differences in psychopathy. Migration factors could be playing a role whereby psychopaths migrate to more individualistic places, such as cities where relationships are more superficial, and victims are easier to find. Migration factors could also be tied to the need of the psychopath to constantly move, seeking new experiences, since evidence has shown that psychopaths are prone to boredom and are high on impulsivity and sensation-seeking (Wernke & Huss, 2008). Also, cross-cultural differences in psychopathy could be due to differences in the prison populations being evaluated. According to the International Centre for Prison Studies (2016), the United States has the highest prison population at 2,217,947 total prisoners, followed by China at 1,649,804. The United States has one of the highest incarceration rates at 698 per 100,000 of the national population (ICPS, 2016). However, more than half the countries in the world (55%) have rates below 155 per 100,000 of the national population (ICPS, 2016). The United States has a stricter sentencing system than other countries, especially when it comes to property crimes and drug offenses (Wernke & Huss, 2008). European countries, for example, might opt to transfer offenders to rehabilitation or prevention programs, but in the
United States, offenders are more likely to get imprisoned, and this could explain why the rate of psychopathy is higher among prisoners in the United States.

In sum, the psychometric properties of the psychopathy measures, mainly the PCL and its factor structure and internal consistency, have been reasonably good in international forensic and psychiatric samples. However, scores on psychopathic traits seem lower in those forensic and psychiatric international samples compared to their American counterparts, and also there seems to be more variability on the interpersonal and behavioral items than the affective ones. These differences suggest a cultural influence, including the influence of individualism-collectivism, values, and migration factors. The international samples have been mainly European, and psychopathy is yet to be systematically explored in other parts of the World, such as the Middle East and specifically, the Arab World. The next section focuses on more cultural factors that may affect the affective and personality characteristics of psychopathy.

**Psychopathology and Affective Experiences across Cultures**

There have been two major views regarding studying psychopathology in different cultures. The universalist view posits that similarities across cultures outweigh the differences, and, therefore, methods and concepts used in the West are most probably appropriate to use elsewhere (Draguns, 1997). The relativist view posits that there are unique and idiosyncratic aspects of psychopathology within each culture and that they should be studied within the culture itself; therefore, more qualitative and descriptive methods would be appropriate to use (Draguns, 1997). The universalist and relativist views are very similar to what has been referred to as the etic and emic approaches, respectively (Draguns, 1997).

Some support for the universalist viewpoint comes from a global study on depression. The World Health Organization (WHO, 1983) sponsored a study investigating depression in
clinical samples from an etic perspective in Iran, Switzerland, Canada, and Japan, and found that over 76% of the participants in hospital and other psychiatric settings reported feelings of sadness, anhedonia, and a lack of concentration and energy. Also, more than half reported suicidal ideation. However, there were some variations among the findings. For example, the sense of guilt did not appear to be shared in the same way or as frequently in collectivist and individualistic cultures (Draguns, 1997; Draguns & Tanaka-Matsumi, 2003). In a study of psychiatric patients, Kimura (1967) found that guilt feelings had a tendency of being absolute and abstract in the German sample, while they tended to be relational and situational in the Japanese sample (as reported in Draguns, 1997). In similar research, Hamdi, Yousreya and Abou-Saleh (1997) reported that guilt feelings are more difficult to elicit among a sample of Arab patients in the United Arab Emirates, and may not be as significantly predictive of depression as they are among Western patients. Also, in an analysis of several studies, Bughra and Mastrogianni (2004) reported that guilt among Arabs is expressed through behavior, including somatic concerns and crying, rather than being recognized as a conscious experience. In addition, guilt is equated with sin sometimes, which may mean ‘anti-religious’ behavior, especially among conservative communities. Guilt is important to consider because remorselessness and lack of guilt are main aspects of the construct of psychopathy. Other affective experiences, such as empathy, are important to consider, as they are also crucial to the understanding of the construct, and are discussed further below.

With regard to research on emotions and affective experiences, there are two different models which explain emotion recognition from a cultural perspective -- one that assumes cultural equivalence and another which assumes cultural advantage. The cultural equivalence model suggests that people perceive and recognize emotions similarly and accurately across
cultures (Soto & Levenson, 2009), while the cultural advantage model suggests that people process characteristics of same-race faces more accurately and efficiently than characteristics of other-race faces (O’Toole, Peterson, & Deffenbacher, 1996). Soto and Levenson (2009) found that among 161 American multi-ethnic participants, the cultural advantage model was not supported. All the participants were as efficient and accurate in rating targets’ faces, except for Chinese Americans who tended to be more efficient when rating Chinese American targets rather than other-race faces. However, it is worth noting that these participants were all born in the United States, and the results could have been different had they have been immigrants or international students. These latter findings are interesting when one considers the studies on facial expression and emotions, and how Eckman’s six basic emotions (happiness, sadness, fear, anger, disgust, and surprise) have been found to be recognized across cultures, and hence, deemed pan-cultural. However, some studies have challenged Eckman et al.’s findings. For example, Haidt and Keltner (1999) asked 40 American college participants and 40 Indian community participants from Orissa, India to rate fourteen facial expressions while using open-ended questions rather than multiple-choice questions. When they used a free-choice method, matches across cultures increased from 9 out of 14 (forced-choice) to 13 out of 14. Some expressions were equally recognized (anger and happiness), while others (compassion, shame) were not. Also, it is worth noting that when told to tell a story about what caused the facial expression, the American participants had more individualistic responses, while the Indian participants had more responses that included situations where interpersonal relationships were emphasized (Haidt & Keltner, 1999). However, the findings may not be solely due to cultural differences, and could also be due to the fact that college students were compared to community members.
**Research on empathy.** Goetz, Keltner, and Simon-Thomas (2010) investigated compassion (which encompasses empathy, among other emotions) across cultures, and found that compassion appeared in the writings of Aristotle, Confucius, as well as in Buddhist writings. Researchers have found that compassion has been identified in many cultures, such as Brazil, India, Italy, Germany, Malaysia, Japan, and Indonesia (e.g. Eisenberg, Zhou, & Koller, 2001; Haidt & Keller, 1999; Trommsdorff, Friedlmeier, & Mayer, 2007). Goetz, Keltener, and Simon-Thomas (2010) reported that an increased tendency of perspective-taking has been linked to empathy, as well as prosocial behavior in the US, Japan, Brazil, and China. For example, in a sample of Brazilian adolescents, Eisenberg et al. (2001) found that the ability to take the other’s perspective and/or sympathizing, assessed by Davis’ Interpersonal Reactivity Index (Davis, 1980), are related to prosocial moral judgment, which consequently motivates prosocial behavior; and that the pattern in Brazil matched the pattern found generally in the United States. Also, Levine, Norenzayan, and Phillbrick (2001) analyzed data from 23 cities, and found that across three different measures, people engaged in helping behavior cross-culturally, with rates being the highest in Rio de Janeiro, Brazil (93%), and lowest in Kuala Lampur, Malaysia (40%).

However, some studies have highlighted important differences between cultures. Trommsdorff, Friedlmeier, and Mayer (2007) compared responses of four different groups of children, two from South East Asian cultures (Malaysia and Indonesia) and two from Western cultures (Germany and Israel). The children were observed in a laboratory setting while playing with one of the investigators; at one point during the experiment, one of the balloons the investigator is playing with gets popped, and consequently the investigator appears sad and cries for a while, before proceeding to play with the child again. The researchers found that the children from the South East Asian groups responded with more personal distress, and engaged
less in helping behavior as compared to their Western counterparts. The researchers attributed these differences to culture and specifically to parenting, and how parents may transmit some values regarding prosocial behaviors to their children via modeling and socialization. Cassels, Chan, Chung, and Birch (2010) compared the components of affective empathy in those who identify as “Western” versus those who identify as “Asian” among a group of 190 young participants in Vancouver, Canada. These authors found that the “Western” sub-sample reported more empathic concern and less personal distress than the “Asian” sub-sample. However, those who identified as bicultural reported scores that were in between the other two groups, specifically, the bicultural group scored high on both empathic concern and personal distress. Also, in the bicultural group, Cassels et al. (2010) found that among the bicultural and Asian sub-samples, empathic concern was associated with better social-emotional health (better peer relationships and more prosocial behavior), similar to the pattern found in the Western sub-sample. So why do East Asian individuals seem to experience more personal distress than empathic concern? Frieldmeier and Trommsdorff (1999) suggested that East Asian mothers most likely do not expect the child to self-regulate, and hence instantly provide comfort to the child, while the Western mothers may expect the child to self-regulate, and therefore, the Western children may grow up knowing how to emotionally self-regulate better than the non-Western children. Similarly, Eisenberg, Miller, Shell, McNalley, and Shae (1991) argued that parents are the external regulators of the child’s emotions, and the child’s ability to emotionally regulate develops by internalizing former experiences of regulation with their parents. Also, Cassels et al. (2010) argued that the fact that a Western individual has an independent sense of self may hinder him/her from internalizing the distress of the other person, while the East Asian individual may adopt the other’s emotions since he/she is used to be interdependent. In line with this, Mesquita
and Frijda (1992) highlighted that one of the main differences which appears in studies of emotion across cultures is emotion regulation, whereby there are differences in the rules of feeling and displaying the emotion; thus, some individuals may avoid or seek some events based on the values they attach to these events and their importance according to their culture. Also, Mesquita and Frijda (1992) emphasized that sometimes the appraisals of certain events and emotions can be suppressed and replaced by more acceptable and/or conforming ones depending on one’s culture. It is worth noting that the findings that East Asians experience more personal distress and therefore are less likely to engage in prosocial behavior contradict findings from Wu and Keysar (2007) who found that Chinese college students scored higher on perspective-taking than their non-Asian American counterparts. In addition, the findings contradict those by Cassels et al. (2010) that prosocial behavior in general is more pervasive in East Asian cultures. This contradiction may suggest that the relationship between prosocial behavior and personal distress in the West may not be the same for people from a different culture, and may be moderated in a different way. Also, the conflicting findings could be due to issues related to the cultural sensitivity of the measures used, or to the over-inclusive labeling of participants as “Western” and “Asian” which could lead to much variability within the groups, and therefore to confounding results.

In sum, empathy has been found to be expressed differently in different cultures, reportedly due to factors such as individualism-collectivism and parenting styles. Given the importance of empathy in conceptualizing psychopathy, it is essential to better understand how it manifests in different cultural groups. For example, in countries or regions that witness conflict and trauma, would it manifest differently? And if so, how would it affect psychopathy?
**Role of trauma.** Since some cultural groups have historically suffered from severe traumas, such as long wars and genocides, and others are currently experiencing these traumas, it is essential to consider the role of trauma in individuals’ affective experiences. It is intuitive for some to believe that people who were harmed or traumatized would develop sensitivity towards the suffering of others (Chaitin & Steinberg, 2008). Trauma studies based on the survivors of the Holocaust and the atomic bombings in Japan in World War II have shown that victims of trauma continue to feel the effects for many years after the events (Chaitin & Steinberg, 2008). Severe maltreatment, violence, and/or oppression can also lead to negative mental health and social outcomes. Kerig, Bennett, Thompson, and Becker (2012) found an association between trauma and callous and unemotional traits in a group of young juveniles in two detention centers. In addition, they found that this association was mediated by the numbing of emotions, especially sadness (Kerig et al., 2012). In their study, Locher, Barenblatt, Fourie, Stein, and Gobodo-Madikizela (2014) assigned 49 adults to three groups -- a control group, a group of those with a history of moderate level of childhood maltreatment, and another of those with history of severe childhood maltreatment, and participants watched videos from the South African Truth and Reconciliation Commission testimonies and were assessed for responses afterwards. Those who reported a history of maltreatment showed impairment in their empathy, especially those with a history of moderate childhood maltreatment who showed emotional blunting and impaired cognitive empathy (Locher et al., 2014). Studies have also been conducted with police officers and veterans. Zerach, Greene, Ginzburg, and Solomon (2013) followed two groups of male Israeli veterans who served on the 1973 Yom Kippur war and followed up with them at three different times, in 1991, 2003, and 2008. Zerach et al. (2013) found that ex-prisoners of war with posttraumatic stress disorder (PTSD) reported higher levels of persistent dissociation than those
ex-prisoners of war (POW) without PTSD and those who were non-POW and without PTSD. Also, PTSD at the three different times mediated the association between being captive as a POW and persistent dissociation in 2008. Persistent dissociation was also associated with detachment and loss of emotional control. Research conducted with police officers who were assessed pre-hire, and then 5 to 10 years later, showed that police officers who reported traumatic events during their job showed lower level of empathy at time 2 compared to pre-hire (Leigh Wills & Schuldberg, 2016). In a study with 84 Iranian male veterans, Nateghian, Dastgiri, and Mullet (2015) found that those who scored higher on the PTSD scale, scored higher on resentment, and lower on forgiveness and empathy.

Chaitin and Steinberg (2008) offered many explanations regarding the effect of trauma on empathy and other emotions. First, individuals who experienced the trauma often develop mistrust of others, whereby the fear of becoming trustworthy of or close to people from an out-group becomes evident, and is transmitted to the children, causing the trauma to have intergenerational effects. Therefore, the effects of the trauma do not end with the person, but continue to develop with his/her offspring and become part of a collective memory. Second, trauma can shatter one’s view that the world is a just and safe place; therefore, victims will look for someone to blame, maybe even themselves. Third, traumatic events continue to affect people throughout their life and through different developmental stages (Chaitin & Steinberg, 2008). Fourth, trauma also affects a person’s sense of identity and self: Many individuals who experience traumas often engage in defense mechanisms in order to get rid of their anxieties; they may displace their anger towards the aggressors and “others” in order to protect themselves. In light of how the abovementioned factors may affect victims of trauma, how can these victims
or their descendants relate to the suffering of others and develop empathy? This is relevant to the research on psychopathy where deficits in perspective taking and empathy have been found.

Chaitin and Steinberg (2008) stated that it would be difficult for individuals who witnessed trauma to be able to connect with the suffering of others, especially if the “others” are perceived as an out-group. This is important in light of the evidence that empathy seems to play an important role in conflict resolution, whereby an empathic person may be able to decrease his/her negative stereotypes of the other and the accompanying feelings of threats or fear, and therefore, alleviates conflict (Stephan & Finley, 1999). Chaitin and Steinberg (2008) conducted interviews with Palestinians and Israelis about the regional conflict, and found evidence that each side tends to see itself as the victim, while ignoring and even negating the victimization of the other. Batson, Batson, Brandt, Sprengelmeyer, and Bayley (1989) reported that trauma survivors tend to use defensive mechanisms, which make it less likely that they would understand the other’s reality; consequently, they cannot develop empathy.

