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COERCIVE CONTROL AMONG UNIVERSITY IN LEBANON: EXAMINING THE ROLES OF ATTACHMENT ANXIETY, SEXISM, AND ADVERSE CHILDHOOD EXPERIENCES

by
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AMERICAN UNIVERSITY OF BEIRUT

COERCIVE CONTROL AMONG UNIVERSITY STUDENTS IN LEBANON: EXAMINING THE ROLES OF ATTACHMENT ANXIETY, SEXISM, AND ADVERSE CHILDHOOD EXPERIENCES

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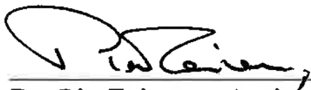

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ABSTRACT
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Title: Coercive Control Among University Students in Lebanon: Examining the Roles of Attachment Anxiety, Sexism, and Prior Exposure to Violence

Coercive control (CC) is an abusive relationship dynamic whereby an individual seeks to degrade and debase a romantic partner in a systematic or patterned way. Although intimate partner violence (IPV) researchers consider CC as a defining feature of IPV, research has yet to address the predictive factors of CC, the presence of CC in early romantic relationships, and the relevance of CC as a construct for populations in the Middle East. The current study aimed to address these gaps by studying predictive factors of CC among dating, university students in Lebanon. It was hypothesized that male students would perpetrate more CC than female students and that attachment anxiety, hostile and benevolent sexism, and prior exposure to violence will be significant predictors of CC in heterosexual relationships. Attachment anxiety and prior exposure to violence were explored as predictors of CC in relationships among sexual and gender minority (LGBT) participants. Participants frequently reported using communication technologies to perpetrate coercive-controlling behaviors. Contrary to predictions, females perpetrated higher levels of coercive-controlling behaviors compared to males. In line with predictions, hostile sexism and attachment anxiety predicted coercive controlling behaviors. For LGBT participants, attachment anxiety predicted coercive-controlling behaviors. Future studies should continue to address predictors of CC, differences in CC perpetration between heterosexual and LGBT individuals, and the development of culturally appropriate CC assessments.

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CHAPTER I

INTRODUCTION

According to the World Health Organization (WHO), intimate partner violence (IPV) is a serious public health concern, with current estimates suggesting that 1 in 3 women globally have experienced lifetime physical and/or sexual violence from either an intimate or non-intimate partner (Butchart & Mikton, 2014). Studies of male victims of IPV are less prevalent, but current data from the Center for Disease Control (CDC) suggest that approximately 1 in 10 men in the United States experience lifetime sexual violence, physical violence, and/or stalking by an intimate partner (Smith et al., 2018). Additionally, the lifetime prevalence rate of IPV among lesbian, gay, bisexual, trasngender, and queer (LGBTQ) individuals is as high or higher than the general population (Brown & Herman, 2015; Messinger, 2011). For example, one study conducted in the United States found that nearly one-third of sexual minority men and one-half of sexual minority women in the United States were victims of physical or psychological violence within the context of a romantic relationship (Breiding et al., 2013).

Past research on violence in intimate relationships has typically focused on marital relationships (IPV), however an emerging field of research is examining dating violence (DV), that is, violence occurring between dating individuals[*] (Garthe, Sullivan, & McDaniel, 2017). Although there are currently no univesally agreed upon definitions for IPV and DV (Buzawa,

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[*] For the current study, *dating* was defined as the
"…dyadic relationship involving meeting for social interaction and joint activities with an explicit or implicit intention to continue the relationship until one or the other party terminates or until some other more committed relationship is established…" (Straus, 2004; pg. 792).

Buzawa, & Stark, 2017), the Centers for Disease Control and Prevention (CDC) considers DV as occurring between two people in a close relationship, while IPV occurs between current or former spouses (CDC, 2018; 2020). DV is also unique from IPV in that DV is more common among individuals who are under 24 years of age (Vagi et al., 2013). That is, because young adults are more likely to be dating than in more serious, committed, or long-term relationships (Sassler, Michelmore, & Holland, 2016), DV may be a more common phenomenon during emerging adulthood. While certain types of violence are common to both IPV and DV such as physical, sexual, psychological, or verbal violence (CDC, 2020; Dardis, Dixon, Edwards, & Turchik, 2015), the development and function of these forms of violence may differ between IPV and DV (Conroy, 2016).

Forms of violence that are unique to the dating context include aggressive behaviors that are used as an attempt to communicate romantic interest by individuals who have not learned to express romantic interest in a way that is socially tolerable (Robinson 2005; Conroy, 2013). Surveillance tactics are also used by men and women when pursuing a dating partner, such as completing unrequested favors, waiting where the individual of interest would be, asking others about the person, following the person, or spying on them (Shorey, Cornelius, & Strauss, 2015; Williams & Frieze, 2005). Overall these behaviors are characteristic of stalking, yet in many cases they are followed by the establishment of a relationship (Williams & Frieze, 2005). That is, certain forms of aggressive and violent behavior may function differently in dating relationships as opposed to marital or intimate relationships. Accordingly, this raises questions about other forms of violence that develop within the context of dating relationships such as coercive control (CC).

One aspect of DV that has received less attention in the research literature is CC. CC can be understood as "…violence in the context of a pervasive pattern of controlling tactics, such as isolation and intimidation, used to create a foundation for one partner to exert and maintain control over another partner…" (Crossman & Hardesty, 2018, p. 196). CC is distinct from psychological abuse in that not all psychological abuse is controlling, even if it is violent or hurtful in some way (Dutton & Goodman, 2005). Further, a perpetrator will often use CC with the aim of broadly dominating the victim's life while psychological abuse typically reflects an attempt to control a specific situation (Johnson, 2010). To be coercive, the perpetrator must signal a threat of subsequent negative consequence, and this threat must be credible, with the perpetrator able to deliver the threat (Hamberger, Larsen, & Lehrner, 2017). Further, under CC, the victim believes that they will experience negative consequences, such as physical violence, for noncompliance with the demands of the perpetrator and positive outcomes, such as avoidance of physical violence, or rewards for compliance (Hamberger et al., 2017). CC is also distinct from persuasion in that, under CC, the victim is restricted to the choices they are given by the perpetrator, and the victim perceives the control as negative (Hamberger et al., 2017). Some examples of coercive-controlling behaviors included making threats, controlling the finances and tracking the money a partner spends, isolating a partner from friends and family, or emotionally abusing a partner (Johnson, 2006). Additionally, in 2015, the United Kingdom passed new legislation that made CC a criminal offense (Serious Crime Act, 2015). Under this new law, tracking a partner's movements via the internet or mobile phone use is considered CC, and therefore, a criminal act (Serious Crime Act, 2015).

Researchers are interested in studying the dynamics of CC in intimate relationships for a number of reasons. The first reason is that the severity of distress in a relationship cannot be

determined by simply counting the number of physically-abusive acts or tactics alone (Beck & Raghavan, 2010; Johnson, 2006). For example, in a sample of 976 male-female couples (1952 individual participants) undergoing court-ordered divorce mediation, Beck & Raghavan (2010) found that 452 women who reported moderate to high CC in their relationship reported none to low physical abuse. That is, focusing exclusively on high physical abuse in an intimate relationship will exclude those experiencing CC (Beck & Raghavan, 2010).

A second important reason for studying CC involves the utility of CC to predict severe, near-lethal, and lethal violence in intimate relationships. For example, Dichter et al. (2018) measured the experience of CC in a sample of 533 female emergency department patients, all of whom had either used or experienced IPV in the past 3 months. They found that women who were coercivelly controlled by their partners experienced higher levels of psychological, physical, and sexual violence compared to women who did not experience CC but still experienced some level of violence in their relationship. The same researchers found that the risk of lethality and severe victimization was statistically higher for the high CC group versus the low CC group (Dichter et al., 2018). Relatedly, Beck & Raghavan (2010) found that CC, compared to physical abuse, was a better predictor of physically forced sex, threats to life, and escalated physical violence. Taken together, the results of these studies highlight the importance of the assessment and measurement of coercive controlling behaviors in intimate relationships, which may also signal the presence of more severe abuse and victimization.

While CC is theorized to be a central component of IPV (Kaplenko, Loveland, & Raghavan, 2018), fewer studies directly address CC in university samples, in other words, within the context of DV (Carney & Barner, 2012). A few studies have examined CC within the context of dating relationships (Bates et al., 2014; Straus & Gozjolko, 2014). For example, Straus &

Gozjolko (2014) assessed coercive control with data from the International Dating Violence Study (IDVS), which examined DV behaviors among 13,877 students (3,886 males and 9,991 females) from 68 universities in 32 nations. The researchers identified coercive control as participants who scored at or above the 90th percentile in the perpetration of psychological aggression (Straus & Gozjolko, 2014). Among the study participants who reported dating violence (24% of male and 31.2% of female students), 20% of the male students and 26.3% of the female students were classified as high in coercive control perpetration (Straus & Gozjolko, 2014). Similarly, Bates et al. (2014) assessed CC in a sample of 706 female and 398 male university students using the Controlling Behavior Scale (CBS-R: Graham-Kevan & Archer, 2005). The researchers classified 62 of the 398 male students (15.6%) as perpetrating high levels of control and 336 of the 398 male students (84.4%) as perpetrating low levels of control. For female students, 144 of the 706 (20.4%) were classified as high control, while 562 (79.6%) were classified as perpetrating low control. Overall, coercive controlling behaviors appear to be present in early relationships and therefore worthy of further study.