Research on trauma is relevant to psychopathy because trauma has an impact on empathy and perspective taking, which are two important aspects in conceptualizing the construct. If an individual has experienced a trauma, his/her scores on the items measuring callousness and empathy may change, not necessarily because of psychopathic traits, but because of the impact of trauma. In addition, and as previously mentioned in chapter 2, a history of childhood trauma, specifically childhood abuse and neglect, has been related to an increased risk for psychopathy by adulthood (Luntz & Widom, 1996).

In sum, empathy, guilt, and other emotions are most likely affected by one’s cultural background. People’s worldview and values, the way they communicate and regulate emotions, and perceive and react to trauma, among other factors, affect how they experience guilt and
shame, develop empathy and perspective-taking, and react to other people’s suffering. More research on cross-cultural experiences of emotions is needed in order to better understand these constructs, especially how they may be affecting the manifestation of psychopathy.

**Psychopathy in Non-Western Cultures**

Research on psychopathy in non-Western samples is limited. Fung, Gao, and Raine (2010) administered the Antisocial Process Screening Device (APSD; Frick & Hare, 2001), a measure based on the PCL-R, used to assess antisocial characteristics in children and adolescents, to 3,675 children ages 11 to 16 in Hong Kong, China. The APSD consists of 20 items rated on a 3-point scale and is composed of three factors measuring callous-unemotional traits, narcissism, and impulsivity, which reflect interpersonal, affective, and impulsive features of psychopathy. Some studies have supported a two-factor structure, while others have supported a three-factor structure of this measure. Using confirmatory factor analysis, Fung, Gao, and Raine (2010) found a better fit of a three-factor model (callous-unemotional, narcissism, and impulsivity) than a two-factor model. Comparing their results to the US normative sample, the Chinese children had higher scores on callous-unemotional traits, narcissism, and APSD total scores, but lower scores on impulsivity. Fung, Gao, and Raine (2010) reported that the higher CU scores among the sample of Chinese children may be explained by research by Tsai and Levenson (1997) showing that Chinese-Americans experience less positive emotion and less expressive variability when compared to European Americans. The authors also cited a study by Fukunishi et al. (1996) where the Chinese individuals in the study scored higher on narcissism when compared to Japanese and Americans.

In another study conducted in Iran, Shariat et al. (2010) administered the PCL:SV to a stratified sample of 351 Iranian male prisoners, and found that the scores best fit a three-factor
hierarchical model (Arrogant and Deceitful Interpersonal Style, Deficient Emotional Experience, and Impulsive and Irresponsible Behavior), the same model found in Cooke and Michie (2001). Using confirmatory factor analysis, there was no support for the two or four-factor structure. Also, using item response theory, the differential power of the Arrogant and Deceitful Interpersonal Style factor was lower than that of the Deficient Emotional Experience factor, when compared to the US standardization sample. Shariat et al. (2010) suggested that the deficient emotional experience may be the center of the psychopathic features, regardless of culture. In addition, these researchers suggested that the reason behind the superficial, deceitful, and grandiose items being less successful at differentiating psychopaths from non-psychopaths in Iran could be because of the collectivistic nature of the society. Shariat et al. (2010) found that two items, “Lacks Empathy” and “Lacks Remorse”, had the steepest slopes and therefore the most ability to differentiate psychopaths from non-psychopaths in the Iranian sample, which may suggest -given the collectivistic nature of the country- that individuals who exhibit such characteristics will be readily considered psychopaths. On the other hand, the item “Doesn’t Accept Responsibility” tended to have a lower peak, and this could be due to people from collectivistic cultures attributing events to external causes rather to their own behaviors (Kongsompong, Patterson, & Green, 2003, as cited in Shariat et al., 2010).

In another study, Neumann et al. (2012) compared the responses of over 33,000 males and females across 58 countries using data from the International Sexuality Description Project -2 (ISDP-2). When English was not the native language, participants were presented with the native language of the ISDP-2 survey, which included the short version of the Hare Self-Report Psychopathy (SRP) scale, or what is referred to as SRP-E (for experimental). Results showed that the four-factor model was a fit for the total sample as well as the separate male and female
samples. Also, males scored higher on the SRP-E than females in general, which is consistent with research on sex and psychopathy (e.g. Nicholls, Ogloff, Brink, & Spidel, 2005). Using structural equation modeling, the interpersonal and antisocial items had the highest discriminatory power in identifying psychopathic versus non-psychopathic individuals. This means that a high level of the psychopathy trait needs to be present so that individuals endorse interpersonal and antisocial items. In the total sample, and across nations and sex, high means of psychopathic traits involved high means on the lifestyle factor, followed by interpersonal and affective factors. Very few individuals endorsed high scores on the antisocial factor. There were some differences across the different cultures. For example, a higher number of females in Africa, the Middle East, and South-East Asia and Eastern Asia endorsed higher levels of interpersonal features of psychopathy than elsewhere. However, a higher number of females in Western Europe and North America endorsed higher levels of the lifestyle features compared to females elsewhere with the exception of the Middle East. Also, females from Western Europe scored higher on the affective factor when compared to others. It is worth noting that Neumann et al. (2012) did not indicate whether or not the study was presented as a sexuality project as this may have affected the participation, perception of items, and the results. Table 2 summarizes the different results from these three abovementioned studies.

**Psychopathy and Sex Differences**

It is also important to highlight sex differences in psychopathy. In a comprehensive review of the research, Nicholls, Ogloff, Brink, and Spidel (2005) found that women scored lower than men on the PCL-R in samples of civil and forensic psychiatric patients, inmates, and community members. Levenson, Kiehl, and Fitzpatrick (1995) compared men and women in a community sample on primary and secondary psychopathy and found that men were much
higher on primary psychopathy, and also higher –although marginally, on secondary
psychopathy than their female counterparts. Also, in their global study, Neumann et al. (2012)
found that the mean scores on the Hare SRP were higher among men than women.

There are different explanations of why these sex differences occur. For example,
women and men might be engaging in different behaviors. Kessler et al. (1994), using data from
the National Comorbidity Survey, found that women tend to report engaging in more
internalizing behavior (depression, anxiety), while men tend to report engaging in more
externalizing behaviors (substance use, aggression). Also, Falkenbach (2008) reported that
women might be involved in more sexual misbehaviors and fewer antisocial behaviors, and
express personality traits with less intensity than their male counterparts. Some attribute these
sex differences to the measures of psychopathy used, or to lower base rates of psychopathic
symptoms in women, while other researchers indicate that the cut-off scores used in measures of
psychopathy might be set too high for women. Some research also suggests that the psychopathy
construct might be manifesting itself differently within the sexes (Falkenbach, 2008). Widom
(1984) proposed that gender and sex roles help understand antisocial, criminal, and deviant
behaviors given that 1) sex roles influence the labeling and diagnosis of actions as deviant or
criminal; and 2) because the individual’s gender affects the response by others to such behaviors.
For example, it has been documented that women are diagnosed more with borderline
personality disorder (75% more), while men are diagnosed more often with antisocial personality
disorder (3 times more) (American Psychiatric Association, 2013). In addition, Widom (1984)
proposed that criminal behavior is influenced by many factors, such as genetic and biological
characteristics (temperament, physiological responses), past socializing experiences (gender-
appropriate behaviors for girls and boys), and other situational factors (victimization, drug use), which are all, in turn, influenced by sex and gender roles.

Overall, research has consistently reported sex differences on psychopathy measures, indicating that it would be worthwhile to consider these potential differences in a further cross-cultural examination of the construct of psychopathy.

In sum, studies in non-Western countries have found different results, a conclusion that is not surprising given the 1) different assessment tools used (PCL:SV, SRP-E, and APSD), 2) different samples (juvenile, forensic, and community samples), 3) different correlates studied, and 4) different statistical methods employed to test different hypotheses. It is, therefore, difficult to have a thorough understanding of the construct of psychopathy or even assess the utility of the measures used in these cultures. It is, however, clear that psychopathy is influenced by culture. Differences in scores in addition to differences in relevance of items across the different samples suggest the need for further studies in non-Western cultural groups.

Psychopathy and Terrorism: Elusive Link

Given the high exposure in our modern society to news on terrorism, and especially the indiscriminate equating of terrorism with suicide bombings committed by fundamentalist extremist Muslim individuals often in Arab countries, a note on the possible relationship between psychopathy and terrorism is warranted. Researchers have tried to find a root cause for terrorism, a terrorist profile and/or personality, but in fact, scholars in the field of terrorism have often found that terrorists are psychologically “normal” (Post, 2010). Crenshaw (1981) even observed that the “outstanding common characteristic of terrorists is their normality” (p. 390). Victoroff (2009) examined the terrorism literature, including articles, books, news reports, and personal communication with scholars, and found that there is nothing particular about the psychological
characteristics of a member of a terrorist organization. Organizations included in the review were Palestinian organizations, the German Red Army Faction, the Italian Army Red Brigades, among others. Thus far, research has not documented a relationship between psychopathology, including psychopathy, and terrorism. While worthy, this topic is beyond the scope of the current study.

**Methodological Issues in Multicultural Studies**

Finally, it is important to highlight some concerns with multi- and cross-cultural research. One major issue concerns structural and measurement consistency; that is, it is possible that the observed differences in scores among populations from different cultures may not be due to variations in levels of psychopathy, but rather caused by the differences in the expression of the disorder or its key features (Shariat et al., 2010). Therefore, a score in one sample may not be comparable to a score from a different sample. Cooke et al. (2005) argued against the “transport-and-test” approach, which involves using a measure developed in the West, translating it to different languages, and then comparing the scores across the cultures. The problem with the “transport and test” approach is that it threatens the cultural relevance and the cultural equivalence of the measure’s test scores. Another problem is that reliability coefficients may not reveal much about the meaning of the items and their relevance to the individuals of the ‘other’ culture and latent variables that underlie the items might not be understood (Cooke et al., 2005).

There are a number of other methodological issues involved in conducting cross-cultural research. First, there is a problem with stimulus equivalence, whereby the items presented to the participants could mean different things in the different cultures (Draguns, 1997). Peña (2007) differentiated between linguistic equivalence (ensuring that words and meanings are the same), functional equivalence (making sure that content validity is the same), cultural equivalence (making sure that the salience of the construct as well as its underlying meaning is the same), and
metric equivalence (ensuring that the level of item difficulty and the response scale are the same). Second, Draguns (1997) reported that using self-report measures can be problematic since Americans are used to filling in measures using forced-choice response style (true or false) and multiple choice (a, b, c or d) from an early age, unlike other cultures. Similarly, Clarke (2000) argues that some ethnicities and cultures have a problem with “extreme response style”, which is “the tendency for some individuals to consistently use the extreme ends of response scales in a multiple response category format” (Clarke, 2000; p. 138). He found that French students scored higher on extreme response style than Australian students, and that Black and Hispanic college students also tended to score higher than non-Black and non-Hispanic students. Third, researchers have warned against special problems such as those pertaining to translation (e.g. Draguns, 1997; Gjersing, Caplehorn, & Clausen, 2010; Matsumoto & Yoo, 2006; Peña, 2007). In the Arab World, for example, different countries have different dialects, and researchers need to be aware of this issue. Gjersing et al. (2010) warned against simply translating an instrument and then using it. These authors suggested a multi-step approach to ensure the instrument is the same: 1) investigate the concept and item equivalence, 2) translate and back-translate the items using multiple translators who are fluent in both the original and target languages, 3) utilize an expert committee to review the translated instrument, 4) pretest the instrument, 5) revise it accordingly, 6) conduct the main study and perform both exploratory and confirmatory factor analysis, and 7) decide on the final version. Finally, Thomas (2007) reported that it is essential that the researchers be transparent about how they are conducting their cross-cultural study and for them to be careful against ethnocentrism. For example, when conducting personal interviews, some individuals from certain cultures might not be comfortable because of concerns about sharing personal issues, trust, and specific etiquette. Draguns and Tanaka-Matsumi (2003)
discussed issues with social distance and its relation to empathy: If a culture is alien to the researcher, he/she might not be able to connect to the individuals or understand them. In addition, researchers might be prone to over-diagnose or under-diagnose some disorders because they are only familiar with the prevalence of these disorders in their own countries.

To avoid the problem of cultural bias, many researchers encourage the use of multiple methods and measures to investigate a construct in different settings (e.g. Hui & Triandis, 1985; Okazaki & Sue, 2004). Thus, using both qualitative and quantitative measures might provide a more accurate and richer picture of the meaning of the construct in a new cultural setting.
CHAPTER 5: CONCLUSION

The construct of psychopathy has been widely studied in North American samples, and represents a constellation of affective, interpersonal, lifestyle, and behavioral aspects. While there are different assessment tools to measure psychopathy, the PCL-R has been the most widely used measure, mainly in forensic and clinical settings. Cross-cultural differences have been observed between North American and European samples, whereby European samples scored lower on psychopathy than the American ones. In addition, the psychometric properties, especially the factor structure, yielded some differing results across the different samples. However, overall, the psychometric properties of the PCL have been reasonably good and consistent cross-culturally. Studies in non-Western cultures conducted more recently have shown differences in psychopathy scores, in addition to differences in items in terms of their relevance and/or power of discrimination in different samples. Findings suggest that there are more differences across cultural samples in the antisocial and interpersonal aspects than the affective aspects of the psychopathy measures, not surprising, since there are many aspects of psychopathy, such as antisocial behaviors, that have been shown to be affected by socialization and other cultural variables.

Guilt has been shown to be experienced differently in different cultures, and may be more relevant to individualistic individuals, while shame may be a more relevant construct to a more collectivistic individual. The differences in experiencing guilt would affect the way that psychopathy would unfold. Also, the assessment tools used to measure guilt may not be sensitive to these cultural differences. In addition, empathy and perspective-taking have also been thought to be deficient in psychopathy and have been found to be experienced differently across cultures. There are mixed findings with regard to whether collectivistic individuals would show more or
less empathy, and therefore, it is important to investigate how empathy affects the manifestation of psychopathy in different cultures. Behaviors also are affected by social factors. For example, in highly relational and collectivistic cultures, some non-conforming behaviors may be frowned upon, which may hinder them from being expressed, and therefore, antisocial behaviors may not be highly prevalent in some cultures that value embeddedness and harmony as compared to others. Finally, traumatic events, due to wars or natural disasters, are more pervasive in some countries than others, and may influence the behaviors and emotions of the individuals who have suffered or are suffering from them. Trauma has been associated with dissociation and numbing, in addition to callousness, and the latter is directly relevant to psychopathy.

In order for these differences to be detected, researchers must use culturally sensitive measures. Many cross-cultural studies have used measures developed in North America, sometimes translated, but often not, and rarely normed. Both the cultural relevance and equivalence would be jeopardized, and the findings may not be useful or meaningful. Cultural differences need to be assessed by culturally sensitive measures that are carefully chosen, translated, and properly tested. Many studies rely on internal consistency reliabilities, and while these are important, these indices will not reflect how the items of the measures are capturing the latent trait being assessed. It is therefore important that researchers in the field of psychopathy address the shortcomings in the measures used and find ways to rectify them.
CHAPTER 6: CURRENT STUDY

The current study examines the construct of psychopathy in Lebanese and American adults. Investigating the construct of psychopathy in the Lebanese community not only has implications for understanding the construct in Lebanon and the Arab World, but also implications for the assessment of psychopathy among Arabs in the USA. According to the Arab American Institute (2012), there are at least 1.9 million Americans of Arab descent reported by the US Census in 2010; however, the Arab American Institute states that the figure is underreported and it is estimated that 3.6 million Americans are of Arab descent. Over a third of Arab Americans live in California, New York, and Michigan, with 152,675 estimated to live in the state of New York; Lebanese make up the biggest percentage of Arab-Americans (26%) across most states (Arab American Institute, 2012). Also, the number of Arab minorities has increased by 41% in the 1980’s and by 38% in the 1990’s according to the US Census (US Census Bureau, 2010).

There are several reasons for focusing psychopathy research on Arabs. First, clinical and/or forensic assessment tools that have been developed in North America and normed primarily with male White prison inmates could be inappropriate and biased when used with Arab individuals. Second, Arab individuals have been neglected in the research on psychopathy, and it would be important to explore the construct within an Arab sample given the evidence that culture affects psychopathology and psychopathy. Third, minorities are overrepresented in the US prison population, and more information on assessment tools used with minorities, including Arabs, is needed.

Lebanon, a country in the Middle East, has an estimated population of 6,184,701 including 449,957 Palestinian refugees, 5,986 Iraqi refugees, and 1,048,275 Syrian refugees
Lebanon is considered religiously heterogeneous (54% Muslim, 40.5% Christian, 5.4% Druze), and includes eighteen official religious sects (Central Intelligence Agency, 2016). Although Arabic is the official language, English and French are widely used, especially in major cities and in the capital Beirut. Lebanon is an Arab country and is considered mostly a collectivistic nation. Being connected to the family and kin is very important. In the Lebanese constitution, the family is defined as the unit of society instead of the individual (Joseph, 1999). Lebanon was under the French mandate following World War I, and was granted independence in 1943 (Central Intelligence Agency, 2016). The country has been wavering between political stability and instability; in 1975, a 15-year civil sectarian war started that resulted in 120,000 dead (Central Intelligence Agency, 2016). In 2006, a war with Israel lasted 34 days and ended up displacing over one million Lebanese and killing 1000 (“Amnesty report accuses Hizbullah of war crimes”, 2006). In May 2008, opposing political factions were fighting in the streets of Beirut for two weeks; 61 people died as a result (“Lebanon army gives gunmen deadline to disarm”, 2008). In recent years, there have been several bombings in Lebanon, in the city of Tripoli (“Bombings strike Lebanon”, 2013), Arsal (“Explosion 'targets Muslim committee' in Lebanon's Arsal”, 2015), and Beirut (“Beirut suicide bombings kill over 40”, 2015). Therefore, the country has witnessed several years of war and political instability.

With regard to the prevalence of mental health disorders in Lebanon, specifically PTSD and antisocial personality disorder (ASPD), Karam et al. (2006) found, in a national sample of 2,857 non-institutionalized Lebanese, that the prevalence of PTSD in the past year was 2%. This figure is lower than that the prevalence of PTSD in the United States reported by Kessler, Chiu, Demler, Merikangas, and Walters (2005), which was 3.5% in the past 12 months in the National Comorbidity Survey Replication sample. Karam et al. (2006) also found that 49% of the sample
reported witnessing at least one traumatic event, including witnessing a dead body or someone being killed or seriously injured, sustaining a life-threatening injury during war, being directly exposed to toxic fumes or explosions, losing a loved one during war, and being a refugee.

Among 51,295 adults from 11 countries using population surveys from the WHO World Mental Health Survey Initiative, Karam et al. (2014), found that the prevalence of PTSD in the past 12-months was 1.6% in Lebanon and 2.5% in the USA. With regard to ASPD, no prevalence rate has been reported, although in a World Health Organization (WHO) Mental Health Survey study conducted in 13 countries, the prevalence of Cluster B personality disorders was 1.7% in the Lebanese sample compared to 2% in the US sample. No statistical significance was reported with regard to the differences, although these figures appear quite comparable.

The present study’s goal is to investigate the construct of psychopathy among Lebanese and American adults. The design of this study involves: 1) a comparison of Lebanese and American adults on measures of psychopathy and its correlates and 2) an examination of the associations between the affective and behavioral correlates of psychopathy in both the Lebanese and American samples. There are several major hypotheses:

**Hypotheses**

1) Lebanese adults will show higher scores on contextualism and lower scores on psychopathy, antisocial traits, and empathy, compared to American adults.

2) Lebanese adults will score lower on the Criminal Tendencies and Erratic Lifestyle subscale of the Hare Self-Report Psychopathy Scale and higher on the Interpersonal Manipulation and Callous Trait scales than American adults.
3) High psychopathy scores will be related to low empathy scores, and to high scores on impulsivity and antisocial traits, providing construct validity for the psychopathy measure.

4) High contextualism scores will be related to low scores on antisocial traits and Criminal Tendencies of the Hare Self-Report Psychopathy Scale.

5) High trauma scores will be related to high psychopathy scores and to low scores on empathy.

6) Lebanese adults will show higher scores on trauma than American adults.

7) High trauma scores will be associated with high Callous Trait scores, which will, in turn, be related to high psychopathy scores.

8) Females in these two groups (Lebanese and American adults) will score lower on the Hare Self-Report Psychopathy Scale than males.

**Methodology**

**Participants**

Participants were recruited online in New York City and Lebanon. In New York City, participants were also recruited using flyers. There were initially 160 participants in the study. However, 21 cases were deleted because of excessive missing data (over 75% of data, including the psychopathy measure). Therefore, the study includes only 139 participants, with 53 males and 86 females. There were 59 Lebanese participants, 75 American, and five with dual nationality (Lebanese-American). The participants’ ages ranged between 18 and 75 years old, with 18% between the ages of 18 and 24, 27% between 25 and 34, 27% between 35 and 44, and 27% 45 or older. All Lebanese participants filled in the survey online, 55 Americans filled it in person, and 20 of them filled it in online. Only 21% of the sample described themselves as
students. Table 3 presents the demographic characteristics for the sample overall and for the Lebanese and American samples individually. As can be seen in Table 3, the Lebanese sample included significantly more women, \( X^2 (1, N = 134) = 6.06, p = .02 \) and individuals with higher education level, \( X^2 (8, N = 134) = 38.95, p < .001 \) than the American sample. There was no difference in age, marital status, or employment between the two groups.

**Procedure**

Once the approval of the Institutional Review Board was granted, the recruitment of participants was begun. The study was conducted between September 2014 and December 2015. A number of Americans completed the survey in-person in a lab room at John Jay College of Criminal Justice – CUNY. There were problems recruiting an adequate sample of Lebanese living in the greater New York City metropolitan area willing to take the survey in-person. Thus, for feasibility issues, Lebanese adults who lived in NYC or Lebanon were offered the option to take the survey on-line. In order to equalize the procedures, the American adults were also offered the option to take the survey on-line. The survey was offered in English and Arabic, and it was the Lebanese participants’ choice to decide which version they preferred. Only six Lebanese adults completed the survey in Arabic, while the remaining 53 completed it in English.

Lebanese participants were recruited through student and community groups in NYC using information from web searches of community, private, and public colleges as well as community associations that work with Arab individuals specifically to target Lebanese individuals. Emails were sent to the associations and groups asking for participants, flyers were posted on the premises of some institutions, and recruiting messages were posted through the web (e.g. Facebook pages and Craigslist). The snowball technique was used where participants were encouraged to tell friends and acquaintances about participating in the study. If individuals
decided to participate in-person, they were given time slots where the researcher would be available to administer the survey. A quiet room was reserved for the purpose of conducting this research at John Jay College and participants completed the questionnaire in small groups. Individuals who were recruited in-person were compensated with 10 US dollars in cash upon completion of the study. Those who took the survey on-line were emailed a link to a 10 US dollar Amazon gift card upon completion of the survey.

Participants who completed the questionnaire in-person on the college campus were first given the informed consent form and assured that the information would be kept confidential. Only participants who were 18 years or older took part in this study. Both the participants and the researcher signed and dated the informed consent forms, and they were kept separate from the actual survey packets to ensure confidentiality. The researcher provided the participants with a hard copy of the consent form and verbally emphasized the important parts: ensuring confidentiality; making sure they understood that participation was voluntary, and that they could withdraw at any time or skip questions they did not feel comfortable answering, with no consequences. The survey packet contained an informed consent, a demographic sheet, seven self-report measures, 20 filler questions, and one vignette with an open-ended question.

Measures

The measures included were in the order used: 1) the Contextualism Scale (Owe et al., 2013); 2) the Barratt Impulsiveness Scale- Version 11 (BIS-11; Patton, Stanford, & Barratt 1995); 3) the Hare Self-Report Psychopathy Scale (HSRP; Paulhus et al., in press); 4) the Antisocial (ASPD) Personality Disorder scale of the Personality Diagnostic Questionnaire -4+ (PDQ-4+; Hyler, 1994); 5) the Basic Empathy Scale (BES; Joliffe & Farrington, 2006); 6) the Balanced Inventory of Desirable Responding (BIDR; Paulhus, 1988); 7) the Lifetime Trauma
and Victimization History (LTVH; Widom et al., 2005).

The measures are described in detail below and are included in Appendix A. Given the potential negative affective quality of most items measuring psychopathy, trauma, and antisocial behaviors, some filler questions were added to the packet to neutralize the negative affective quality of the items. Five questions from the Rosenberg Self-Esteem Scale (Rosenberg, 1965) and five questions from the General Self-Efficacy Scale (Schwarzer & Jerusalem, 1995) were added in the middle of the survey, in addition to 10 questions on daily activities which were added at the end of the survey, after the trauma scale. These filler questions were not included in the analyses. With regard to the order of scale/item presentation, few scales preceded the psychopathy scale, and the psychopathy and the trauma items was separated by other scales to minimize the negative affective quality. There were two versions provided, version A with the items organized in the order described above, and then version B with jumbled items from different scales. The purpose of these two orders of presentation was to ensure that the order of the questions did not bias the responses.

Once they signed the consent form, participants proceeded to complete the demographic sheet followed by the measures. The same format was used in the online version of the survey.

**Contextualism Scale.** This is a brief 6-item scale developed by Owe et al. (2013) using a large sample across 19 nations, including Lebanon where the scale was translated into Arabic. The scale taps into beliefs about personhood that underlie cultural collectivism, including the importance of social and contextual characteristics in defining a person. An example of an item is “To understand a person well, it is essential to know about his/her family.” Participants rate their level of agreement with items on a 6-point Likert-type scale that ranges from 1 (completely disagree) to 6 (completely agree). In this study, a 4-point-Likert-type scale was used to ensure
consistency with other measures. Owe et al. (2013) reported good psychometric properties and good correlation coefficients with other indicators of individualism and collectivism. In this study, the Cronbach alpha for the full sample was .73, .68 in the American sample, and .86 in the Lebanese sample. In this sample, the mean of this scale was 2.4 and the SD was .47.

**Barratt Impulsiveness Scale- Version 11.** The BIS-11 (Patton et al., 1995) contains 30 statements that participants rate on a 4-point Likert-type scale ranging from 1 (rarely) to 4 (almost always). An example of an item is “I plan tasks carefully.” Patton et al. (1995) reported internal consistency coefficients ranging from .79 to .83 in different populations including psychiatric and forensic. Stanford et al. (2009) reported that while the measure was developed and normed in English, the BIS-11 has been translated into at least 11 languages including Chinese, Dutch, Hebrew, and Spanish, with internal consistency coefficients ranging between .71 and .83. In this sample, the mean score of the BIS-11 was 2.26, and the SD was .31. In this study, the Cronbach alpha was .81 in the full sample, .84 in the American sample, and .88 in the Lebanese sample.

**The Hare Self-Report Psychopathy Scale.** The Hare Self-Report Psychopathy Scale (Paulhus et al., in press), also referred to as the SRP-III, consists of 64 items that are rated on a 5-point Likert-type scale, ranging from 1 (disagree strongly) to 5 (agree strongly). Possible scores ranged from a minimum score of 64 to a maximum score of 320. Prior research with the SRP-II has shown that it includes four factors similar to that of the PCL-R: Callous Trait (CA), Interpersonal Manipulation (IPM), Erratic Lifestyle (ELS), and Criminal Tendencies (CT) (Williams, Paulhus, & Hare, 2007). Examples of items include “I can talk people into anything”, “I easily get bored”, and “I rarely follow the rules.” The scale has been reported to have good internal consistency. For example, Neal and Selbom (2012) reported a coefficient alpha of .92.
for the total scale with alphas ranging from .75 to .82 on the four factor scales. The scale has also
been used with international samples. According to Sandvik et al. (2012), in a Norwegian
sample, the Cronbach’s alpha was .93 for the total scale, with alphas ranging from .74 to .86 on
the facet scales. Neumann et al. (2012) used a shorter version of this scale in their global study
that included Lebanon; however, the data on the psychometric properties of the scale in the
Lebanese sample are not available and were not made available by the author when contacted
(Schmitt, D. S, personal communication, July 1, 2013). Neumann et al. (2012), however,
reported generally good internal consistency and construct validity in their multicultural sample.
For this study, the response scale was converted to a 4-point Likert-type scale to ensure
consistency among all scales used. In this sample, the mean score on the HSRP was 1.98, and the
standard deviation (SD) was .40. The Cronbach alpha coefficient was .94 for the total scale (.94
in the American sample and .95 in the Lebanese sample). With regard to the facet scales,
coefficients alphas ranged from .65 (Callous Trait) to .87 (Interpersonal Manipulation) in the
total sample. They ranged from .80 (Callous Trait) to .90 (IPM) in the Lebanese sample, and
from .55 (Callous Trait) to .86 (IPM) in the American sample.

The Antisocial Personality Disorder Scale from the Personality Diagnostic
Questionnaire-4+. The PDQ-4+ is a self-report measure that assesses the DSM-IV criteria of
personality disorders. The full measure contains 118 True-False items which assess all
personality disorders; however, for this research, only the 8 items which assess antisocial
personality disorder were used. Items are rated as either “True” or “False”. An example of an
item is: “I enjoy doing risky things”. Among a sample of psychiatric patients, the PDQ-4+
exhibits moderate internal consistency (K-R 20 = .61) and test-retest reliability coefficients
varied from .62 to .75 (Cale & Lilienfeld, 2002). The ASPD scale was used with a Lebanese
college student sample in a pre-dissertation project (Issa & Falkenbach, 2009) and the alpha was .73. In this study, a 4-point Likert-type scale was used to ensure consistency among the study’s scales. In the total sample, the mean score of the ASPD scale was 1.65 and the SD was .56. In this study, the Cronbach alpha was .84 in the full sample, .87 in the American sample, and .86 in the Lebanese sample.