The current study aims to add to the DV literature by examining the potential gendered use of CC and factors related to CC behaviors among dating college students in Lebanon. DV has numerous negative consequences, such as increasing an individual's long-term risk for violent behavior, including later IPV perpetration (Cui, Ueno, Gordon, & Fincham, 2013; Greenman & Matsuda, 2016). Research examining dating violence among young adults is therefore warranted and may provide a unique context for understanding early experiences of interpersonal violence. Because most of the previous research has focused on CC within the context of intimate adult relationships, the following literature review will draw upon research conducted with both adult and young adult populations.

CHAPTER II

LITERATURE REVIEW

A. Gender and Coercive Control

The debate on gender differences in IPV perpetration and victimization has been ongoing for 40 years and led by two main perspectives (Winstok, 2011). On one side of the debate, the *family violence* perspective argues that women and men perpetrate fairly equal rates of violence in intimate relationships albeit using different forms of violence (Archer, 2000; Straus, 2010). The *feminist* perspective, argues that IPV is a highly gendered phenomenon, allowed for by societal, gender inequalities and power imbalances, and as a result, men become the primary perpetrators of violence in intimate relationships (Kelly & Johnson, 2008; Stark, 2007; 2010). Although most IPV researchers today agree that both men and women can be violent, current research questions surround the use of coercive-controlling tactics coupled with other physical, emotional, and psychological forms of abuse in intimate relationships (Myhill, 2015).

Like the debate surrounding gender differences in IPV victimization and perpetration, the gendered use of CC in intimate relationships has been debated. For example, family violence researchers typically assess IPV in community and convenience samples and find that men and women perpetrate IPV at equal rates (Anderson, 2002; Gelles & Straus, 1988; Williams & Frieze, 2005), that men and women perpetrate CC at similar rates (Carney & Barner, 2012; Hardesty & Ogolsky, 2020; Jasinski, Blumenstein, & Morgan, 2014), or that women perpetrate CC at a higher rate compared to men (Bates et al., 2014; Straus & Gozjolko, 2014). This includes convenience samples of university students where men and women report commonly being both victims and perpetrators of CC (Carney & Barner, 2012).

The feminist perspective, however typically rely on findings of IPV in clinical settings which often include court-mandated mediation for divorcing couples (Beck, Anderson, O'Hara, & Benjamin, 2013; Beck & Raghavan, 2010; Tanha, Beck, Figueredo, & Raghavan, 2010), emergency rooms (Dichter et al., 2018) and domestic violence shelters (Dutton & Painter, 1993). Research from a feminist perspective on IPV typically concludes that women are overwhelmingly the victims while men are the perpetrators of IPV (Johnson, 2006; Winstok, 2011). Indeed, the finding that women are disproportionately victimized by severe physical violence, rape, multiple forms of violence, inury, and death is agreed upon by feminist and family violence researchers (Archer, 2000; Violence Policy Center, 2018; Winstok, 2011). While Winstok (2011) argues that the question of gender differences in IPV perpetration and victimization results from differing perspectives on the identification, definition, and understanding of IPV, the differing findings in the aforementioned studies that examined CC may also be explained by a social desirability bias, the sampling frame for each study, or through the instruments used to measure CC behaviors.

First, Wincentak, Connolly, & Card (2017) argue that social desirability is more salient for men than women due to the societal stigmatization of male violence against women. Thus, in representative samples, men may minimize (Vagi et al., 2013), or lack the insight necessary to recognize their aggressive behaviors (Hamberger, Larsen, & Lehrner, 2017). Next, Johnson (2011) writes that "…the sampling frame for every study in a specific institutional setting has a specific set of processes that shape the balance of the types of violence that enter it…" (p. 291). That is, while representative, community, and convenience samples may capture more equal rates of CC perpetration between men and women, the clinical samples include individuals who are more likely to experience high levels of CC and distress in a relationship (Johnson, 2006).

Johnson (2010) further theorizes that representative samples, such as the National Family Violence Surveys suffer from low response rates due in part to individuals experiencing high levels of CC declining to participate due to fear of retaliation from their violent and controlling partner. Overall, the variations in reported CC rates are not sampling errors, but rather reflect the particular population being sampled and subsequent reported rate of CC (Raghavan et al., 2019).

The inconsistencies in the aforementioned studies might lastly be explained by differences in the approach to CC measurement. The measurement of CC presents a challenge to researchers because it is a multidimensional construct that involves the ongoing use of intimidation, isolation, emotional abuse, economic-control, and often sexual coercion (Beck, Menke, Brewster, & Figueredo, 2009; Beck & Raghavan, 2010). Additionally, a perpetrator will use specific CC behaviors based on their knowledge of the victim's vulnerabilities (Hamberger, Larsen, & Lehrner, 2017). That is, CC behaviors may differ in each relationship (Hamberger, Larsen, & Lehrner, 2017). To measure CC in intimate relationships, a few instruments currently exist such as the Psychological Maltreatment of Women Index (PMWI; Tolman, 1989) and the Relationship Behavior Rating Scale (RBRS; Beck et al,, 2009). Researchers have also utilized the psychological aggression and sexual coercion subscales of the Revised Conflict Tactics Scales (CTS2; Straus, Hamby, Boney-McCoy, & Sugarman, 1996). In the studies that reported similar rates of CC by men and women, CC was assessed by creating a scale based from the PMWI and the Canadian Violence Against Women Survey (Johnson & Sacco, 1995) (Jasinski, Blumenstein, & Morgan, 2014), or by using the psychological aggression subscale of the CTS2 as a proxy measure for CC (Straus & Gozjolko, 2014). This is important to note because, as mentioned earlier, psychological abuse and aggression is distinct from CC in that not all psychological abuse is controlling, even if it is violent in some way (Dutton & Goodman, 2005).

The use of psychological abuse to measure CC is limited in that measures of psychological abuse do not consider the ability of such abuse to control a partner, or separate the process of control from outcome (i.e. did the abuse achieve compliance as an end result?) (Dutton & Goodman, 2005). Measures such as the PMWI and the CTS2 measure psychological abuse, for which there may be more equal rates of perpetration among men and women compared to CC. Studies that report higher rates of CC perpetration by men against women used instruments constructed to measure CC as opposed to psychological aggression (Tanha et al., 2010; Myhill, 2015). Importantly, Myhill (2015) analyzed data from a national survey, the Crime Survey for England and Wales (CSEW). Included in this survey were questions to assess the state and experience of coercive control. Specifically, participants had to report abuse that was "…ongoing, denigrating, perceived as threatening, and causing a degree of fear…" (p. 362). Myhill (2015) found that coercive control was highly gendered, with 30% of the female participants reporting experiencing coercive control compared to 6% of men. These results suggest that CC must be carefully assessed and differentiated from psychological aggression.

A related difficulty involves understanding the motivations to use CC. Historically, feminist researchers have suggested that men's use of CC is motivated by socially constructed patriarchal dominance in intimate relationships (Bates, 2019). Similarly, Stark (2007) believes that CC is enacted due to a threatened and unstable masculine identity. A related hypothesis suggests that men engage in coercive-controlling behaviors to demonstrate proprietorship of their partner's sexuality (Figueredo et al., 2001). To account for how or why women engage in coercive-controlling behaviors, Robertson & Murachver (2011) found that women were more likely to perpetrate CC if they reported experiencing IPV (specifically, physical and psychological violence).

IPV and CC are also present in LGBT relationships (Dank, Lchman, Zweig, & Yahner, 2014; Messinger, 2011; Reuter, Sharp, & Temple, 2015; Reuter, Newcomb, Mustanski, & Whitton, 2017, Raghavan, Beck, Menke, & Loveland, 2019), yet research examining these behaviors in LGBT relationships is lacking compared to heterosexual couples (Raghavan et al., 2019, Reuter et al., 2017). Heterosexual findings on IPV may not generalize to LGBT couples due to several unique factors including internalized stigma, the degree to which either or both partners in the romantic dyad are "out," and minority stress (Meyer et al., 2003, Reuter et al., 2017). Each unique factor may increase stress, emotion dysregulation, and isolation within the LGBT couple, which may lead to increased rates of IPV perpetration (Meyer et al., 2003, Raghavan et al., 2019). In terrms of CC perpetration, a recent study conducted among 184 lesbian and gay individuals in Australia found that 23.9% of the participants engaged in high levels of controlling behavior (Frankland & Brown, 2014). Another study that analyzed 95 qualitative narratives from homosexual men of a "worst fight" with an intimate partner found that 55 of the men (58%) reported experiencing CC during the fight (Raghavan et al., 2019). Accordingly, the current study aims to include LGBT couples and examine if the factors selected for the current study will also be predictive of CC for LGBT couples.

Current research suggests using an integrative approach to identify separate theories and combine them to create a unified explanation of a phenomenon, such as DV (Dardis et al., 2015). One example of this is the social-ecology theory of DV which was proposed by Smith, White, and Moracco (2009) based on an adaptation from Brofenbrener's model (1979). Such a model of DV examines predictors and correlates of DV at various levels of social ecology, including the individual, mesosystem, and macrosystem levels. (Dardis et al., 2015). Although previous work has examined predictors of certain types of DV such as physical, sexual, or psychological

violence, fewer studies have explicitly examined predictors of CC. Thus, the current study aims to examine the relationship between prior exposure to violence, hostile and benevolent sexism, and adult attachment style and the perpetration of CC. Adult attachment style is considered the predictor variable at the individual level of social ecology, prior exposure to violence is considered the predictor variable at the mesosystem (one's extended social network) level of social ecology, and hostile and benevolent sexism are considered the predictor variables at the macrosystem (sociocultural norms and customs) level of social ecology (Dardis et al., 2015).

B. Prior Exposure to Violence

According to Social Learning Theory (SLT), behavior is learned in part from observing, imitating and modeling others (Bandura, 1977; Dardis et al., 2015). Prior research has found an association between childhood exposure to violence and later IPV perpetration (Ehrensaft et al., 2003; Lee et al., 2014; Mbilinyi et al., 2012, Smith-Marek et al., 2015; Vagi et al., 2013; Whitfield, Anda, Dube, & Felitti, 2003) and DV perpetration (Gover, Kaukinen, & Fox, 2008). Childhood exposure to violence can include children witnessing IPV between parents, or experiencing physical, sexual, or psychological abuse from a parent (Smith-Marek et al., 2015). Ehrensaft et al. (2003) noted that coercive punishment, as a form of child abuse, may serve as a model for coercive conflict resolution that is learned in childhood and then generalized to the romantic partner relationship.

Mbilinyi et al. (2012) found in a community sample of non-treatment seeking adult male IPV perpetrators, that individuals with high childhood domestic violence exposure reported the greatest amount of IPV perpetration. Relatedly, Whitfield et al. (2003) surveyed men about Adverse Childhood Experiences (ACEs) and found that the risk for perpetrating IPV increased

according to having experienced physical abuse, sexual abuse, or witnessing their mother being battered. Importantly, Ehrensaft et al. (2003) followed individuals randomly selected from two upstate New York counties starting in 1975 over 20-years. Participants in this sample reported on parenting practices in 1975, 1983, and 1985-1986, maltreatment experienced during childhood in 1991-1993, parent-to-parent violence in 1999 and current partner violence in 1999 (Ehrensaft et al., 2003). The researchers found among 543 male and female participants that childhood abuse doubled the odds for future violence toward a partner, and exposure to inter-parental violence tripled the odds. Notably, Ehrensaft et al. (2003) did not find sex differences in the relationships between risk factors and partner violence. In terms of DV, another study of 2,541 college students in the U.S. found that those who experienced childhood abuse perpetrated significantly higher rates of physical violence and psychological abuse in dating relationships (Gover et al., 2008).

Although the previous studies predicted that children are more likely to model the behavior of a same-sex parent, a meta-analysis from Smith-Marek et al. (2015) found no significant difference between the impact of a perpetrating father or mother on later IPV perpetration for males or females. Additionally, while much of the scholarship, to date, has focused on prior exposure to violence in the immediate family, fewer studies have examined other factors at the community and social levels (Vagi et al., 2013). This may be an important determinant of dating violence perpetration, as some research suggests a relationship between the level of community violence and later DV perpetration (Davis et al., 2019). For example, Davis and colleagues (2019) found among 3549 students in the U.S. that witnessing violence in the home and community has a significant effect on later perpetration of dating violence. Together, exposure to multiple forms of violence in the family and community may have a graded dose

relationship with negative social, mental, and physical health outcomes, including IPV perpetration (Davis et al., 2018a, 2018b; Davis et al., 2019; Finkelhor et al., 2007a, 2007b; Ford et al., 2007; Whitfield et al., 2003).

C. Hostile and Benevolent Sexism

Violence in intimate relationships can also be understood within a broader context of gender inequality (Dardis et al., 2015; Hester & Donovan, 2009). Glick and Fiske (1996) identified two types of sexism which include attitudes towards gender roles. The first, hostile sexism is described as anger and resentment toward women who do not follow traditional gender roles, along with the justification of traditional gender roles (Loveland & Raghavan, 2017). The second, benevolent sexism, is more subtle and often romanticizes women's roles (Forbes et al., 2004). Although the tone of benevolent sexism is positive, benevolent sexism is not considered positive because "its underpinnings lie in traditional stereotyping and masculine dominance" (Glick & Fiske, 1996, pg. 492). For example, a man might comment to a female colleague that she is "nurturing" or "caring." The comment, although prosocial, might undermine the female colleague's feelings of being taken seriously as a professional (Glick & Fiske, 1996). Together, the two types of sexism share the assumption that women are restricted in their roles and are the "weaker" sex (Ibabe, Arnoso, & Elgorriaga, 2016). Further, Glick, Sakalli-Ugurl, Ferreira, and de Souza (2002) note that benevolent sexism and hostile sexism can be conceptualized as "complementary tools of control." For example, men's support for and affection of women are dependent on women's adherence to traditional gender roles. Consequently, when women fail to comply with traditional gender roles, they are punished (Glick et al., 2002).

Many studies have reported that the endorsement of hostile sexist beliefs by men is related to physical (Renzetti et al., 2018; Whitaker, 2013) and psychological partner violence (Whitaker, 2013). Moreover, Whitaker (2013) found that control-seeking mediates the relationship between hostile sexism and the perpetration of physical and psychological IPV in men. Additionally, in a sample of men recruited from a batterer's treatment program in the United States, Loveland and Raghavan (2017) found that hostile sexism was significantly positively correlated with the use of CC. Taken together, the results of the previous studies suggest that hostile sexism is related to the endorsement of, and actual perpetration of CC in intimate relationships (Loveland and Raghavan, 2017).

Previous studies have also found that hostile sexism predicts higher tolerance toward the use of IPV (Glick et al., 2002) and positive attitudes towards the use of IPV among college students (Forbes et al., 2005). Forbes et al. (2004) found that male undergraduate students who endorsed hostile sexism were more likely to use verbal and sexual coercion. In another sample of male undergraduate students, Makin-Byrd and Azar (2011) found that violent males endorsed more hostile sexist beliefs about women compared to their nonviolent counterparts. In Spain, Ibabe, Arnoso, & Elgorriaga (2016) found that both hostile and benevolent sexism were significantly correlated with the perpetration of dating violence by male college students.

The impact of women's sexism on their experiences of IPV is less clear (Allen et al., 2009). In terms of gender differences, women endorse hostile sexism at lower rates compared to men (Allen et al., 2009; Forbes et al., 2004; Glick & Fiske, 1996), but endorse benevolent sexism just as often as men do (Allen et al., 2009; Husnu & Mertan, 2017). Research that examined constructs related to hostile and benevolent sexism (i.e. sex-role stereotyping, adherence to traditional gender roles, and adversarial sexual beliefs) have reported a relationship to the

perpetration of violent behavior by women (Bookwala et al., 1992; Chen & White, 2004; Torres et al., 2012) For example, Bookwala et al. (1992) measured traditional sex-role attitudes among 305 male and female university students using the Macho Scale, which was designed to measure stereotyped attitudes toward men and women (Villemez & Touhey, 1977). For female students, Bookwala and colleagues (1992) found that more traditional sex-role attitudes were predictive of expressed and threatened violence toward a dating partner. Relatedly, Chen and White (2004) found among 725 young adults that women who were more violent in their intimate relationships also adhered to a more traditional gender ideology. Finally, one study found that hostile sexism was significantly correlated to the perpetration of dating violence by female college students (Ibabe et al., 2016). Although these findings appear counterintuitive, a few researchers have suggested that gender-related issues of power can explain how women engage in IPV to defend their gender identity when it is threatened (Dardis et al., 2015; Towson & Zanna, 1982; White & Kowalski, 1994). For example, Towson and Zanna (1982) argue that gender-role congruent contexts such as the home, are more central to a woman's self-concept than other contexts. When their self-concept is threatened in the home, the likelihood of violence and aggression increases. Additionally, White and Kowalski (1994) suggest that "…the home is the realm where women are expected to hold and exercise authority, thus to the extent that power corrupts men, it may also corrupt women" (p. 495). That is, both men and women may derive a sense of power from contexts that are congruent with gendered norms and expectations. When this sense of power is challenged, men and women may respond with violence. Accordingly, a goal of the current study is to examine if benevolent and hostile sexism are related to the perpetration of CC behaviors among women.

D. Adult Attachment Style

Attachment theory suggests that individuals develop *internal working models* about relationships from early interactions with caregiver figures, such as mothers and fathers (Bowlby, 1988). These internal working models serve as cognitive and emotional templates for future relationships, such that children with affectionate and predictable caregivers will expect others in future relationships to be affectionate and predictable (Lee, Reese-Weber, & Kahn, 2014). Conversely, children with harsh and unpredictable caregivers may learn to expect that others in future relationships will be harsh and unpredictable (Lee et al., 2014). Prior research has found a stability in attachment style from infancy to adulthood (Fraley, 2002; Pinquart, Fuessner, & Ahnert, 2013; Vice, 2005), and that insecurely attached adults attach in either anxious or avoidant styles (Fraley & Waller, 1998). Adults high on attachment anxiety are typically worried about the responsiveness and availability of their romantic partner, in addition to fearing rejection and abandonment (Lee et al., 2014). Adults high on attachment avoidance, on the other hand, feel discomfort with closeness, depending on others, and the disclosure of feelings (Lee et al., 2014). Together, attachment theory suggests that high attachment anxiety or high attachment avoidance results in behaviors (e.g. anxious clinginess or emotional distancing) that could increase the chance for violence and conflict in interpersonal relationships (Lee et al., 2014).