**The Basic Empathy Scale.** The BES (Joliffe & Farrington, 2006) is a 20-item questionnaire that measures two different aspects of empathy: cognitive (assessed by 9 items) and affective empathy (assessed by 11 items). An example of an item is “I tend to feel scared when I am with friends who are afraid.” Participants rate the items on a 4-point Likert-type scale ranging from 1 (strongly disagree) to 4 (strongly agree). Jolliffe and Farrington (2006) reported that scores on the BES correlated with Davis’ Interpersonal Reactivity Index (IRI; Davis, 1980) (ranging from .30 to .53), indicating concurrent validity. The instrument was translated into different languages including Turkish (Topcu, Erdur-Baker, & Çapa-Aydın, 2010), and Chinese (Geng, Xia, & Qin, 2012). In this study, the mean of the BES was 2.95 and the SD was .37. The Cronbach alpha coefficient for the full sample was .83, .76 in the American sample, and .97 in the Lebanese sample.

**The Lifetime Trauma and Victimization History.** The Lifetime Trauma and Victimization History (LTVH) instrument (Widom, Dutton, Czaja, & Dumont, 2005) is a 30-item structured interview that asks participants about serious events that happened in their lifetime. There are seven different categories of events: general traumas, physical assault/abuse, sexual assault/abuse, family/friend murder or suicide, witnessing trauma to others, crime victimization, and being kidnapped/stalked. The LTVH has good predictive, criterion-related, and convergent validity (Widom et al., 2005). In this study, it was used as a self-report measure
of traumas and victimizations. The Cronbach alpha coefficient for the full sample was .92, .95 in the American sample, and .76 in the Lebanese sample. The mean of the LTVH in this sample was 7.31 and the SD was 6.91.

**The Balanced Inventory of Desirable Responding (BIDR).** The BIDR (Paulhus, 1988) measures self-deceptive enhancement (SDE) and impression management (IM). The scale, now in its seventh version, consists of 40 items, which participants rate on a 7-point Likert-type scale. In this study, a 4-point-Likert-type scale was used to ensure consistency with other measures. The scoring key is balanced, and the maximum score is 20 on each subscale (SDE and IM). An example of an item is “I have not always been honest with myself.” Paulhus (1991) reported a reliability coefficient of .83 for the total scale and alphas ranging from .65 to .80 for the SDE scale and .75 to .86 for the IM scale; in addition, the scale had concurrent validity as it correlated with .71 with the Marlowe-Crowne Social Desirability Scale. The BIDR has been used with different ethnic and cultural groups (Heine & Lehman, 1995; Li & Reb, 2009), and forensic samples (Kroner & Weekes, 1996). In this study, the Cronbach alpha coefficient for the full sample was .67, .65 in the American sample, and .95 in the Lebanese sample. The mean of the BIDR in this sample was 2.57 and the SD was .29.

**Vignette describing a psychopathic individual.** The participants were presented with a short vignette, written for this study, describing a person who fits the psychopathy construct as conceptualized by Cleckley (1955). After reading the vignette (see Appendix A), the participant is asked to write three words to describe the person presented in the vignette. The purpose of this question is to understand what aspects, behaviors, or characteristics the participants focused on and to investigate whether the language used (Arabic or English) would elicit any differences in the labels/words chosen by the participants. Also, the use of this vignette was thought to provide
an initial snapshot of how a psychopath (as seen in the West) would be described in Lebanon, given that the word “psychopath” has no equivalent in the Arabic language.

The demographic sheet. This sheet asked participants to provide information about their sex, age, race/ethnicity, nationality, citizenship, highest level of education completed, marital status, employment, whether they had ever been fired from a job, their longest period of unemployment, and/or student status.

Pilot Test

Given that many of the instruments used in this survey had not been translated or normed among Arab samples, the first task of this dissertation research involved translation and back-translation of the above-mentioned measures and took place in several steps. A Lebanese bilingual certified translator translated the items from English to Arabic. A panel of four experts including two linguistic bilingual experts and two bilingual experts in the field went through the translated instrument. The translated items were only selected if all four members deemed them suitable. After agreeing on all translated versions, the researcher gave the translated instruments to a small sample of Arabic-English bilingual individuals in order to 1) assess for initial psychometric properties and 2) to receive feedback from them on any problems they may have faced while completing the survey. The translation process occurred over a period of 2 months. The initial translated versions were revised based on the feedback from the pilot study and then the study proceeded.

Results

Data Preparation

Before proceeding with the analysis, the data were examined to determine the extent of missing data and outliers. There were no multivariate outliers using the Mahalanobis distance
criterion at \( p < 0.001 \). No univariate outliers were detected using \( z \) scores (3.29), except for one (Tabachnick & Fidell, 2007). However, given that this case was not a multivariate outlier, and the relatively small study sample size, the case was not deleted. Variables were also examined for skewness and kurtosis, and with the exception of trauma (skewness of 1.84 and kurtosis of 3.70), the assumption of normality was met. The trauma variable was not transformed as transformations are harder to interpret and not always recommended (Tabachnik & Fidell, 2007).

The original sample consisted of 160 participants, and the final sample consisted of 139 participants, after deleting 21 cases, with more than 75% of the data missing, including the psychopathy measure items.

There were no significant differences in scores between those who completed the survey on-line and those who took it in-person, with the exception of a difference on empathy, \( t (113) = 3.63, p < 0.001 \). In addition, there were no significant differences between the scores of Lebanese individuals who took the survey in Arabic (\( N = 6 \)) and those who took it in English (\( N = 53 \)), and no differences in scores between those who took Version A or Version B of the survey. Table 4 presents the means and standard deviations for the following variables: Psychopathy (including the four subscales Callous Trait, Interpersonal Manipulation, Erratic Lifestyle, and Criminal Tendencies), impulsivity, antisocial traits, empathy, contextualism, trauma, and impression management for the entire sample.

**Statistical Analysis**

Between-subjects multivariate analysis of variance (MANOVA) was used to test Hypotheses #1, #2, #6, and #8, in order to compare groups on the dependent variables. Pearson correlation coefficients were used to test Hypotheses #3, #4, and #5 and to measure the construct validity of the Hare Self-Report Psychopathy Scale by testing whether variables that have been
found to be related to the construct of psychopathy are related in this study. In order to test
Hypothesis #7, the effect of trauma on callousness, and eventually on psychopathy, regression
analysis using the Sobel test for mediation was used. In addition, chi-squares and t-tests were
used to compare frequencies and means of the trauma variable.

Comparison of Lebanese and American Adult Samples: Hypotheses #1 and #2

**Hypothesis #1.** Hypothesis 1 predicted that Lebanese adults will show higher scores on
contextualism and lower scores on psychopathy, antisocial traits, and empathy compared to the
American adults. Results of the evaluation of assumptions of normality, homogeneity of
variance-covariance matrices, linearity and multicollinearity were satisfactory. Using the Pillai’s
trace criterion, the results of the MANOVA indicated that the scores for participants from the
two countries differed significantly, \( F(9, 61) = 5.03, p<0.001 \), with a moderate effect size, partial
\( \eta^2 = .43 \). Table 5 presents the scores for each measure for the two countries. As can be seen in
Table 5, Lebanese adults had significantly lower scores on psychopathy \( F(1, 69) = 10.55, p < 0.01 \) and antisocial traits, \( F(1, 69) = 4.96, p=0.02 \) than the American sample. In contrast, the
Lebanese scored significantly higher than Americans on empathy, \( F(1, 69) = 18.62, p<0.001 \).
All other differences were not statistically significant. These findings partially support
Hypothesis #1 that predicted that the Lebanese adults would score lower than Americans on
psychopathy and antisocial traits. However, the contextualism findings were not statistically
significant, and contrary to what was expected, the Lebanese scored higher than Americans on
empathy.

**Hypothesis #2: the Hare Self-Report Psychopathy Scale subtests.** Hypothesis 2
predicted that Lebanese adults will score lower on the Criminal Tendencies and Erratic Lifestyle
subscale of the Hare Self-Report Psychopathy Scale and higher on the Interpersonal
Manipulation and Callous Trait scales than American adults. The results of the MANOVA showed, as seen in Table 5, that Lebanese adults had significantly lower scores on Callous Trait $F(1, 69) = 7.79, p < 0.01$, Interpersonal Manipulation $F(1, 69) = 9.23, p < 0.01$, Criminal Tendencies $F(1, 69) = 17.40, p < 0.001$, and differences on Erratic Lifestyle were not significant. Therefore, Hypothesis #2 was also partially supported.

**Inter-Correlations among the Characteristics: Hypotheses #3 and #4**.

**Hypothesis #3: Construct validity of the HSRP.** In order to test the construct validity of psychopathy in this sample, Pearson’s correlation coefficients were computed for psychopathy, impulsivity, antisocial traits, and empathy. Table 6 displays the inter-correlations among these variables for the total sample, as well as for the American and Lebanese samples. Hypothesis 3 predicted that high psychopathy scores will be associated with lower empathy scores, and higher scores on impulsivity and antisocial traits. As expected, psychopathy scores were positively correlated to antisocial traits within each group (American vs. Lebanese) ($r$ varied from .83 to .93, $p < 0.01$), and negatively correlated with empathy within each group ($r$ varied from -.48 to -.58, $p < 0.01$). While higher psychopathy scores were significantly related to higher impulsivity scores in the American sample ($p <0.01$), in contrast, the correlations were not significant in the Lebanese sample. Therefore, Hypothesis #3 was only partially supported.

**Hypothesis #4.** It was predicted that high contextualism scores will be related to low scores on antisocial traits and Criminal Tendencies of the HSRP. Using Pearson’s correlation coefficients, and as seen in table 6, higher contextualism scores were related to lower antisocial traits in the Lebanese sample ($r = -.28, p <0.01$) and total sample ($r = -.21, p <0.01$), but not in the American sample. Also, contextualism scores were related to lower scores on Criminal
Tendencies only in the Lebanese sample ($r = -0.25, p < 0.01$). Therefore, Hypothesis #4 was partially supported.

**Trauma Findings in Total Sample and between Groups**

**Hypothesis #5: Inter-correlations.** Hypothesis 5 predicted that high trauma scores will be associated with high psychopathy scores and low empathy scores. Using Pearson’s correlations, and as seen in table 6, high trauma scores were negatively correlated with empathy scores only in the total sample, $r = -0.33$, $p < 0.01$. This finding only partial supports Hypothesis #5 as this result was expected across the total sample and for both groups. To further test the relationship between trauma and empathy, Pearson’s correlation coefficients were computed for the two subscales of the empathy measure (cognitive items vs. affective items), and trauma. Trauma scores were negatively correlated with the cognitive empathy scale only in the American sample ($r = -2.72$, $p = 0.02$) and the total sample ($r = -2.67$, $p < 0.01$).

Given the differences in the demographic variables between the groups, as discussed earlier, particularly the higher number of female participants and the higher educational level in the Lebanese group, partial correlations controlling for sex and education were conducted for the all variables to test whether there would be any changes in the correlations’ strengths or direction. However, there were no significant changes, and the relationships between the key variables noted above were essentially the same.

**Hypothesis #6: Group differences among Lebanese and American adults.** It was expected that Lebanese adults will show higher scores on trauma than American adults. According to above-mentioned MANOVA, and as seen in table 5, results showed that Americans scored higher on trauma than their Lebanese counterparts, contrary to what was expected, $F (1, 64) = 3.29$, $p = 0.07$. It is also worth mentioning that the American sample showed a large SD
from the mean as seen in table 5 (\( M = 9.51, SD = 9.94 \)), which was not the case in the Lebanese sample (\( M = 6.00, SD = 2.90 \))

**Hypothesis #7: Callous Trait as a mediator between trauma and psychopathy.**

Before proceeding to test hypothesis 7, it was important to look into the frequencies of the different types of trauma in the Lebanese and American groups. Collective trauma appears to be more prevalent in Lebanon than in the United States, e.g., 88.1% Lebanese reported living in a war zone compared to 14.5% of the Americans, whereas other traumas, deemed personal, were found to be more prevalent among the Americans. For example, 52% of the Americans reported having being physically harmed in their lifetime compared to 22% of the Lebanese. In addition, 26.7% of Americans reported that they had been assaulted by a weapon, and 58.7% reported they had been threatened face-to-face, compared to 3.4% and 28.8% of the Lebanese, respectively. Independent t-tests were conducted to compare the group means, and the differences among the types cited above were significant. Table 7 displays the frequencies of the different types of traumas among the two nationality groups, as well as the means, chi squares, and t values.

Linear regression analysis was used to investigate whether scores on the Callous Trait measure mediate the effect of trauma on psychopathy. The results indicated that trauma was a significant predictor of the Callous Trait, \( \beta = .02, SE = .005, p < .001 \), and that Callous Trait was a significant predictor of psychopathy, \( \beta = .70, SE = .073, p < .001 \). The Sobel test was conducted and the results supported the mediation hypothesis, \( z=3.69, SE = .03, p < .001 \). Thus, there was support for Hypothesis #7 for the full sample.

**Sex Differences in the Psychopathy Scores: Hypothesis #8**

In order to determine whether there were sex differences in the psychopathy scores, and to test Hypothesis #8, a between-subjects multivariate analysis of variance was performed (see
With the use of Pillai’s Trace criterion, the results indicated that psychopathy scores differed significantly for the two sexes, $F(4, 87) = 4.21, p<0.001$, with a small effect size, partial $\eta^2 = .16$. Furthermore, males had significantly higher scores on psychopathy ($M = 2.19, SD = .37$) than females ($M = 1.83, SD = 0.36$), $F (1, 90) = 16.50, p =0.001$. Males also scored higher than the females on Callous Trait, Interpersonal Manipulation, Erratic Lifestyle, Criminal Tendencies, and all these differences were statistically significant. These results support Hypothesis #8 whereby male participants were expected to score higher than females on psychopathy. It is worth noting that using the Pillai’s Trace criterion, the interaction of sex and nationality of the participant was not significant for the psychopathy scores ($F(4, 87) = .79, p=.53$).

**Vignettes: Qualitative Findings**

Table 9 shows the frequency of words used most often by both groups of participants to describe Fadi, the person depicted as a psychopath in the vignette. The first word given by each participant was entered and 13 main words/labels were found (defined as having at least 2 people per each group use them). In the Lebanese sample, liar/dishonest, was the most frequently used word, followed by psychopath, criminal, and unhappy/unsatisfied. In the American sample, the most frequently used word/label was psychopath/sociopath, followed by liar/dishonest, conniving, manipulative, and unhappy/unsatisfied, and then smart/successful.