According to previous research examining IPV, attachment anxiety, in particular, has been linked to IPV (Barbaro & Shackelford, 2019; Bookwala & Zdaniuk, 1998; Doumas, Pearson, Elgin, & McKinley, 2008; Godbout, Dutton, Lussier, & Sabourin, 2009; Godbout et al., 2017; Lee et al., 2014; Rapoza & Baker, 2008; Wright, 2017). The body of research on adult attachment anxiety and interpersonal violence has produced useful, albeit inconsistent findings.

For example, one study found that attachment anxiety was a significant predictor of IPV for men but not women (Rapoza & Baker, 2008), other studies found that attachment anxiety was associated with IPV for women but not men (Doumas et al., 2008; Godbout et al., 2009), or that attachment anxiety was associated with IPV for both men and women (Barbaro & Shackelford, 2019; Godbout et al., 2017; Lee et al., 2014; Wright, 2017).

The findings regarding the relationship between attachment avoidance and IPV are equally mixed. Some studies report no associations between attachment avoidance and IPV for men or women (Bookwala & Zdaniuk, 1998; Lee et al., 2014; Rapoza & Baker, 2008), while others report associations between attachment avoidance and IPV for men and women (Babcock et al., 2000; Doumas et al., 2008; Lawson & Malnar, 2011).

Methodological variations may explain the inconsistent findings of the aforementioned studies. For example, the studies that reported a relationship between attachment anxiety and IPV for both men and women recruited participants from universities and used the Experiences in Close Relationships Revised Questionnaire (ECR-R; Fraley, Waller, & Brennan, 2000) (Godbout et al., 2017; Lee et al., 2014; Wright, 2017). The other studies that reported a relationship between attachment anxiety and IPV for men or women, but not both, typically recruited married or couples in long-term relationships and used measures other than the ECR-R (Doumas et al., 2008; Godbout et al., 2009, Rapoza & Baker, 2008). Despite the inconsistent findings, the aforementioned studies suggest an association between adult attachment style, particularly attachment anxiety, and IPV perpetration. Additionally, the inconsistent findings may be due to missing, unexamined variables that may be more predictive of IPV.

The current study attempts to add to the literature by examining the relationship between attachment anxiety and use of CC behaviors in dating relationships. The relationship between

attachment style and use of CC in dating relationships remains under-researched and may help further understand the divergent findings in the previous body of research by focusing on aggression and manipulative behavior as seen in CC that may more directly reflect attachment insecurities.

E. Intimate Partner Violence in the Middle East

IPV is increasingly being recognized as a problem for many countries in the Middle East and North Africa (MENA) (Boy & Kulczycki, 2008), and few studies have specifically examined DV in low and middle-income countries (Gage, 2016). The MENA region includes Algeria, Bahrain, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Syria, Tunisia, Turkey, United Arab Emirates, and Yemen (World Bank, 2013). The current study was carried out in Lebanon, a middle-income country in the MENA region (Mahfoud, Afifi, Haddad, & DeJong, 2011), which presents a unique case study for Arab society because of its religio-cultural diversity and openness to Western influence (Obeid, Chang, & Ginges, 2010). A major concern in the MENA region involves the attitudes of men and women regarding IPV (Boy & Kulczycki, 2008). For example, 87% of ever-married women in Jordan agreed with at least one justification of physical abuse (Government of Jordan & ORC Macro, 2003), and in Palestinian refugee camps in Jordan, 60% of married men agreed that wife beating was sometimes justified (Khawaja, 2004).

Although the cultural contexts and social norms vary considerably within the MENA region itself, the social learning and sociocultural variables of the current study may be of particular relevance given the highly important socializing role of the Lebanese family, in addition to the patriarchal gender roles within Lebanese society (Obeid et al., 2010). For

example, a study conducted among university students in Lebanon found that male and female students with traditional attitudes about women's roles were more likely to endorse beliefs condoning physical violence against female intimate partners (Obeid et al., 2010). Additionally, in one study at four primary health care centers in Lebanon, Usta, Farver, and Pashayan (2006) reported that, among 1415 women, 494 (35%) reported exposure to at least one form of violence (physical, psychological, economic, or emotional). In 277 cases, the victim reported that the offender was the husband (Usta et al., 2006). Other research in Lebanon that specifically examined IPV found high rates of domestic violence during the 2006 war (Khawaja & Tewtel-Salem, 2004; Kvinna till Kvinna, 2010). Thus, the variables of hostile sexism, benevolent sexism, and prior exposure to violence, selected for the current study, may be of particular importance. Overall, the current study aims to contribute to the previous work on IPV in the MENA region by examining variables from the individual, mesosystem, and macrosystem levels of social-ecology as they relate to the perpetration of CC behaviors.

CHAPTER III

AIMS OF THE CURRENT STUDY

The current study aims to contribute to the literature on DV in several ways. First, the current study aims to examine if more male compared to female university students in Lebanon perpetrate CC behaviors. Second, the current study aims to examine if there are gender differences among the perpetration of CC behaviors in this sample. Third, the study aims to examine if adult attachment style, prior exposure to violence, or hostile and benevolent sexism is related to CC behaviors in dating relationships. Finally, the study aims to explore if these variables are related to the perpetration of CC in LGBT relationships. The aims of the current study come from the lack of research examining the links between these variables and the use of coercive control. These variables each represent the individual (adult attachment style), mesosystem (prior exposure to violence), and macrosystem (hostile and benevolent sexism) levels of social-ecology and have previously been linked to other forms of IPV perpetration for both men and women (Dardis et al., 2015), but are less understood in relation to CC behaviors. Given that rates of recidivism are high among perpetrators of IPV (Ruddle, Pina, & Vasquez, 2017), understanding the underlying psychological processes and dynamics of CC is particularly important.

Hypotheses:

Previous research that has assessed for coercive control in relationships using psychological aggression or abuse subscales as proxy-measures find that men and women perpetrate coercive control at equal rates (Jasinski et al., 2014; Straus & Gozjolko, 2014).

In samples that use instruments to specifically assess for coercive control in relationships, previous work has found that more men perpetrate coercive control compared to women, and that more women are victims of coercive control compared to men (Myhill, 2015).

Hypothesis 1) The current study hypothesized that the perpetration of CC will be gendered, with more male college students reporting CC perpetration compared to women.

Previous work has demonstrated that attachment anxiety is a significant positive predictor of DV for both men and women (Lee et al., 2014), and that attachment anxiety is significantly positively associated with the perpetration of psychological aggression, physical assault, and sexual coercion IPV for women, and the perpetration of psychological aggression, physical assault, and sexual coercion IPV for men (Barbaro & Shackelford, 2019).

Attachment anxiety has also been found to be predictive of relational partner violence (i.e. flirting to make a partner jealous, giving the silent treatment when angry; Linder, Crick, & Collins, 2002), cyber (i.e. sending mean or hurtful text messages, or blackmailing a partner with electronic content; Hinduja & Patchin, 2011), and cyber/technology privacy invasion (i.e. checking a partner's cell phone, and/or logging into a partner's online account wiithou permission; Wright, 2015).

Hypothesis 2) The current study hypothesized that attachment anxiety will be a significant positive predictor of CC for male and female students.

Previous work has demonstrated that prior exposure to violence is a significant positive predictor of DV for both men and women (Lee et al., 2014; Gover et al., 2008). Specifically, mother-to-child victimization and father-to-child victimization was predictive of DV for men

(Lee et al., 2014). Mother-to-child victimization and father-to-child victimization was also predictive of DV for women. Gover et al. (2008) also found that males and females who experienced abuse during childhood were significantly more likely to perpetrate physical DV.

Hypothesis 3) The current study hypothesized that prior exposure to violence will be a significant positive predictor of CC for male and female students.

Previous work has demonstrated that traditional sex role attitudes were predictive of DV for women (Bookwala et al., 1992). Whitaker, 2013 found that a one-unit increase in hostile sexism above the mean was associated with being 31% more likely to perpetrate psychological IPV and being 54% more likely to perpetrate physical IPV for male college students. Ibabe et al. (2016) found that hostile sexism was significantly positively correlated to IPV perpetration for men and women.

Hypothesis 4) The current study hypothesized that hostile and benevolent sexism will be significant positive predictors of CC for male and female students.

Exploratory hypotheses:

Previous work has not examined the relationship between attachment anxiety, prior exposure to violence, and use of CC in LGBT relationships, however based on previous research in heterosexual samples, a relationship is expected between attachment anxiety, prior exposure to violence and CC behaviors in the LGBT sample. The current study explored the relationship between attachment anxiety and prior exposure to violence in LGBT individuals. The measure of hostile and benevolent sexism was not administered for LGBT participants, as the measure

examines sexist attitudes within the context of heterosexual relationships and therefore may be irrelevant.

CHAPTER IV:

METHODS

A. Participants

The study was administered using Lime Survey among undergraduate university students at the American University of Beirut (AUB), a private university in Beirut, Lebanon. Terms were defined for participants and instructions were given for each section of the survey. A skip pattern was enabled for participants to respond to relevant questions only. For example, if a participant indicated their sexual identity as something other than heterosexual, they did not complete the Ambivalent Sexism Inventory (ASI). Analyses were completed using R software (R Core Team, 2020). Institutional Review Board (IRB) approval was obtained on November 19, 2020. Participants were recruited via email to an introductory psychology course, and data were collected over a one-week period from November 29, 2020 until December 6, 2020. Prior to the study, participants provided informed consent and received extra credit for their participation in the study.