**Discussion**

This research investigated the construct of psychopathy in a sample of Lebanese adults living in Lebanon and New York City and compared them to a sample of American adults in the greater New York City area. Hypothesis #1 was partially supported. Lebanese participants scored lower than the Americans on psychopathy and antisocial traits as expected, but scored higher on empathy, which was not expected. In addition, there was no difference between the
contextualism scores of the Lebanese and Americans samples. Given that Lebanon is considered a collectivistic nation, it was expected that Lebanese individuals would score higher on contextualism than Americans; however, both groups scored almost the same. This is an interesting finding, which may support the many criticisms of the Individualism-Collectivism (I-C) theory, as many individuals may present as individualistic or collectivistic in different contexts. A concern with I-C, as noted in the literature, is whether individualism and collectivism are culture-level or individual-level variables, and whether they are continuous or orthogonal variables (see Brewer & Chen, 2007). Another concern is how the I-C variables are measured and what groups are being referred to within the scales/items (co-workers, friends, family, neighbors, etc). This study only focused on contextualism, which is seeing people in a context, and there may be different aspects of collectivism that may not have been captured (harmony, seeking advice from others, values, etc). In addition, the majority of the Lebanese sample was highly educated and opted to complete the survey in English, which may have affected the results, leading to lower scores on contextualism than anticipated. However, the American sample still scored above average on the contextualism variable. Also, it is not known whether the Lebanese who participated in the study live in rural or urban areas, which may affect how they view themselves in relation to their environment.

Hypothesis #2 suggested that Lebanese adults would score lower on Criminal Tendencies and Erratic Lifestyle than Americans, and would score higher on Interpersonal Manipulation and Callous Trait. However, the findings provided only partial support with Americans scoring higher on Interpersonal Manipulation and Callous Trait. These results were inconsistent with some of the prior literature. For example, Neumann et al. (2012) found that Interpersonal Manipulation was higher among individuals from the Middle East, Africa, and East
Asia compared to other individuals in the sample. These results may be in part explained by the work of Shariat et al. (2010) who discussed the construct of “taarof”, “a form of discretion and compliment in which people try to show their respect in a colorful way,” (Shariat et al., 2010, p. 687) that could lead to insincere compliments; however, “taarof” is not perceived as deceitful or superficial in Iran. For example, people often invite others to their home before saying goodbye to show respect and hospitality, and not because they genuinely intend the invitation. This behavior does not suggest that the person is being deceitful or superficial; he/she is just following a cultural expectation. Shariat et al. (2010) also noted that this behavior and/or similar behaviors are not regarded as pathological because they do not deviate from cultural norms. They also provided another explanation based on the duality of social life in Iran. They differentiated between the inner self expressed to family and close friends, and the outer self that is the formal demeanor of the individual and that conforms to social norms. The latter may be derivative of the collectivistic nature or even the political climate based on the suppression of individuals’ wills so that conflict with mainstream thinking and governmental rules is avoided. Therefore, there is a self that is obeying social norms, even if the person does not agree with the norms. While this could be perceived as deceitful in a way, it is not pathological given the cultural expectations, and may impact the way individuals from non-Western cultures score on the interpersonal items of the psychopathy measures. The items used in the psychopathy measures may not be able to distinguish between pathological behaviors, and those behaviors based on respect, ensuring harmony, or cultural expectations; this finding is consistent with the findings presented earlier by Kim et al. (2008). The Hare Self-Report Psychopathy Scale items assess overt psychopathic behavior, for example: “I have pretended to be someone else in order to get something”, “I purposefully flatter people to have them on my side”, “I can talk people
into anything.” The items on the Interpersonal Manipulation subscale reflect an overt quality of taking advantage of people in a negative manner, and not in a manner that is conducive to harmony or respect. Therefore, this may explain why Lebanese individuals scored lower than expected. Also, if “taarof” indeed is a cultural way of being, individuals from that culture would not be engaging in the behavior in a consciously manipulative way, and may not be able to identify their behavior as manipulative in a self-report measure. In the Shariat et al. (2010) study, the Arrogant/Deceitful factor was the least discriminatory among the factors in differentiating a psychopath from a non-psychopath, and this may be due to the effect of “taarof”, various ways of relating to others, and how people perceive and understand certain items while filling in the survey in context of their cultural background.

Hypothesis #3 was only partially supported. Psychopathy scores were positively related to antisocial traits within each sample (American and Lebanese), and negatively correlated with empathy. However, while higher psychopathy scores were related to higher impulsivity scores in the American sample, they were positively but not significantly related in the Lebanese sample. Impulsivity has been found to be positively related to psychopathy in studies conducted in North America. Americans and Lebanese adults’ scores did not significantly differ on impulsivity, yet impulsivity was only positively correlated with psychopathy in the American sample. This may suggest that impulsivity is not as essential to the construct of psychopathy in the Arab world, unlike lack of empathy or antisocial traits.

Higher contextualism was related to lower antisocial traits and Criminal Tendencies in the Lebanese sample, but not the American sample. Therefore, Hypothesis #4 was also only partially supported. As mentioned previously, individuals can manifest their individualism and collectivism affiliations differently depending on situations. While scores on contextualism were
similar across the two nationality samples, it may be that for the Lebanese, contextualism can be related more to values that affect behaviors directly, while it could serve a different purpose among Americans. For Americans, contextualism may affect how they cognitively assess situations or relationships, but may not manifest itself as a value that directly affects behaviors. For example, an American individual may be able to cognitively appreciate the importance of one’s family or social network, but would still engage in a non-conforming behavior that serves his or her own personal goal. A Lebanese individual, however, may avoid engaging in the non-conforming behavior if they know that the behavior would affect the relationship with their family or social network.

Hypothesis #5 was supported in the total sample, but not in the American or Lebanese samples, whereby high trauma scores were negatively correlated with empathy scores. Also, Americans scored higher on trauma than the Lebanese, contrary to what was expected in Hypothesis #6. These findings may have been due to the characteristics of the samples, including the large number of minorities with high levels of trauma in the American sample. Also, the Lebanese samples included more women, and individuals with higher educational backgrounds. It is also worth noting that most of the research on trauma has focused on the diagnosis of PTSD rather than exposure to trauma, or even more importantly the type of trauma experienced and how they impact empathy. Trauma was expected to be more prevalent among the Lebanese sample based on the prevalence of wars and political instability that have been ongoing in Lebanon since the mid-1970’s. Collective trauma (e.g. living through war) was more prevalent in Lebanon than in the United States, whereas personal traumas (e.g. being assaulted by a weapon, threatened face-to face) were found to be more prevalent among the Americans. Refer to Table 8 for prevalence of these traumas among the two groups and the mean differences. There may be a
different effect of the type of trauma (collective vs. personal) on the individual’s affective and cognitive experiences. A collective trauma targets the group rather than an individual, and feelings of responsibility, shame, or guilt may not be dominant in the victim, while they may become more prominent when the traumatic event is more personal (such as being punched, being raped, being robbed, etc). There is sparse literature on the difference between personal and collective trauma and how they impact individuals’ well-being and personality traits. One study conducted by Giacaman, Shannon, Saab, Aya, and Boyce (2007) found that both personal and collective experiences of trauma equally affected the mental health of 3,415 Palestinian adolescents, specifically depressive symptoms. Personal exposure to trauma was defined as one’s house being searched, being arrested, one’s body being searched, and collective exposure was defined as exposure to tear gas, sound bombs, shelling, etc. A problem with the definition of personal traumatic experiences in this study is the difficulty in differentiating them from the impact of the collective trauma experiences. In other words, in war, occupation, or oppression, many people go through the experiences defined as “personal” in Giacaman et al. (2007) study (body searched, house searched, etc), which may not feel personal among the victims, but rather an extension of the war. It would be interesting in future studies to further investigate the impact of personal vs. collective trauma on empathy, negative affect, and personality traits.

It is also worth mentioning that with regard to the Callous Trait, it was expected that scores would be higher in the Lebanese sample than the American sample (Hypothesis #2) because Lebanese individuals were expected to score higher on trauma, and therefore would score higher on Callous Trait. While Karam et al. (2006, 2014) reported lower prevalence rates of PTSD in the past year in the Lebanese samples compared to the American samples in their studies, it was expected that the Lebanese would score higher on the Callous Trait due to the
nature of the trauma (collective trauma including wars), and not the prevalence of a clinical diagnosis.

Hypothesis #7 was supported by the findings that Callous Traits mediated the relationship between high levels of trauma and high scores on psychopathy in the overall sample. This is an important finding that may explain the pathway for developing psychopathic-like traits. A mere exposure to trauma may not in and of itself be enough to lead to psychopathic-like traits, but these findings suggest that there is an impact through the development of callous traits. Witnessing trauma may lead to callousness (numbing, lack of empathic concern, etc), which may in turn lead to psychopathy. This may be an important key to social and clinical interventions in individuals exposed to high levels of trauma, to foster empathy and concern for others in order to avert a path for developing psychopathic-like traits. In fact, in a review of the literature, Hawes, Price, and Dadds (2014) found that the six studies they investigated found that social-learning-based parent training led to improvement in callous and unemotional traits that could be lasting, especially when this training was delivered early in childhood.

The final hypothesis, Hypothesis #8, was supported and indicated that women in the sample scored lower than men on psychopathy and its subscales. This finding mirrors almost all findings on sex and psychopathy in different countries as discussed in the literature review. It suggests that sex differences in psychopathy may be due to biological differences that are not connected to culture. It also suggests that it may be due to sex and gender roles that tend to be similar in many cultures, which in turn affect women and men’s behaviors, such as women exhibiting more internalizing behaviors rather than externalizing behaviors as compared to men.

The vignette findings indicate that Americans labeled Fadi a psychopath more often than their Lebanese counterparts (17.3% of Americans vs. 10.2% Lebanese). This was expected as
there is no word for psychopathy in the Arabic language. Therefore, people would be expected to use the word less in Lebanon than the US. The Lebanese sample included individuals who are highly educated and who overwhelmingly chose to answer the survey in English, which may explain why the word was still used, albeit less frequently. In addition, Americans used the words conniving and manipulative more frequently to label Fadi than their Lebanese counterparts. This may lend further support to the idea that the interpersonal items may be more relevant to the construct among Americans rather than the Lebanese. Finally, more Lebanese labeled Fadi as a criminal compared to the Americans, and this may be due to abovementioned findings that deviation from norms is less tolerated in collectivistic societies (Schwartz, 2006).

Limitations of this Research

A few limitations to this research are important to highlight. First, only one of the instruments used had previously been translated into Arabic and used in research. Although the instruments were translated and back-translated and tested before proceeding with data collection, issues of cultural equivalence and relevance may still be of concern. However, given the lack of measures available in Arabic, this procedure was the most feasible. Only six individuals chose to use the Arabic version of the survey, and therefore, the above-mentioned issues may not be relevant in this study. Second, the Lebanese adults who took the survey are not necessarily representative of Lebanese adults living in Lebanon. For example, the educational level of the Lebanese sample, whereby over 52% had a graduate degree or higher, compared to only 16% of the American sample, may have influenced the results. In addition, over 70% of the Lebanese sample were females, compared to half the American sample. The sex ratio is important given that psychopathy has been shown to be more prevalent in males than females. As noted above, both education and sex may have played a role in affecting the results; however,
when partial correlations were conducted controlling for their effect, there were no change in the relationships found between the dependent variables. While the Lebanese sample was not typical of the Lebanese population at large, the American sample was not typical either. Most of the sample was recruited on Craigslist, and non-White individuals made up half this sample. Specifically, 26.7% of the American sample identified as Black or African-American, compared to only 15.9% of New York City residents identified as Black based on data from the 2010 Census (US Census Bureau, 2015). In the 2010 census as well, 65.7% of New York City residents identified as White, while this sample had 50.7% individuals who identified as White.

Third, there were differences among the American and Lebanese samples in the internal reliability in some of the measures used. Interestingly, some measures that were developed in the West showed better reliability in the Lebanese sample than the American sample. This may be due to the higher educational level of the Lebanese individuals, since most of the measures developed in North America and the West were normed using primarily White students. For example, the Basic Empathy Scale, which showed group differences in reliability in the current study, was developed using 15-year-old school students in England. The Paulhus’ Balanced Inventory of Desirable Responding, which also showed differences in internal reliability between the two samples, was developed using undergraduate students in Canada.

Fourth, there were challenges in recruiting Lebanese individuals living in New York City, which influenced the decision to recruit participants online. The low response could be due to the fact that many Lebanese individuals did not want to come in person due to scheduling issues or insufficient motivation to participate. There is also evidence that Arabs living in the US have higher than median incomes, which may have decreased the incentive to participate. For example, according to the Arab American Institute (2012), the median income for Arab American
American households in 2008 was $56,331, higher than the median income in the United States ($51,369). Also, the mean Arab-American individual income is 27% higher than the national average (Arab American Institute, 2012). A 10 US dollar compensation may not have been sufficient for individuals to travel to the office location to participate. Although some personal connections were used to reach out to participants, the response rate was still low. Fifth, using the internet to recruit participants in Lebanon may have biased the results as the access to internet is difficult in some communities as the connectivity is poor. In addition, it has been reported that in 2014 there were 74.7 users per 100 in Lebanon compared to 87.4 users per 100 in the USA (World Bank, 2016). It is also important that wide access to the internet is relatively new, since only half the population in Lebanon had access to the internet (50.2%) compared to 69.7% of the US population in 2011 (World Bank, 2016). There is no known data available at this time on the demographics of users in Lebanon. In addition, taking surveys on-line or even in-person in Lebanon is not as widespread as it is in the United States. In fact, the Arab World is lagging behind in scientific research (Abu-Orabi, 2016). It has been reported that expenditure on Arab scientific research is approximately 0.2 to 0.6% of GDP compared to 2 to 4% of GDP in industrialized countries. Also, the number of researchers in the Arab world is 500 per million compared to 5,000 per million in industrialized countries (Abu-Orabi, 2016). If there is no awareness on the importance of research in these countries, individuals will not be motivated to enroll in research. This may have had an impact on individuals’ decision to participate.

Implications and Future Recommendations

Despite some limitations and challenges, this research is important given the lack of studies investigating psychopathy in Arab populations, and the need to better understand the construct of psychopathy and its relevance in this cultural group. One of the more important
recommendations is that a more representative sample should be used, where people from various geographical locations in Lebanon would be included. The focus in psychopathy research, and sometimes unfortunately in cross-cultural research, is the use of college students due to ease of recruitment and administration. Missing from this study is the access to the large population in Lebanon who do not have access to the Internet and who are not fluent in English. A comparison of Lebanese living in Lebanon and those living in the US would provide an interesting view of acculturation and might lead to differences in scores on psychopathy and its affective and behavioral correlates. Therefore, it is important that more individuals be recruited in person, and for Arabic to be used in the measures to better reflect the cultural and linguistic relevance of constructs.