The following were inclusion criteria for the study: participants must have been (a) at least 18 years old, (b) previously involved in a dating relationship that lasted at least one month, and (c) born in and grew up in a MENA country, and have not lived outside of a MENA country for more than four years (Murray et al., 2015). The majority of the participants were born and raised in Lebanon, however, participants also came from other countries in the MENA region including the United Arab Emirates, Syria, Yemen, Palestine, Kuwait, Bahrain, and Oman, or were born outside the MENA region, but raised in the MENA region. For the current study, countries that are part of the MENA region include Algeria, Bahrain, Egypt, Iran, Iraq, Jordan,

Kuwait, Lebanon, Libya, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Syria, Tunisia, Turkey, United Arab Emirates, Yemen (World Bank, 2013).

A total of 131 participants began the study. Of the 131 participants, 30 responses were removed due to incomplete or missing data, leaving a total of 101 completed responses. This was sufficient, as the number of participants necessary for the study was calculated by completing a G*Power 3 analysis (Faul, Erdfelder, Lang, & Buchner, 2007). First, the estimated observed R^2 was estimated to be 0.212 based on the previous literature (Conroy, 2016). Next, using the observed R^2, the effect size was calculated to be $f^2 = .269$ (Sopor, 2020). Finally, the estimated effect size was entered into the G*Power 3 analysis along the number of tested predictors (four; hostile sexism, benevolent sexism, attachment anxiety, and prior violence exposure). The G*3 Power analysis determined that 75 participants would be necessary to maintain power at the 0.95 level. A post-hoc G*Power 3 analysis was additionally calculated for the t-test. Cohen's d was estimated to be 0.5 based on the previous literature (Archer, 2000; Conroy, 2016). This value was entered into the power analysis, and it was reported that 83 participants in each sample group would be necessary to detect differences in the mean reported scores on the Coercive Control Scale (CCS). Although this requirement was not met, an examination of hypothesis 1 was undertaken to explore any differences in reported CCS scores between male and female students, though this examination must be analyzed with caution.

The final sample included a total of 101 individuals (*Table 1*). This included 83 female participants, 13 male participants, and 5 gender non-conforming participants. Participant age ranged from 18-33 years old ($M = 20.17$, $SD = 1.77$). Eighty of the participants identified as heterosexual (79%) and 21 identified as homosexual, "other," or "prefer not to answer" (21%). The majority of the participants were born in Lebanon ($n = 75$) followed by another country in

the Middle East or North Africa (n = 14), the USA, Canada, Western Europe, or South America (n = 12). For participants who were born outside of the MENA region, none lived outside of a MENA country for more than four years. The entire sample was either currently, or had been in a dating relationship for at least one month. At the time of the study, 35 of the participants were in a dating relationship (34.7%) and 66 participants were previously in a dating relationship (65.3%). For heterosexual participants, the average relationship length was 13.95 months (*SD* = 13.2), and for LGBT participants, the average relationship length was 11.04 months (*SD* = 13.3).

Table 1 - Participant Demographics

		Female (n = 83)	**Male (n = 13)**	**Other/Gender Nonconforming (n = 5)**
		n (%)	n (%)	n (%)
Country of birth				
	Lebanon	62 (74.7)	9 (69.2)	5 (100)
	Middle East and North Africa	11 (13.3)	2 (15.4)	-
	USA, Canada, Western Europe, or South America	10 (12.0)	2 (15.4)	-
Sexual Identity				
	Heterosexual	70 (84.3)	10 (76.9)	-
	Homosexual or Other	13 (15.7)	3 (23.1)	5 (100)
Variable		*M* (*SD*)	*M* (*SD*)	*M* (*SD*)
Age		20.1 (1.84)	20.3 (1.6)	20.2 (.58)
Relationship Length (Months)		14.2 (13.9)	10.0 (10.14)	8.8 (6.4)

B. Instruments

Demographic and background information. The study obtained demographic information such as age, sex, gender identity, sexual orientation, ethnicity, nationality, and country of birth. Participants were also asked if they had been in an intimate or dating relationship with an individual for at least one month (Lee et al., 2014; Straus, 2004).

Coercive control. The Coercive Control Scale (CCS; Conroy, 2016) is a 28-item measure that assesses coercive control in intimate relationships. The scale contains 4 subscales that aim to measures aspects of coercive control like *isolation and monitoring*, *verbal coercion and manipulation*, *communication technology control*, and *sexual coercion*. The scale was developed using a sample of university students, ranging from 18-22 years old. Conroy (2016) subjected the 28 items in the CCS to principle component analysis (PCA) after confirming the suitability of the data for factor analysis (Kaiser-Meyer-Olkin value = .929) and Bartlett's Test of Sphericity reached statistical significance. Conroy (2016) performed promax rotations and found that items loaded substantially on one component. The CCS has good reported internal consistency with a Cronbach's alpha of .94 for female and .91 for male university students. Physical violence, sexual violence, and coercive control scales were moderately to strongly correlated with one another, $r = .45$ to $.68$, $p < .01$, showing good convergent validity among related constructs (Conroy, 2016).

In the current study, the Cronbach's alpha coefficient was .73. Cronbach's alpha was examined for each subscale of the CCS. For the *isolation and monitoring* subscale, Cronbach's alpha was .56. For the *verbal coercion* subscale, Cronbach's alpha was .46. For the *communication technology and control* subscale, Cronbach's alpha was .59. For the *sexual coercion* subscale, Cronbach's alpha was .29. Thus, while most of the CCS subscales had

acceptable Cronbach's alpha coefficient, the *sexual coercion* subscale of this measure was not reliable in this sample and will be addressed as a limitation.

To ensure the suitability of the CCS for use in a sample of majority Lebanese students, the procedure used to factor analyze the CCS by Conroy (2016) was replicated. The CCS was subject to exploratory factor analysis with promax rotation (*Appendix H: Coercive Control Scale Factor Analysis Table*). Contrary to the finding by Conroy (2016) that the majority of the CCS items loaded onto one factor, in the current study, many items in the current study did not load onto one factor. Items 22 through 28 composed the sexual coercion subscale of the CCS and were rarely endorsed by participants in the current study (most participants endorsed "never" for these items with few exceptions). The factor analysis suggested the retention of a five factor model, X^2 (205, N = 97) = 220.9, p = 0.21. The 28 items explained 36.3% of the variance with factor loadings ranging from 0.19 to 0.73 (Kaiser-Meyer-Olkin Value = .56 and Bartlett's Test of Sphericity reached statistical significance). In the five-factor model, the items "Attempted to control my partner's communication with friends like phone calls or online messages," "told my partner if they care about me, they would have sex with me," "told my partner what they could or could not wear," "threatened to date someone else," "monitored the public activity on my partner's social media sites," accused my partner of having an affair," and "threatened to pursue sexual activity with other people if my partner did not have sex with me" did not load onto any factor. Further, the factor loadings did not load neatly onto the *isolation and monitoring*, *verbal coercion and manipulation*, *communication technology control*, and *sexual coercion* subscales as proposed by Conroy (2016). In the current study, the five factors in the model were conceptualized as *online surveillance, isolation, pressure and persuation, psychological abuse,* and, *monitoring*. However, it should be noted that these labels are not perfect. For example, the

item “Refused to use a condom when we had sex,” loaded onto the *online surveillance* factor. This is a limitation and point of consideration that will later be explored in further detail.

Hostile and benevolent sexism. The Ambivalent Sexism Inventory (ASI; Glicke & Fiske, 1996) was used to assess participant reported hostile and benevolent sexism. The ASI contains 22 items across two subscales. One subscale uses 11 items to assess hostile sexism (HS) (e.g., “Women are too easily offended”) and the second subscale uses 11 to assess benevolent sexism (BS) (e.g., “Women should be cherished and protected by men”). Participants were queried about their attitudes toward women and responses were recorded on a zero (*Strongly disagree*) to five (*Strongly agree*) Likert scale. The reported scale reliabilities range from 0.80 to 0.92 across several studies (Glick & Fiske, 1996). The HS subscale demonstrated good convergent validity with other measures of sexism such as the Modern Sexism Scale ($r = .65$, $p < 0.01$) and the Old-Fashioned Sexism Scale ($r = .48$, $p < 0.01$) (Swim et al., 1995). The BS subscale also displayed good convergent validity with the Modern Sexism Scale ($r = .33$, $p < 0.01$), and the Old-Fashioned Sexism Scale ($r = .24$, $p < 0.01$) (Glick & Fiske, 1996). The ASI was administered to a student sample in Lebanon and Cronbach’s alphas for the BS and HS subscales were reported as .61 and .62 respectively (Obeid et al., 2010). In the current study, the Cronbach’s alpha for the BS subscale was .74 and .88 for the HS subscale. For the HS subscale of the ASI, all 11 items loaded onto one factor and explained 42.5% of the variance with factor loadings ranging from 0.250 to 0.772 (Kaiser-Meyer-Olkin Value = .84 and Bartlett’s Test of Sphericity reached statistical significance). For the BS subscale of the ASI, 10 of 11 items loaded onto one factor with the exception of “In a disaster, women ought not to be rescued first.” It is possible that the wording of this item confused participants, and it was the only item phrased with a double negative on the scale. The remaining 10 items explained 24.1% of the variance with factor

loadings ranging from 0.291 to 0.670 (Kaiser-Meyer-Olkin Value = .713 and Bartlett's Test of Sphericity reached statistical significance).

Adult attachment. The Experiences in Close Relationships - Revised Questionnaire (ECR-R; Fraley, Waller, & Brennan, 2000) was used to assess adult attachment style, specifically attachment anxiety and attachment avoidance. The ECR-R was designed to assess attachment within and across a variety of relational contexts (Fraley et al., 2011). The ECR-R contains 36 items across two subscales. One subscale uses 18 items to assess attachment anxiety (e.g., "I often worry that my partner doesn't love me") and the second subscale contains 18 items to assess attachment avoidance (e.g., "I prefer not to be too close to romantic partners"). The ECR-R has previously been used in samples of undergraduate students in Lebanon, and factor analyses in these samples indicate that ECR-R items load onto two factors (Kazarian, 2003, Kazarian & Martin, 2004 cited in Hijazi, 2004). As described in the literature review, several studies have consistently reported a significant relationship between the Attachment Anxiety subscale of the ECR-R and the perpetration of intimate partner violence. Such consistent findings have not been reported between the Attachment Avoidance subscale of the ECR-R and intimate partner violence. Accordingly, in the current study, only the attachment anxiety subscale were used. Cronbach's alpha has been reported as .92 for the anxiety subscale and .93 for the avoidance subscale (Fairchild & Finney, 2006). In the current study, participants were asked to rate each item on a 7-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*) depending on their current or most recent relationship. Possible scores range from 1 to 7, with higher scores indicating higher attachment anxiety. In the current study, Cronbach's alpha was .92. For the Attachment Anxiety subscale of the ECR-R, all items loaded onto one factor

explaining 39.6% of the variance with factor loadings ranging from 0.409 to 0.793 (Kaiser-Meyer-Olkin Value = .872 and Bartlett's Test of Sphericity reached statistical significance).

Prior exposure to violence. Prior violence exposure was assessed using the Adverse Childhood Experiences questionnaire (ACE; Felitti et al., 1998). The ACE is a 10-item self-report questionnaire that assesses adverse experiences occurring prior to 18 years of age. These early adverse events include experiencing emotional abuse, physical abuse, sexual abuse, emotional neglect, physical neglect, violent treatment of the mother, household substance abuse, household mental illness, parental separation or divorce, and parental incarceration. Participants can only choose one of two responses for each question (*Yes* or *No*). The total score is calculated by summating all the questions and ranges from 0 to 10, with higher scores indicating greater exposure to childhood adversity. In previous studies, the ACE was found to demonstrate good to excellent test-retest reliability (Dube et al., 2003), the validity of the ACE has been supported across diverse populations (Mersky & Janczewski, 2018), and Cronbach's alpha for the ACE was reported as .72 (Lin, Yang, Elliott, & Green, 2020). The Adverse Childhood Experiences – International Questionnaire (ACE-IQ) has been used before in one study in Lebanon (Naal, Jalkh, & Haddad, 2013). The ACE-IQ is considerably longer (36 items), than the ACE (10 items). In the current study, the ACE was used as it is a shorter measure. Cronbach's alpha for the ACE scale was .7 in the current study. Additionally, an exploratory factor analysis found that the 10 ACE items loaded onto one factor and explained 22.3% of the variance with factor loadings ranging from 0.156 to 0.730 (Kaiser-Meyer-Olkin Value = .707 and Bartlett's Test of Sphericity reached statistical significance).

Social desirability scale. A scale that measures socially undesirable behavior such as the perpetration of coercive control might have a high level of internal consistency reliability

because some participants consistently avoid reporting that behavior (Straus, 2004). To control for this possibility, the current study used the Marlowe-Crowne Social Desirability Scale – Short Form (SDS; Reynolds, 1982). This scale measures the degree to which a participant avoids disclosing undesirable behavior across 13 items (Reynolds, 1982). The more of these items denied, the more likely a participant is to also deny other socially undesirable information. The Kuder-Richardson formula 20 reliability has been reported as .76 for this scale, and the scale demonstrated convergent validity with the Edwards Social Desirability Scale (r = .41) and the standard Marlowe-Crowne Social Desirability Scale (r = .93). In the current study, Cronbach's alpha was found to be .64.

C. Procedures

All study participants completed measures online through LimeSurvey. Study instructions, questionnaires, informed consent, and debriefing forms were completed in English. All participants provided informed consent prior to the beginning of the study. It was emphasized to participants that their participation in the study was voluntary, anonymous, and that they were free to withdraw from the study at any time. Further, it was emphasized that their decision to participate or not to participate would not impact their relationship with their course instructor or with American University of Beirut (AUB). Participants were not identified and all measures were completed anonymously. After demographic and background information were obtained, participants completed the Coercive Control Scale (CCS), Experiences in Close Relationships Scale – Revised (ECR-R), Ambivalent Sexism Inventoy (ASI), Adverse Childhood Experiences Scale (ACE), and Marlowe-Crowne Social Desirability Scale. The order of study measures was randomized to counterbalance the measures and reduce order effects, resulting in

120 different possible combinations of study instruments. As mentioned earlier, LGBT participants did not complete the ASI as it examines sexism within the context of heterosexual relationship dynamics. Therefore, if participants identified their sexuality as something other than *Heterosexual* in the demographic portion of the study, then they completed only the CCS, ECR-R, and ACE.

The study first piloted 8 participants to check for clarity of measures and time to complete the questionnaires. Data from the pilot study was not included in the final analysis. Participants in the pilot study did not receive extra-credit in classes for their participation in the study. Participants in the pilot study reported completing the entire battery of measures in under 20 minutes. Participants in the pilot study were asked about clarity of wording on test measures and clarity of instructions. Pilot study participants suggested minor semantic changes on test items that were difficult to understand, or included words that would not be immediately familiar for individuals who speak English as a second language. Pilot study participants also noted difficulty in responding to test items on the Coercive Control Scale honestly. This was confirmed by the significant negative correlation between Social Desirability Scale scores and Coercive Control Scale scores in the pilot study, $r = -0.78$, $t(6) = -3.03$, $p = 0.02$.

D. Statistical Analyses

To examine hypothesis 1 (male students will perpetrate more CC compared to female students), a t-test was used to examine the mean difference in CCS scores for male and female students. With higher CCS scores indicating higher use of coercive control in dating relationships, it was expected that male students will have a significantly higher score compared to female students. To examine hypotheses 2 (attachment anxiety will be a significant positive

predictor of CC for male and female students), 3 (prior exposure to violence will be a significant positive predictor of CC for male and female students), and 4 (hostile and benevolent sexism will be significant positive predictors of CC for male and female students), a multiple regression analysis was used to determine if benevolent sexism, hostile sexism, prior exposure to violence, and attachment anxiety predict CC. Analyses were conducted separately for LGBT participants.

To examine if a social desirability bias represents a threat to internal validity, correlational analyses were completed between mean CCS scores and scores from the Marlowe-Crowne Social Desirability Scale – Short Form (SDS). It is expected that there will be an inverse relationship between these scores, such that participants scoring high on the SDS will report lower scores on the CCS. A significant negative correlation between the SDS and CCS would suggest that participants in the study possibly withheld reporting socially undesirable behavior like CCS perpetration.

CHAPTER V:

RESULTS

A. Preliminary Analyses

Missing Value Analyses. Data were retained if no more than 10% of data were missing (10 items). Of the 131 participants who began the study, 30 participants were removed for 10% or higher missing data and responses to items. Participants who were missing less than 10% of data were retained, and mean substitution was used to compute scores. Little's MCAR analysis was completed for each test instrument separately (Little, 1988), as the Little's MCAR function in R examines a maximum of 50 variables at one time. Additionally, because LGBT participants did not complete the Hostile Sexism (HS) or Benevolent Sexism (BS) Scales, a pattern of missing data would likely have been detected.

Little's MCAR test was non-significant for responses on the Hostile Sexism (HS) Scale, $\chi^2(44, N = 111) = 51.75$, $p = 0.20$, Benevolent Sexism (BS) Scale, $\chi^2(34, N = 111) = 42.63$, $p = 0.15$, Experiences in Close Relationship Scale – Revised (ECR-R) Scale, $\chi^2(76, N = 131) = 78.36$, $p = 0.40$, Adverse Childhood Experiences (ACE) Scale, $\chi^2(1, N = 131) = 0.23$, $p = 0.63$, and Social Desirability Scale (SDS), $\chi^2(27, N = 131) = 35.27$, $p = 0.13$.

Prior to analyses, data were subject to a validation process. Data were checked to ensure values were within the range of possible values for each variable. Data were graphically examined for normality, and skewness. Scores on the BS subscale of the ASI, HS subscale of the ASI, ECR-R, and SDS were normally distributed. The ACE and CCS scores were positively skewed suggesting that the majority of the participants in the study did not experience many adverse childhood events, or high levels of controlling behaviors in their dating relationships.