Second, these findings indicate that empathy is an important factor to consider when investigating the construct of psychopathy. There may be a need to move away from focusing on behavioral correlates (antisocial and criminal behaviors), and to focus more on affective components and find ways to assess these affective constructs in a more valid and reliable manner. While statistically, the behavioral correlates of psychopathy are significant and reliable in assessing the construct, they do not capture the construct fully. There also may be a need to move toward an examination of the role of trauma and its role in the development of psychopathic traits, as there may be room for intervention especially during childhood. Trauma has been investigated mostly under a PTSD diagnosis, and sometimes as mere exposure to traumatic events. A shift to focusing on different types of trauma and the clinical outcomes associated with them is important, whether a PTSD diagnosis is warranted or not.

Finally, with regard to clinical implications of the construct, is treating the psychopath possible or effective? Salekin, Worley, and Grimes (2010) found in a review of studies on the
treatment of psychopaths, including eight studies with adults and eight studies with children and adolescents, that treatments for adults show low to moderate success in three of the eight studies demonstrating treatment gains. Treatment of youth appears to be more promising with six of the eight studies showing treatment benefits. There has been a longstanding pessimistic view of treating psychopaths, and many studies have found poor treatment outcomes (e.g. Ogloff, Wong, Greenwood, 1990; Richards, Casey, & Lucente, 2003). However, it is worth noting that the majority of these studies were conducted in forensic settings with offenders. In a study with more positive results using a civil psychiatric sample, Skeem, Monahan, and Mulvey (2002) found a reduction in violence among the psychopathic patients with longer treatment times (seven or more sessions). Salekin, Worley, and Grimes (2010) reported that there is a need for better study designs in addition to more outcomes variables other than recidivism, which many studies were measuring as the main outcome. While recidivism is important to measure, there are many variables that may indicate a therapeutic success, such as improvement in relationships, maintaining a job, and improved communication skills. There should be more studies investigating treatment of psychopaths in more civil and non-forensic settings as well. Also, while the PCL-R has been widely used to assess psychopathy, some researchers have maintained a very narrow view of the need to use it solely as an assessment tool of psychopathy. While psychometric properties are important, researchers and clinicians must find ways to investigate psychopathy with an open mind. For instance, Harris and Rice (2006) in a review of the psychopaths’ treatment literature reported that the only studies that should be taken into consideration are those that use the PCL-R and look at recidivism as an outcome variable. This view overlooks the work of many researchers and clinicians who would want to define
successful outcomes in a more varied and positive way, as well as look at the construct of psychopathy as richer and more complex.
<table>
<thead>
<tr>
<th>PPI Factors</th>
<th>PPI Content Scales</th>
<th>Description</th>
<th>N of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPI-I (Fearless</td>
<td>Social Influence</td>
<td>Ability to manipulate others</td>
<td>18</td>
</tr>
<tr>
<td>Dominance)</td>
<td>Fearlessness</td>
<td>Absence of anticipatory anxiety and eagerness to engage in risky behaviors</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Stress Immunity</td>
<td>Absence of reaction to events that provoke anxiety</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PPI-II (Self-Centered</td>
<td>Machiavellian Egocentricity</td>
<td>Ruthless and narcissistic attitudes in interpersonal functioning</td>
<td>20</td>
</tr>
<tr>
<td>Impulsivity)</td>
<td>Rebellious Nonconformity</td>
<td>Unconventionality and a lack of concern towards conforming to norms</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Carefree Nonplanfuness</td>
<td>Indifference towards planning and thinking ahead.</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Coldheartedness</td>
<td>Remorselessness and lack of empathy</td>
<td>16</td>
</tr>
<tr>
<td>Does not load on any</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 2

*Summary of Findings from the Multicultural Studies of Psychopathy in Non-Western Cultures*

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>3,675 adolescents in Hong Kong</td>
<td>351 male Iranian prisoners</td>
<td>33,000 individuals from 58 countries</td>
</tr>
<tr>
<td>Measure</td>
<td>Antisocial Process Screening Device</td>
<td>The PCL:SV</td>
<td>The SRP-E (short version, 19 items)</td>
</tr>
<tr>
<td>Language Used</td>
<td>Translated to Chinese</td>
<td>Unclear</td>
<td>Translated in some countries, English in others</td>
</tr>
<tr>
<td>Normed/Comparison Group</td>
<td>None</td>
<td>US normative sample used to compare results. Not normed.</td>
<td>American comparison group used. Not normed.</td>
</tr>
<tr>
<td>Findings</td>
<td>3 Factors Callous, Narcissistic, Impulsive</td>
<td>3 Factors Arrogant/Deceitful, Deficient Emotional Experience, Impulsive/Irresponsible</td>
<td>4 Factors Interpersonal, Antisocial, Affective, Lifestyle</td>
</tr>
</tbody>
</table>
Table 3

**Descriptive Statistics of Lebanese and American Participants**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Total Sample (N=139)</th>
<th>American (N=75)</th>
<th>Lebanese (N=59)</th>
<th>X^2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N (%)</td>
<td>N (%)</td>
<td>N (%)</td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>53 (38.1)</td>
<td>36 (48.0)</td>
<td>16 (27.1)</td>
<td>6.06*</td>
</tr>
<tr>
<td>Females</td>
<td>86 (61.9)</td>
<td>39 (52)</td>
<td>43 (72.9)</td>
<td></td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>80 (57.6)</td>
<td>38 (50.7)</td>
<td>37 (62.7)</td>
<td>NT*</td>
</tr>
<tr>
<td>Black</td>
<td>20 (14.4)</td>
<td>20 (26.7)</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td>5 (3.6)</td>
<td>5 (6.7)</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td>10 (7.19)</td>
<td>4 (5.2)</td>
<td>6 (10.2)</td>
<td></td>
</tr>
<tr>
<td>Mixed race</td>
<td>8 (5.8)</td>
<td>6 (8)</td>
<td>2 (3.4)</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>15 (10.8)</td>
<td>2 (2.7)</td>
<td>13 (22)</td>
<td></td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never married</td>
<td>74 (53.2)</td>
<td>42 (56)</td>
<td>30 (50.8)</td>
<td>3.13</td>
</tr>
<tr>
<td>Married</td>
<td>45 (32.4)</td>
<td>20 (26.7)</td>
<td>22 (37.3)</td>
<td></td>
</tr>
<tr>
<td>Divorced</td>
<td>13 (9.4)</td>
<td>8 (10.7)</td>
<td>5 (8.5)</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>6 (4.32)</td>
<td>4 (5.4)</td>
<td>2 (3.4)</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Up to high school</td>
<td>11 (7.9)</td>
<td>7 (9.3)</td>
<td>4 (6.8)</td>
<td>38.95**</td>
</tr>
<tr>
<td>Some college</td>
<td>23 (16.5)</td>
<td>21 (28)</td>
<td>2 (5.1)</td>
<td></td>
</tr>
<tr>
<td>BA/BS/Associate’s</td>
<td>59 (42.4)</td>
<td>35 (46.6)</td>
<td>22 (37.3)</td>
<td></td>
</tr>
<tr>
<td>Graduate or higher</td>
<td>46 (33.2)</td>
<td>12 (16)</td>
<td>31 (52.6)</td>
<td></td>
</tr>
<tr>
<td>Currently</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time</td>
<td>64 (46)</td>
<td>32 (42.7)</td>
<td>27 (45.8)</td>
<td>7.89</td>
</tr>
<tr>
<td>Part-time</td>
<td>33 (23.7)</td>
<td>21 (28)</td>
<td>12 (20.3)</td>
<td></td>
</tr>
<tr>
<td>Student</td>
<td>11 (7.9)</td>
<td>3 (4)</td>
<td>8 (13.6)</td>
<td></td>
</tr>
<tr>
<td>Unemployed</td>
<td>21 (15.1)</td>
<td>14 (18.7)</td>
<td>7 (11.9)</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>8 (5.8)</td>
<td>3 (4)</td>
<td>5 (8.5)</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* NT refers to not tested. For race, the differences between the groups was expected given the difference in nationality, and therefore, chi squares were not tested. Missing values were omitted from total number.

*p<0.05, **p<0.01, ***p<0.001


Table 4

*Descriptive Statistics of the Dependent Variables in Total Sample*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Test Used (Range of Scores)</th>
<th>M</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychopathy</td>
<td>Hare Self-Report of Psychopathy (1 to 4)</td>
<td>1.98</td>
<td>.40</td>
<td>97</td>
</tr>
<tr>
<td>Callous Trait</td>
<td>-</td>
<td>2.05</td>
<td>.37</td>
<td>121</td>
</tr>
<tr>
<td>Interpersonal Manipulation</td>
<td>-</td>
<td>2.11</td>
<td>.48</td>
<td>120</td>
</tr>
<tr>
<td>Erratic Lifestyle</td>
<td>-</td>
<td>2.13</td>
<td>.44</td>
<td>124</td>
</tr>
<tr>
<td>Criminal Tendencies</td>
<td>-</td>
<td>1.53</td>
<td>.49</td>
<td>118</td>
</tr>
<tr>
<td>Impulsivity</td>
<td>Barratt Impulsiveness Scale (1 to 4)</td>
<td>2.26</td>
<td>.31</td>
<td>119</td>
</tr>
<tr>
<td>Antisocial traits</td>
<td>Antisocial Personality Disorder Sale from PDQ-4+ (1 to 4)</td>
<td>1.65</td>
<td>.56</td>
<td>130</td>
</tr>
<tr>
<td>Empathy</td>
<td>Basic Empathy Scale (1 to 4)</td>
<td>2.95</td>
<td>.37</td>
<td>119</td>
</tr>
<tr>
<td>Contextualism</td>
<td>Contextualism Scale (1 to 4)</td>
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<td>.47</td>
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Table 5

*Results of MANOVA Comparing Lebanese and American Adults*

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*Note.* N =43 for Americans, N= 28 for Lebanese, and total N = 71.

*Degrees of freedom (df)= 1, df(errors) =69 for all variables

*p<0.05, **p<0.01, ***p<0.001
Table 6

Intercorrelations for the American, Lebanese, and Total Samples

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Note: Intern Manip = Interpersonal Manipulation. *p<0.01, **p<0.001
Table 7

Prevalence and Mean Number of Traumas and Victimization Experiences in Lebanese and American Adults

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<td>Lived in war zone</td>
<td>11 (14.7)</td>
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<td>81.06***</td>
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<td>Direct combat (in war, gangs)</td>
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<td>Exposure to chemicals/radioactivity</td>
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<td>39 (52.0)</td>
<td>13 (22.0)</td>
<td>10.63***</td>
<td>.52 (50)</td>
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<tr>
<td>Threatened with a weapon</td>
<td>29 (38.7)</td>
<td>6 (10.2)</td>
<td>12.43***</td>
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<td>17 (28.8)</td>
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<td>.59 (49)</td>
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<td>2 (3.4)</td>
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<td>As a child, physically harmed</td>
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<td>9 (15.3)</td>
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<td>As a child, physically abused</td>
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<td>Attempt but not actually coerced into sex</td>
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<td>Touched private parts against our will</td>
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<td>12 (20.3)</td>
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<td>Close person murdered</td>
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<td>Been kidnapped or held captive</td>
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Note: N = number; M = mean; SD = standard deviation; N= 75 in American sample and N= 59 in Lebanese sample.
*p<0.05, **p<0.01, ***p<0.001
Table 8

*Results of MANOVA: Sex Differences in Psychopathy Scale Scores*

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<td></td>
<td>Females</td>
<td>1.37</td>
<td>.42</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* M = mean; SD = standard deviation; N = 41 for males and N = 53 for females.

*p<0.5, *p<0.01, ***p<0.001
### Table 9

**Words/Labels Used in the Vignettes by Lebanese and American Adults**

<table>
<thead>
<tr>
<th>Word/Label Written</th>
<th>Americans N (%)</th>
<th>Lebanese N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychopath (Sociopath)</td>
<td>13 (17.3)</td>
<td>6 (10.2)</td>
</tr>
<tr>
<td>Liar/Dishonest</td>
<td>8 (10.7)</td>
<td>11 (18.6)</td>
</tr>
<tr>
<td>Conniving</td>
<td>7 (9.3)</td>
<td>3 (5.1)</td>
</tr>
<tr>
<td>Manipulative</td>
<td>7 (9.3)</td>
<td>2 (3.4)</td>
</tr>
<tr>
<td>Unhappy/Unsatisfied</td>
<td>7 (9.3)</td>
<td>6 (10.2)</td>
</tr>
<tr>
<td>Smart/Successful</td>
<td>5 (6.7)</td>
<td>2 (3.4)</td>
</tr>
<tr>
<td>Detached</td>
<td>4 (5.3)</td>
<td>2 (3.4)</td>
</tr>
<tr>
<td>Mentally Ill</td>
<td>3 (4.0)</td>
<td>4 (6.8)</td>
</tr>
<tr>
<td>Criminal</td>
<td>2 (2.7)</td>
<td>6 (10.2)</td>
</tr>
<tr>
<td>Cold-hearted</td>
<td>2 (2.7)</td>
<td>0</td>
</tr>
<tr>
<td>Arrogant</td>
<td>2 (2.7)</td>
<td>0</td>
</tr>
<tr>
<td>Antisocial</td>
<td>0</td>
<td>2 (3.4)</td>
</tr>
<tr>
<td>Amoral/No Conscience</td>
<td>1 (1.3)</td>
<td>4 (6.8)</td>
</tr>
<tr>
<td>Other</td>
<td>3 (4.0)</td>
<td>1 (1.3)</td>
</tr>
<tr>
<td>Missing</td>
<td>10 (13.3)</td>
<td>10 (16.9)</td>
</tr>
</tbody>
</table>

*Note.* The category “Other” includes words that only 1 participant used in each group (e.g. no shame, deviant)
Figure. PCL-R four-factor model of psychopathy. Source: Hare and Neumann (2006).
Demographic sheet

1. What is your sex?  □ Male  □ Female  □ Intersex

2. What is your age? ________

3. What is your race/ethnicity? (Please check all that apply to you)
   □ White
   □ Hispanic, Latino, or Spanish origin
   □ Black or African-American
   □ American Indian or Alaska native
   □ Asian Indian  □ Chinese
   □ Filipino  □ Japanese
   □ Korean  □ Vietnamese
   □ Native Hawaiian  □ Guamanian or Chamorro
   □ Samoan
   □ Other Asian. Print race __________________________
   □ Other Pacific Islander. Print race ________________
   □ Other race. Print race __________________________

4. Where were you born?
   □ In the USA
   □ Outside the USA

   Print name of foreign country: __________________________

5. Are you a citizen of the United States?
   □ Yes, born in the USA
   □ Yes, born in Puerto Rico, Guam, the US Virgin Islands, or Northern Marianas
   □ Yes, born abroad of US citizen parent(s)
   □ Yes, US citizen by naturalization Print year of naturalization: __________
   □ No, not a US citizen Print country or countries of citizenship: ______________

6. a) If you were born outside the USA. When did you come to live in the United States?
   Print year: ______________

---

1 Two additional measures were included in the original survey, the State-Trait Anxiety Inventory (STAI; Spielberger, Gorsuch, & Lushene, Vagg, & Jacobs, 1983) to measure anxiety, and the Differential Emotions Scale - IV (DES-IV; Izard et al., 1993) to assess several positive and negative emotions, including shame and guilt, but are not included here.
b) Where were you living before you came to the United States. *Print country’s name:* __________

7. What is the highest degree or level of school that you have COMPLETED?
   - No schooling completed
   - Nursery school
   - Kindergarten
   - Grades 1 through 11. *Print grade:* __________
   - 12th grade – No diploma
   - Regular high school diploma
   - GED or alternative credential
   - Some college
   - Bachelor’s degree (for example: BA, BS)
   - Associate’s degree (for example: AA, AS)
   - Master’s degree (for example: MA, MS, MBA)
   - Professional degree beyond a bachelor’s degree (for example: JD, MD, DDS)
   - Doctorate degree (for example: Phd, EdD)

8. What is your current marital status?
   - Married
   - Widowed
   - Divorced
   - Separated
   - Never married
   - Other. *Please specify* __________

9. Are you currently employed?
   - Yes, part-time
   - Yes, full-time
   - No, I am a homemaker
   - No, I am retired
   - No, I am in school full-time
   - No, I am unemployed

10. Have you ever been fired from a job?
    - Yes
    - No

11. How many months out of the last 5 years have you been without a job?
    - Less than 6 months
12. Are you **currently** a student?
- Yes
- No

*A number of statements which people have used to describe themselves are given below. Read each statement and then circle the appropriate number to the right of the statement to indicate how you generally feel. There is no right or wrong answer. Do not spend too much time on any one statement; just do your best to answer as quickly and as honestly as you can.*

<table>
<thead>
<tr>
<th>Measure: State-Trait Anxiety Inventory (STAI; Spielberger, Gorsuch, &amp; Lushene, Vagg, &amp; Jacobs, 1983)</th>
<th>Almost Never/ Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>Almost Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel pleasant.</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel nervous and restless.</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel satisfied with myself.</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I wish I could be as happy as others seem to be.</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel like a failure.</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel rested.</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am “calm, cool, and collected.”</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel that difficulties are piling up so that I cannot overcome them.</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I worry too much over something that really doesn't matter.</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am happy.</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have disturbing thoughts.</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I lack self-confidence.</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel secure.</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I make decisions easily.</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel inadequate.</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am content.</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some unimportant thought runs through my mind and bothers me.</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I take disappointments so keenly that I can't put them out of my mind.</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am a steady person.</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I get in a state of tension or turmoil as I think over my recent concerns and interests.</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
In your daily life, how often do you:

<table>
<thead>
<tr>
<th>Measure: The Differential Emotions Scale -IV (DES-IV; Izard et al., 1993)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Almost Never/Rarely</strong></td>
</tr>
<tr>
<td>Feel like what you’re doing or watching is interesting?</td>
</tr>
<tr>
<td>Feel so interested in what you’re doing, caught up in it?</td>
</tr>
<tr>
<td>Feel alert, curious, kind of excited about something?</td>
</tr>
<tr>
<td>Feel glad about something?</td>
</tr>
<tr>
<td>Feel happy?</td>
</tr>
<tr>
<td>Feel joyful, like everything is going your way, everything is rosy?</td>
</tr>
<tr>
<td>Feel surprised, like when something suddenly happens you had no idea would happen?</td>
</tr>
<tr>
<td>Feel amazed, like you can’t believe what’s happened, it was so unusual?</td>
</tr>
<tr>
<td>Feel like you feel when something unexpected happens?</td>
</tr>
<tr>
<td>Feel regret, sorry about something you did?</td>
</tr>
<tr>
<td>Feel like you did something wrong?</td>
</tr>
<tr>
<td>Feel like you ought to be blamed for something?</td>
</tr>
<tr>
<td>Feel embarrassed when anybody sees you make a mistake?</td>
</tr>
<tr>
<td>Feel like people laugh at you?</td>
</tr>
<tr>
<td>Feel like people always look at you when something goes wrong?</td>
</tr>
<tr>
<td>Feel you can’t stand yourself?</td>
</tr>
<tr>
<td>Feel mad at yourself?</td>
</tr>
<tr>
<td>Feel sick about yourself?</td>
</tr>
</tbody>
</table>
Please indicate the extent to which you agree or disagree with each of the following statements by circling a number for each statement.

<table>
<thead>
<tr>
<th>Measure: The Contextualism Scale (Owe et al., 2013)</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>To understand a person well, it is essential to know about which social groups he/she is a member of.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>One can understand a person well without knowing about his/her family.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>To understand a person well, it is essential to know about the place he/she comes from.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>One can understand a person well without knowing about his/her social position.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>One can understand a person well without knowing about the place he/she comes from.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>To understand a person well, it is essential to know about his/her family.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Measure: The Barratt Impulsiveness Scale – Version 11 (BIS-11; Patton, Stanford, &amp; Barratt, 1995)</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I plan tasks carefully.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I do things without thinking.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I make-up my mind quickly.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I am happy-go-lucky.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I don’t “pay attention.”</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I have “racing thoughts.”</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I plan trips well ahead of time.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I am self-controlled.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I concentrate easily.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I save regularly.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I “squirm” at plays or lectures.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I am a careful thinker.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I plan for job security.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I say things without thinking.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I like to think about complex problems.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I change jobs.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I act “on impulse.”</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I get easily bored when solving thought problems.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I act on the spur of the moment.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I am a steady thinker.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I change residences.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I buy things on impulse.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Statement</td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>-------------------</td>
<td>----------</td>
<td>-------</td>
<td>---------------</td>
</tr>
<tr>
<td>I can only think about one thing at a time.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I change hobbies.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I spend or change more than I earn.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I often have extraneous thoughts when thinking.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I am more interested in the present than the future.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I am restless at the theater or lectures.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I like puzzles.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I am future oriented.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

**Measure: The Hare Self-Report Psychopathy Scale (HSRP; Paulhus et al., in press)**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I’m a rebellious person.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I’m more tough-minded than other people.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I think I could &quot;beat&quot; a lie detector.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I have taken illegal drugs (e.g., marijuana, ecstasy).</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I have never been involved in delinquent gang activity.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I have never stolen a truck, car or motorcycle.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Most people are wimps.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I purposely flatter people to get them on my side.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I’ve often done something dangerous just for the thrill of it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I have tricked someone into giving me money.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>It tortures me to see an injured animal.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I have assaulted a law enforcement official or social worker.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I have pretended to be someone else in order to get something.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I always plan out my weekly activities.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I like to see fist-fights.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I'm not tricky or sly.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I’d be good at a dangerous job because I make fast decisions.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I have never tried to force someone to have sex.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>My friends would say that I am a warm person.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I would get a kick out of ‘scamming’ someone.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I have never attached someone with the idea of injuring them.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I never miss appointments.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I avoid horror movies.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I trust other people to be honest.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>-----------------------------------------------------------------</td>
<td>-------------------</td>
<td>----------</td>
<td>-------</td>
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</tr>
<tr>
<td>I hate high speed driving.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I feel so sorry when I see a homeless person.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>It's fun to see how far you can push people before they get upset.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I enjoy doing wild things.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I have broken into a building or vehicle in order to steal something or vandalize.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I don’t bother to keep in touch with my family any more.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I find it difficult to manipulate people.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I rarely follow the rules.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I never cry at movies.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I have never been arrested.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>You should take advantage of other people before they do it to you.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I don’t enjoy gambling for real money.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>People sometimes say that I’m cold-hearted.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>People can usually tell if I am lying.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I like to have sex with people I barely know.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I love violent sports and movies.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Sometimes you have to pretend you like people to get something out of them.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I am an impulsive person.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I have taken hard drugs (e.g., heroin, cocaine).</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I'm a soft-hearted person.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I can talk people into anything.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I never shoplifted from a store.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I don’t enjoy taking risks.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>People are too sensitive when I tell them the truth about themselves.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I was convicted of a serious crime.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Most people tell lies every day.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I keep getting in trouble for the same things over and over.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Every now and then I carry a weapon (knife or gun) for protection.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>People cry way too much at funerals.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>You can get what you want by telling people what they want to hear.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I easily get bored.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I never feel guilty over hurting others.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Statement</td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>-------------------</td>
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<td>----------------</td>
</tr>
<tr>
<td>I have threatened people into giving me money, clothes, or makeup.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>A lot of people are “suckers” and can easily be fooled.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I admit that I often “mouth off” without thinking.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I sometimes dump friends that I don’t need any more.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I would never step on others to get what I want.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I have close friends who served time in prison.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I purposely tried to hit someone with the vehicle I was driving.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I have violated my parole from prison.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>On the whole, I am satisfied with myself.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I feel that I have a number of good qualities</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I am able to do things as well as most other people</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I feel that I’m a person of worth, at least on an equal plane with others</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I take a positive attitude toward myself</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td><strong>Measure: The Antisocial Personality Disorder Scale of the Personality Diagnostic Questionnaire -4+ (PDQ-4+, Hyler, 1994)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I’ve been in trouble with the law several times (or would have been if I had been caught).</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I get into a lot of physical fights.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I have difficulty paying bills because I don’t stay at any job for very long.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I do a lot of things without considering the consequences.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Lying comes easily to me and I often do it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I enjoy doing risky things.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I don’t care if others get hurt as long as I get what I want.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>When I was a kid (before age 15), I was somewhat of a juvenile delinquent (for example, lied a lot, stole things, was physically cruel to animals and/or people, set fires, ran away from home more than once, skipped school a lot, etc.)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td><strong>Measure: The Basic Empathy Scale (BES; Jolliffe &amp; Farrington, 2006)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>----------------------------------------------------------------</td>
<td>-----------------</td>
<td>---------</td>
<td>-------</td>
<td>----------------</td>
</tr>
<tr>
<td>My friends’ emotions don’t affect me much</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>After being with a friend who is sad about something, I usually feel sad.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I can understand my friend’s happiness when she/he does well at something.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I get frightened when I watch characters in a good scary movie.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I get caught up in other people’s feelings easily.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I find it hard to know when my friends are frightened.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I don’t become sad when I see other people crying.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Other people’s feelings don’t bother me at all.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>When someone is feeling ‘down’ I can usually understand how they feel.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I can usually work out when my friends are scared.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I often become sad when watching sad things on TV or in films.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I can often understand how people are feeling even before they tell me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Seeing a person who has been angered has no effect on my feelings.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I can usually work out when people are cheerful.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I tend to feel scared when I am with friends who are afraid.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I can usually realize quickly when a friend is angry.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I often get swept up in my friends’ feelings.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>My friend’s unhappiness doesn’t make me feel anything.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I am not usually aware of my friends’ feelings.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I have trouble figuring out when my friends are happy.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td><strong>Measure: The Balanced Inventory of Desirable Responding (BIDR; Paulhus, 1988)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I can usually handle whatever comes my way</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>If I am in trouble, I can usually think of a solution</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I can solve most problems if I invest the necessary effort</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Description</td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------</td>
<td>-------------------</td>
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<td>----------------</td>
</tr>
<tr>
<td>I can always manage to solve difficult problems if I try hard enough</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I can remain calm when facing difficulties because I can rely on my coping abilities</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>My first impressions of people usually turn out to be right.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I don't care to know what other people really think of me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I have not always been honest with myself.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>When my emotions are aroused, it biases my thinking.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I am not a safe driver when I exceed the speed limit.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>It's hard for me to shut off a disturbing thought.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I never regret my decisions.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>The reason I vote is because my vote can make a difference.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I rarely appreciate criticism.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I have sometimes doubted my ability as a lover.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I sometimes tell lies if I have to.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I never cover up my mistakes.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I always obey laws, even if I'm unlikely to get caught.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I have said something bad about a friend behind his/her back.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>When I hear people talking privately, I avoid listening.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I have received too much change from a salesperson without telling him or her</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>When I was young I sometimes stole things.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I sometimes drive faster than the speed limit.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I never read sexy books or magazines.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I have done things that I don't tell other people about.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
The next questions are about serious events that may have happened to you during your lifetime.

Measure: The Lifetime Trauma and Victimization History (LTVH; Widom et al., 2005)

1. Have you ever been involved in a natural disaster, such as a tornado, hurricane, flood, or earthquake?
   □ No (Go to question 2)
   □ Yes
   
   If you answered yes:
   
   a) How old were you when it happened?
      □ 0-11 years old
      □ 12-17 years old
      □ 18 years or older
   b) Were you in danger of death or serious physical injury?
      □ No
      □ Yes
   c) Did you feel intense fear, helplessness, or horror?
      □ No
      □ Yes
   d) Was there another time you were involved in a natural disaster, such as a tornado, hurricane, flood, or earthquake?
      □ No
      □ Yes

2. Have you ever been involved in a man-made disaster, such as a fire, train crash, car accident, or building collapse?
   □ No (Go to question 3)
   □ Yes
   
   If you answered yes:
   
   a) How old were you when it happened?
      □ 0-11 years old
      □ 12-17 years old
      □ 18 years or older
   b) Were you in danger of death or serious physical injury?
      □ No
      □ Yes
   c) Did you feel intense fear, helplessness, or horror?
      □ No
      □ Yes
   d) Was there another time where you were involved in a man-made disaster, such as a fire, train crash, car accident, or building collapse?
      □ No
      □ Yes

3. Have you ever been involved in direct combat experience in a war? (Include gang
fights and police shootouts)
□ No (Go to question 4)
□ Yes

If you answered yes:
  a) How old were you when it happened?
     □ 0-11 years old
     □ 12-17 years old
     □ 18 years or older
  b) Were you in danger of death or serious physical injury?
     □ No
     □ Yes
  c) Did you feel intense fear, helplessness, or horror?
     □ No
     □ Yes
  d) Was there another time where you were involved in direct combat experience in a war?
     □ No
     □ Yes

4. Have you ever lived in a war zone? (For example, Beirut, Palestine, or Bosnia).
□ No (Go to question 5)
□ Yes

If you answered yes:
  a) How old were you when it happened?
     □ 0-11 years old
     □ 12-17 years old
     □ 18 years or older
  b) Were you in danger of death or serious physical injury?
     □ No
     □ Yes
  c) Did you feel intense fear, helplessness, or horror?
     □ No
     □ Yes
  d) Was there another time that you lived in a war zone?
     □ No
     □ Yes

5. Have you ever had a serious accident at work, at home, or somewhere else?
□ No (Go to question 6)
□ Yes

If you answered yes:
  a) How old were you when it happened?
     □ 0-11 years old
     □ 12-17 years old
     □ 18 years or older
  b) Were you in danger of death or serious physical injury?
c) Did you feel intense fear, helplessness, or horror?
   □ No
   □ Yes
d) Was there another time when you had a serious accident at work, at home, or somewhere else?
   □ No
   □ Yes