Coercive control scale (CCS). Of the participants in the current study, 93.1% (*n* = 94) reported at least "rarely" using a coercive controlling tactic in their current or most recent relationship (*Table 2*). The average number of reported coercive control tactics present in the current or most recent relationship was 4.21 (*SD* = 2.78). The maximum number of coercive control tactics reported by any participant was 12. The frequency of CCS item endorsements is presented in *Table 2*, and the most frequent were, "I blamed my partner for causing problems in our relationship" (*n* = 64, 63.4%), "I insisted on knowing where my partner was at all times" (*n* = 61, 60.4%), "I monitored the public activity on my partner's social media sites" (*n* = 52, 51.5%), and "I persistently called or texted my partner to see where they were or what they were doing" (*n* = 45, 44.6%). The average CCS score was 34.13 (*SD* = 4.70).

Table 2 - Participant Responses on the Coercive Control Scale

Isolation and monitoring	**Total** (*N* = 101)
Insisted on knowing where my partner was at all times	60.4% (61)
Expected my partner to ask permission before doing things without me	22.8% (23)
Attempted to control my partner's communication with friends, like phone calls or online messages	18.8% (19)
Had friends monitor my partner's behavior when they weren't with me	14.9% (15)
Encouraged my partner to change residence	14.9% (15)

Attempted to control the time my partner spent with their family and friends	14.9% (15)
Told my partner what they could or could not wear	7.9% (8)
Verbal coercion and manipulation	
Blamed my partner for causing problems in our relationship	63.4% (64)
Tried to make my partner feel inadequate	10.9% (11)
Threatened to date someone else	6.9% (7)
Damaged something that belonged to my partner	5.9% (6)
Accused my partner of having an affair	5.9% (6)
Threatened to harm and/or kill myself, or threatened to physically hurt my partner *	4.0% (4)
Communication technology control	
Monitored the public activity on my partner's social media sites	51.5% (52)
Persistently called or texted to see where my partner was or what they were doing	44.6% (45)
Checked my partner's text messages, emails, and/or social media messages to monitor their activity	29.7% (30)
Demanded my partner's online and/or cell phone passwords	13.9% (14)

	Sent threatening messages to my partner via text message, online or social media sites, or phone calls; Wrote hurtful things about my partner on social media; Used key logging software to track my partner's activity *	5.0% (5)
Sexual coercion		
	Refused to use a condom when we had sex; Pressured my partner to send sexual photos; Pressured my partner to engage in sexual activities they didn't want; Threatened to pursue sexual activity with other people; Told my paretner if they cared about me, they would have sex with me. [*]*	2.97% (8)
	Pressured my partner to videotape or photograph sexual acts	- (0)
	Shared private sexual photos of my partner with other people against their will	- (0)

[*] Note: Items are amalgamated in the interest of participant confidentiality

Adverse childhood experiences (ACE). The average number of reported ACEs in the current study was 1.52. The minimum number of ACEs reported was 0 and the maximum was 8. T-tests were conducted to examine if there were any significant differences in ACE scores among male and female, and LGBT and heterosexual participants. There was no significant difference in the ACE scores reported between male (M = 0.92, SD = 1.19) and female participants (M = 1.58, SD = 1.9), t (94) = 1.204, p = 0.23. There was a significant difference in ACEs reported by heterosexual (M = 1.30, SD = 1.71) and LGBT participants (M = 2.38, SD = 1.88), with LGBT participants reporting a significantly higher level of ACEs, t (99) = 2.53, p = 0.01.

Attachment Anxiety Subscale of Experiences in Close Relationships Scale - Revised (ECR-R). The average attachment anxiety ECR-R score in this sample was 3.56, the lowest ECR-R score was 1.27 and the highest was 6.61. There was no significant difference between the ECR-R scores reported by female (M = 3.57, SD = 1.27) and male (M = 3.38, SD = 1.17) participants, t (16) = 0.53, p = 0.61. There was a significant difference between ECR-R scores for LGBT and heterosexual participants, with LGBT participants (M = 4.13, SD = 0.98) reporting significantly higher ECR-R scores compared to heterosexual participants (M = 3.41, SD = 1.26), t (99) = 2.43, p = 0.02.

Hostile Sexism (HS) and Benevolent Sexism (BS). The HS scores in this sample ranged from 0.18 to 9.00 with an average of 4.80. There was no significant difference in the average HS score for male (M = 4.23, SD = 1.88) and female participants (M = 4.88, SD = 1.75), t (78) = 1.09, p = 0.28. BS scores ranged from 0.455 to 3.82 with an average of 2.01. There was no significant difference in the average BS score for male (M = 2.42, SD = 0.93) and female (M = 1.95, SD = 0.70) participants, t (78) = 1.93, p = 0.08.

***Social Desirability Scale* (*SDS*).** The SDS scores in this sample ranged from 13.0 to 26.0 with an average of 19.7 (*SD* = 2.61). Male participants had an average SDS score of 19.38 (*SD* = 2.90), and female participants had an average SDS score of 19.83 (*SD* = 2.54). Significant negative correlations between the SDS and measure of socially undesirable behavior would suggest that participants may have withheld reporting socially undesirable behavior. In the current study, the trend was in the negative direction, as such, results must be interpreted with caution. Participants with higher SDS scores reported lower levels of CCS perpetration, however, this relationship was non-significant, $r = -0.182$, $t(99) = -1.85$, $p = 0.07$.

Table 3 - Means, Standard Deviations, and t-test Analyses for Study Variables

	Possible Range	Female (*n* = 83) *M* (*SD*)	Male (*n* = 13) *M* (*SD*)	*t*-test	Cohen's d	*p* Value
Adverse Childhood Experiences (ACE)	(0 – 10)	1.58 (1.9)	0.92 (1.19)	1.20	0.36	0.23
Attachment Anxiety (ECR-R)	(1 – 7)	3.57 (1.27)	3.38 (1.17)	0.53	0.15	0.61
Benevolent Sexism (BS)	(0 – 5)	1.95 (0.70)	2.43 (0.93)	1.93	0.65	0.06
Hostile Sexism (HS)	(0 – 5)	4.88 (1.75)	4.23 (1.88)	1.09	0.37	0.28
Coercive Control (CCS)	(28 – 140)	34.66 (4.81)	32.54 (3.31)	1.53	0.46	0.13
		Heterosexual (*n* = 80) *M* (*SD*)	LGBT (*n* = 21) *M* (*SD*)	*t*-test	Cohen's d	*p* Value
Adverse Childhood Experiences (ACE)	(0 – 10)	1.30 (1.71)	2.38 (1.88)	2.52	0.62	0.013
Attachment Anxiety (ECR-R)	(1 – 7)	3.41 (1.26)	4.13 (0.98)	2.43	0.59	0.017
Coercive Control (CCS)	(28 – 140)	34.78 (4.69)	31.67 (3.93)	2.79	0.68	0.006

Table 4 - Means, standard deviations, and correlations with confidence intervals

Variable	*M*	*SD*	1	2	3	4
1. ACE	1.52	1.79				
2. BS	2.01	0.74	-.28* [-.47, -.06]			
3. HS	4.80	1.77	-.00 [-.22, .22]	.32** [.10, .50]		
4. ECR	3.56	1.24	.12 [-.07, .31]	.00 [-.22, .22]	-.24* [-.43, -.02]	
5. CCS	34.13	4.70	-.00 [-.20, .19]	-.07 [-.28, .16]	.12 [-.10, .33]	.32** [.13, .49]

Note. *M* and *SD* are used to represent mean and standard deviation, respectively. Values in square brackets indicate the 95% confidence interval for each correlation. The confidence interval is a plausible range of population correlations that could have caused the sample correlation (Cumming, 2014). * indicates $p < .05$. ** indicates $p < .01$.

B. Main Analyses

Normality Testing. Homoscedasticity, normality, and multicollinearity were examined as assumptions of the regression analysis.

Homoscedasticity was examined through the generation of a Spread-Level Plot for fit in R. Absolute studentized residuals were plotted against a range of fitted Y values (Appendix I). A lack of any curves or skewness in the graph suggested a non-violation of the homoscedasticity assumption. This was confirmed for the regression model with heterosexual participants, as well as the model with LGBT participants (Appendix J).

The Shapiro-Wilk test was used to examine the statistical assumption of normality (Shapiro & Wilk, 1965). This assumption was violated for the regression model examining

heterosexual participants only ($W = 0.96$, $p = .02$). However, because the regression model is robust in regards to violations of the normality assumption (Ernst & Albers, 2017), this model was retained for further analysis. In the regression model examining LGBT participants, the Shapiro-Wilk test was non-significant indicating non-violation of the normality assumption ($W = 0.99$, $p = .98$).

Multicollinearity was examined using the variance inflation factor (VIF) in R. The VIF notes the amount of increase of regression coefficient when all predictors are uncorrelated. If the VIF is less than 2, the assumption of no multicollinearity is met (James et al., 2014). In the current study, the VIF was below 2 for all predictor variables, thus the assumption of no multicollinearity was met.

Cook's Distance was calculated to examine the influence of outliers on the model. Three cases were identified as outliers and removed from the analysis. The regression analysis was re-run and the results remained the same, and the normality assumption remained violated, thus the three outlier cases were retained in further analyses.

Due to the low number of male participants in the study ($n = 13$), separate regression analyses that examined male and female participants separately were not be completed. An initial regression model was first completed that included all of the independent variables, prior childhood exposure to violence (Adverse Childhood Experiences Scale; ACE), attachment anxiety (Experiences in Close Relationships Scale; ECR), hostile and benevolent sexism (Ambivalent Sexism Scale; HS and BS), and dependent variable, coercive controlling behavior (Coercive Control Scale; CCS). This model was found to be significant $F(4, 75) = 4.85$, $p < 0.01$. Variables that were found to be non-significant were dropped and a final model was analyzed that included variables that were found to be significant in the initial model.