6. Have you ever been exposed to dangerous chemicals or radioactivity?
   □ No (Go to question 7)
   □ Yes
      If you answered yes:
      a) How old were you when it happened?
         □ 0-11 years old
         □ 12-17 years old
         □ 18 years or older
      b) Were you in danger of death or serious physical injury?
         □ No
         □ Yes
c) Did you feel intense fear, helplessness, or horror?
   □ No
   □ Yes
d) Was there another time that you were exposed to dangerous chemicals or radioactivity?
   □ No
   □ Yes

7. Have you ever been shot at, stabbed, struck, kicked, beaten, punched, slapped around, or otherwise physically harmed?
   □ No (Go to question 8)
   □ Yes
      If you answered yes:
      a) How old were you when it happened?
         □ 0-11 years old
         □ 12-17 years old
         □ 18 years or older
      b) Were you in danger of death or serious physical injury?
         □ No
         □ Yes
c) Did you feel intense fear, helplessness, or horror?
   □ No
   □ Yes
d) Has anyone else ever shot at, stabbed, struck, kicked, beaten, punched, slapped around, or otherwise physically harmed you?
8. Have you ever been threatened with any kind of a weapon, like a knife, gun, baseball bat, frying pan, scissors, stick, rock or bottle?
   □ No (Go to question 9)
   □ Yes
   
   If you answered yes:
   a) How old were you when it happened?
      □ 0-11 years old
      □ 12-17 years old
      □ 18 years or older
   b) Were you in danger of death or serious physical injury?
      □ No
      □ Yes
   c) Did you feel intense fear, helplessness, or horror?
      □ No
      □ Yes
   d) Has anyone else threatened you with any kind of weapon?
      □ No
      □ Yes

9. Has anyone ever threatened you in a face-to-face confrontation?
   □ No (Go to question 10)
   □ Yes
   
   If you answered yes:
   a) How old were you when it happened?
      □ 0-11 years old
      □ 12-17 years old
      □ 18 years or older
   b) Were you in danger of death or serious physical injury?
      □ No
      □ Yes
   c) Did you feel intense fear, helplessness, or horror?
      □ No
      □ Yes
   d) Has anyone else threatened you in a face-to-face confrontation?
      □ No
      □ Yes

10. Have you ever been actually assaulted with any kind of a weapon, like a knife, gun, baseball bat, frying pan, scissors, stick, rock, or bottle?
    □ No (Go to question 11)
    □ Yes
    
    If you answered yes:
    a) How old were you when it happened?
□ 0-11 years old  
□ 12-17 years old  
□ 18 years or older  
b) Were you in danger of death or serious physical injury?  
□ No  
□ Yes  
c) Did you feel intense fear, helplessness, or horror?  
□ No  
□ Yes  
d) Has anyone else actually assaulted you with any kind of a weapon, like a knife, gun, baseball bat, frying pan, scissors, stick, rock, or bottle?  
□ No  
□ Yes

11. When you were a child— that is, when you were in elementary or middle school, before about age 12— were you ever struck, kicked, beaten, punched, slapped around, or otherwise physically harmed?  
□ No (Go to question 12)  
□ Yes  

If you answered yes:  
a) How old were you when it happened?  
□ 0-11 years old  
□ 12-17 years old  
□ 18 years or older  
b) Were you in danger of death or serious physical injury?  
□ No  
□ Yes  
c) Did you feel intense fear, helplessness, or horror?  
□ No  
□ Yes  
d) During your childhood— were you struck, kicked, beaten, punched, slapped around, or otherwise physically harmed by anyone else?  
□ No  
□ Yes

12. When you were a child— that is, when you were in elementary or middle school, before about age 12—were you ever physically abused?  
□ No (Go to question 13)  
□ Yes  

If you answered yes:  
a) How old were you when it happened?  
□ 0-11 years old  
□ 12-17 years old  
□ 18 years or older  
b) Were you in danger of death or serious physical injury?
c) Did you feel intense fear, helplessness, or horror?
   □ No
   □ Yes

d) During your childhood--has anyone else physically abused you?
   □ No
   □ Yes

13. Has anyone--male or female--ever forced or coerced you to engage in unwanted sexual activity?
   □ No (Go to question 14)
   □ Yes
   If you answered yes:
   a) How old were you when it happened?
      □ 0-11 years old
      □ 12-17 years old
      □ 18 years or older
   b) Were you in danger of death or serious physical injury?
      □ No
      □ Yes
   c) Did you feel intense fear, helplessness, or horror?
      □ No
      □ Yes
   d) Has anyone else--male or female--ever forced or coerced you to engage in unwanted sexual activity?
      □ No
      □ Yes

14. Other than what’s reported above, did anyone, male or female ever attempt to--but not actually--force you to engage in unwanted sexual activity?
   □ No (Go to question 15)
   □ Yes
   If you answered yes:
   a) How old were you when it happened?
      □ 0-11 years old
      □ 12-17 years old
      □ 18 years or older
   b) Were you in danger of death or serious physical injury?
      □ No
      □ Yes
   c) Did you feel intense fear, helplessness, or horror?
      □ No
      □ Yes
   d) Has anyone else--male or female, attempted to--but not actually--forced you to engage in unwanted sexual activity?
15. Other than what’s reported above, has anyone ever actually touched private parts of your body or made you touch theirs against your wishes?
   □ No (Go to question 16)
   □ Yes
   If you answered yes:
   a) How old were you when it happened?
      □ 0-11 years old
      □ 12-17 years old
      □ 18 years or older
   b) Were you in danger of death or serious physical injury?
      □ No
      □ Yes
   c) Did you feel intense fear, helplessness, or horror?
      □ No
      □ Yes
   d) Has anyone else ever actually touched private parts of your body or made you touch theirs against your wishes?
      □ No
      □ Yes

16. Have you ever had an immediate family member, romantic partner, or very close friend who was murdered?
   □ No (Go to question 17)
   □ Yes
   If you answered yes:
   a) How old were you when it happened?
      □ 0-11 years old
      □ 12-17 years old
      □ 18 years or older
   b) Were you in danger of death or serious physical injury?
      □ No
      □ Yes
   c) Did you feel intense fear, helplessness, or horror?
      □ No
      □ Yes
   d) Was anyone else who was an immediate family member, romantic partner, or very close friend murdered?
      □ No
      □ Yes

17. Have you ever seen or been present when someone was murdered or seriously injured?
☐ No (Go to question 18)
☐ Yes

If you answered yes:

a) How old were you when it happened?
   □ 0-11 years old
   □ 12-17 years old
   □ 18 years or older

b) Were you in danger of death or serious physical injury?
   □ No
   □ Yes

c) Did you feel intense fear, helplessness, or horror?
   □ No
   □ Yes

d) Was there any other time when you saw or were present when someone was murdered or seriously injured?
   □ No
   □ Yes

18. Have you ever had an immediate family member, romantic partner, or very close friend commit suicide?
☐ No (Go to question 19)
☐ Yes

If you answered yes:

a) How old were you when it happened?
   □ 0-11 years old
   □ 12-17 years old
   □ 18 years or older

b) Were you in danger of death or serious physical injury?
   □ No
   □ Yes

c) Did you feel intense fear, helplessness, or horror?
   □ No
   □ Yes

d) Did anyone else who was an immediate family member, romantic partner, or very close friend commit suicide?
   □ No
   □ Yes

19. Have you ever seen a dead or mutilated body? (Other than at a funeral, or in the movies or newspaper.)
☐ No (Go to question 20)
☐ Yes

If you answered yes:

a) How old were you when it happened?
   □ 0-11 years old
   □ 12-17 years old

111
b) Were you in danger of death or serious physical injury?
   □ No
   □ Yes

c) Did you feel intense fear, helplessness, or horror?
   □ No
   □ Yes

d) Was there any other time when you saw a dead or mutilated body?
   □ No
   □ Yes

20. Have you ever seen or been present when another person was shot at, stabbed, struck, kicked, beaten, slapped around, or otherwise physically harmed?
   □ No (Go to question 21)
   □ Yes

   If you answered yes:
   a) How old were you when it happened?
      □ 0-11 years old
      □ 12-17 years old
      □ 18 years or older
   b) Were you in danger of death or serious physical injury?
      □ No
      □ Yes
   c) Did you feel intense fear, helplessness, or horror?
      □ No
      □ Yes
   d) Was there any other time when you saw or were present when another person was shot at, stabbed, struck, kicked, beaten, slapped around, or otherwise physically harmed?
      □ No
      □ Yes

21. Have you ever seen or been present when another person was raped, sexually attacked, or made to engage in unwanted sexual activity?
   □ No (Go to question 22)
   □ Yes

   If you answered yes:
   a) How old were you when it happened?
      □ 0-11 years old
      □ 12-17 years old
      □ 18 years or older
   b) Were you in danger of death or serious physical injury?
      □ No
      □ Yes
   c) Did you feel intense fear, helplessness, or horror?
      □ No
22. Has anyone ever intentionally damaged or destroyed property owned by you or by someone in your household?
   □ No (Go to question 23)
   □ Yes
   
   If you answered yes:
   a) How old were you when it happened?
      □ 0-11 years old
      □ 12-17 years old
      □ 18 years or older
   b) Were you in danger of death or serious physical injury?
      □ No
      □ Yes
   c) Did you feel intense fear, helplessness, or horror?
      □ No
      □ Yes
   d) Has anyone else intentionally damaged or destroyed property owned by you or by someone in your household?
      □ No
      □ Yes

23. Has anyone ever stolen something from you by using force or the threat of force like in a stick-up, mugging, or car-jacking?
   □ No (Go to question 24)
   □ Yes
   
   If you answered yes:
   a) How old were you when it happened?
      □ 0-11 years old
      □ 12-17 years old
      □ 18 years or older
   b) Were you in danger of death or serious physical injury?
      □ No
      □ Yes
   c) Did you feel intense fear, helplessness, or horror?
      □ No
      □ Yes
   d) Has anyone else ever stolen something from you by using force or the threat of force like in a stick-up, mugging, or car-jacking?
      □ No
      □ Yes
24. Has anyone ever tried to--but not actually--steal something from you by using force or the threat of force like in a stick-up, mugging, or car-jacking?
   □ No (Go to question 25)
   □ Yes
      If you answered yes:
      a) How old were you when it happened?
         □ 0-11 years old
         □ 12-17 years old
         □ 18 years or older
      b) Were you in danger of death or serious physical injury?
         □ No
         □ Yes
      c) Did you feel intense fear, helplessness, or horror?
         □ No
         □ Yes
      d) Has anyone else ever tried to--but not actually--steal something from you by using force or the threat of force like in a stick-up, mugging, or car-jacking?
         □ No
         □ Yes

25. Has anyone ever tried to or actually broken in to your house, garage, shed, or storage room when you were not there?
   □ No (Go to question 26)
   □ Yes
      If you answered yes:
      a) How old were you when it happened?
         □ 0-11 years old
         □ 12-17 years old
         □ 18 years or older
      b) Were you in danger of death or serious physical injury?
         □ No
         □ Yes
      c) Did you feel intense fear, helplessness, or horror?
         □ No
         □ Yes
      d) Has anyone else ever tried to or actually broken in to your house when you were not there?
         □ No
         □ Yes

26. Has anyone ever tried to or actually broken in to your house, garage, shed, or storage room when you were there?
   □ No (Go to question 27)
   □ Yes
      If you answered yes:
a) How old were you when it happened?
   □ 0-11 years old
   □ 12-17 years old
   □ 18 years or older
b) Were you in danger of death or serious physical injury?
   □ No
   □ Yes
c) Did you feel intense fear, helplessness, or horror?
   □ No
   □ Yes
d) Has anyone else ever tried to or actually broken in to your house, garage, shed, or storage room when you were there?
   □ No
   □ Yes

27. Has anyone ever stolen something directly from you without the threat or use of force (for example purse-snatching or pick-pocket)?
   □ No (Go to question 28)
   □ Yes

   If you answered yes:
   a) How old were you when it happened?
      □ 0-11 years old
      □ 12-17 years old
      □ 18 years or older
   b) Did you feel intense fear, helplessness, or horror?
      □ No
      □ Yes
c) Has anyone else stolen something directly from you without the threat or use of force?
      □ No
      □ Yes

28. Have you ever been kidnapped or held captive?
   □ No (Go to question 29)
   □ Yes

   If you answered yes:
   a) How old were you when it happened?
      □ 0-11 years old
      □ 12-17 years old
      □ 18 years or older
   b) Were you in danger of death or serious physical injury?
      □ No
      □ Yes
c) Did you feel intense fear, helplessness, or horror?
      □ No
      □ Yes
d) Was there any other time when you were kidnapped or held captive?
   □ No
   □ Yes

29. Have you ever been stalked by anyone? For example, has anyone ever followed or spied on you?
   □ No (Go to question 30)
   □ Yes
   If you answered yes:
   a) How old were you when it happened?
      □ 0-11 years old
      □ 12-17 years old
      □ 18 years or older
   b) Were you in danger of death or serious physical injury?
      □ No
      □ Yes
   c) Did you feel intense fear, helplessness, or horror?
      □ No
      □ Yes
   d) Has anyone else stalked you?
      □ No
      □ Yes

30. Have you ever been in any other situation in which you were in danger of death or serious physical injury, or in which you felt intense fear, helplessness, or horror?
   □ No
   □ Yes
   If yes, specify: -
Please read the paragraph below carefully:

Fadi is a 32 year-old male, who has been a CEO for 3 years at a prominent bank in Beirut. His boss discovered recently that Fadi had embezzled more than 2 million dollars from clients’ accounts.

Fadi seems very charming, and of average to above average intelligence. He is composed and often well-dressed. Upon investigating his case, the police discovered that he had forged his college graduation diploma as well as letters of recommendation from “previous” employers and professors. Fadi changed jobs frequently, often after 2 or 3 years. Upon asking him why, Fadi said that he got bored easily. Fadi never seemed to have real relationships with women, although he had slept with a dozen. His relationships seemed to be all superficial and trivial. Fadi showed no remorse about what he did, and said he would lie again and manipulate people if it gets him what he wants. Upon interviewing his parents, from whom Fadi has been estranged for over a decade, they said that as a child, Fadi always seemed detached, used to lie a lot, and in general got away with things.

Give 3 words that best describe Fadi, with word in line 1) being the best word/label you can think of.

1) __________
2) __________
3) __________

Please rate the degree to which you agree with the following statements about you.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I enjoy listening to music.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>I like watching television.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>I enjoy going to the movies.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>I enjoy hunting or fishing.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>I enjoy going to church/mosque/temple or other religious services.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I enjoy going to the park.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>I like going to the library.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>I enjoy camping.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>I like playing sports.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>I like playing online games.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Thank you!! 😊
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