Hypothesis 1: Male students are more likely to perpetrate CC in dating relationships compared to female students. This hypothesis was not supported (*Table 3*). Male participants ($M = 32.54$, $SD = 3.31$) did not perpetrate a significantly higher level of CC compared to female participants ($M = 34.66$, $SD = 4.81$), $t\,(94) = 1.53$, $p = 0.13$).

Hypothesis 2: Attachment anxiety will be a significant positive predictor of CC for male and female students. This hypothesis was supported. In the initial regression model that included all independent variables, ECR-R scores significantly predicted CCS scores $F\,(1, 75) = 16.6$, $p < 0.001$. In the initial model (*Table 5*), the coefficient for ECR-R was 1.62, thus, a unit increase in ECR-R score was associated with an increase in CCS score by 1.62, $t\,(1, 75) = 4.08$, $p < 0.001$. The final model (*Table 6*) of the regression analysis found that a unit increase in ECR-R was associated with a 1.58 increase in CCS score, $t\,(1, 77) = 4.01$, $p < 0.001$.

Hypothesis 3: Prior exposure to violence will be a significant, positive predictor of CC for male and female students. This hypothesis was not supported (*Table 5*), $F\,(1, 75) = 0.01$, $p = 0.93$.

Hypothesis 4: Hostile and benevolent sexism will be significant, positive predictors of CC for male and female students. This hypothesis was partially supported (*Table 5*). In the initial model, hostile sexism was found to be a significant, positive predictor of CCS, $F\,(1, 75) = 5.71$, $p < 0.05$. A unit increase in HS score was associated with an increase in CCS score by 0.72, $t\,(1, 75) = 2.39$, $p < 0.05$. Benevolent sexism was not found to be a significant, positive predictor of CCS, $F\,(1, 75) = 1.72$, $p = 0.19$. In the final model, hostile sexism remained a significant, positive predictor of CCS, $t\,(1, 77) = 2.08$, $p < 0.05$ (*Table 6*).

Table 5 – Initial Regression Model (Heterosexual Participants)

Predictor	*b*	*b* 95% CI [LL, UL]	*beta*	*beta* 95% CI [LL, UL]	sr^2	sr^2 95% CI [LL, UL]	*r*	Fit
(Intercept)	27.68**	[22.98, 32.39]						
ACE	0.03	[-0.57, 0.62]	0.01	[-0.21, 0.23]	.00	[-.00, .00]	.09	
ECR	1.62**	[0.83, 2.41]	0.44	[0.22, 0.65]	.18	[.03, .33]	.37**	
BS	-0.94	[-2.38, 0.49]	-0.15	[-0.38, 0.08]	.02	[-.03, .07]	-.07	
HS	0.72*	[0.12, 1.32]	0.27	[0.04, 0.49]	.06	[-.03, .15]	.12	
								R^2 = .205** 95% CI[.04,.32]

Note. A significant *b*-weight indicates the beta-weight and semi-partial correlation are also significant. *b* represents unstandardized regression weights. *beta* indicates the standardized regression weights. sr^2 represents the semi-partial correlation squared. *r* represents the zero-order correlation. *LL* and *UL* indicate the lower and upper limits of a confidence interval, respectively. * indicates $p < .05$. ** indicates $p < .01$.

Final Model: A final regression analysis was run with only the predictors found to be significant in the initial analysis, attachment anxiety (ECR-R) and hostile sexism (HS) (*Table 6*). The model was significant, F (2, 77) = 8.71, p < 0.001, with attachment anxiety (ECR-R) and hostile sexism (HS) scores accounting for 18.4% of the variance in coercive control (CCS) scores (adjusted R-squared = 0.184). In the final model, a unit increase in ECR-R score was

associated with a 1.58 increase in CCS score, t (1, 77) = 4.01, $p < 0.001$, and a unit increase in HS score was associated with a 0.58 increase in CCS score, t (1, 77) = 2.08, $p < 0.04$.

Table 6 - Final Regression Model (Heterosexual Participants)

Predictor	*b*	*b* 95% CI [LL, UL]	*beta*	*beta* 95% CI [LL, UL]	sr^2	sr^2 95% CI [LL, UL]	*r*	Fit
(Intercept)	26.61**	[22.29, 30.92]						
ECR	1.58**	[0.79, 2.36]	0.42	[0.21, 0.64]	.17	[.02, .32]	.37**	
HS	0.58*	[0.02, 1.14]	0.22	[0.01, 0.43]	.05	[-.04, .13]	.12	
								R^2 = .184** 95% CI[.04,.32]

Note. A significant *b*-weight indicates the beta-weight and semi-partial correlation are also significant. *b* represents unstandardized regression weights. *beta* indicates the standardized regression weights. sr^2 represents the semi-partial correlation squared. *r* represents the zero-order correlation. *LL* and *UL* indicate the lower and upper limits of a confidence interval, respectively. * indicates $p < .05$. ** indicates $p < .01$.

***Exploratory Hypothesis*:** The relationship between attachment anxiety (ECR-R) and prior exposure to violence (ACE) was explored among LGBT participants (*Table 7*). Participants in this regression analysis were participants who indicated their gender identity as something other than their biological born sex (i.e., gender non-conforming), or their sexual identity as anything other than heterosexual (i.e., homosexual, bisexual). Although significant and important differences among gender and sexual minorities are recognized, due to the lower number of

gender and sexual minority participants in this study, these participants were analyzed together in a group labeled "LGBT" (n = 21).

A multiple regression analysis was used to explore the relationship between attachment anxiety (ECR-R), prior exposure to violence (ACE), and coercive control (CCS) among LGBT participants. A model that used ACE and ECR-R scores as predictors of CCS was found to be significant F (2, 18) = 6.68, $p < 0.01$. ECR-R scores significantly predicted CCS scores, F (1, 18) = 13.35, $p < 0.01$. ACE scores did not significantly predict CCS scores among LGBT participants, F (2, 18) = 0.02, $p = 0.90$. Thus, ACE was dropped from the model.

Table 7 - Initial Regression Model (LGBT Participants)

Predictor	*b*	*b* 95% CI [LL, UL]	*beta*	*beta* 95% CI [LL, UL]	sr^2	sr^2 95% CI [LL, UL]	*r*	Fit
(Intercept)	21.01**	[14.38, 27.63]						
ACE	-0.05	[-0.83, 0.74]	-0.02	[-0.40, 0.35]	.00	[-.01, .01]	-.02	
ECR	2.61**	[1.11, 4.11]	0.65	[0.28, 1.03]	.43	[.11, .75]	.65**	
								R^2 = .426** 95% CI[.05,.62]

Note. A significant *b*-weight indicates the beta-weight and semi-partial correlation are also significant. *b* represents unstandardized regression weights. *beta* indicates the standardized regression weights. sr^2 represents the semi-partial correlation squared. *r* represents the zero-order correlation. *LL* and *UL* indicate the lower and upper limits of a confidence interval, respectively. * indicates $p < .05$. ** indicates $p < .01$.

The final model examined attachment anxiety (ECR-R) scores as predictors of coercive control (CCS) scores among LGBT participants (*Table 8*). The model was significant, F (1, 19) = 14.08, $p < 0.01$. ECR-R scores accounted for 42.6% of the variance in CCS scores (adjusted R-squared = 0.426). A unit increase in ECR-R score was associated with a 0.65 increase in CCS score, t (1, 19) = 3.75, $p < 0.01$.

Table 8 - Final Regression Model (LGBT Participants)

Predictor	*b*	*b* 95% CI [LL, UL]	*beta*	*beta* 95% CI [LL, UL]	sr^2	sr^2 95% CI [LL, UL]	*r*	Fit
(Intercept)	20.90**	[14.73, 27.06]						
ECR	2.61**	[1.15, 4.07]	0.65	[0.29, 1.02]	.43	[.09, .63]	.65**	
								R^2 = .426** 95% CI[.09,.63]

Note. A significant *b*-weight indicates the beta-weight and semi-partial correlation are also significant. *b* represents unstandardized regression weights. *beta* indicates the standardized regression weights. sr^2 represents the semi-partial correlation squared. *r* represents the zero-order correlation. *LL* and *UL* indicate the lower and upper limits of a confidence interval, respectively. * indicates $p < .05$. ** indicates $p < .01$.

CHAPTER VI:

DISCUSSION

CC creates a dangerous power imbalance where an individual attempts to subordinate their romantic partner through a pattern of controlling, exploitative, isolating, and degrading tactics that often directly target vulnerabilities of the romantic partner. Recent research demonstrates that the presence of CC in a relationship is a better predictor of rape, near-lethal violence, weapon-use, and severe distress in a romantic relationship than the presence of physical violence alone (Beck & Raghavan, 2010; Dichter et al., 2018). While most previous research on CC has focused on the consequences of CC, fewer studies have examined the dynamics that predict CC behaviors. Further, fewer studies have examined the presence of CC in early, dating relationship, and CC has largely been studied in Western countries. Accordingly, the current study aimed to examine the factors related to the perpetration of CC in a sample of dating university students outside of the Western world.

It should be noted that this study was completed during the COVID-19 pandemic that required many people remain at home. In Lebanon, specifically, during this time, the country was subject to recurring stay-at-home orders and lockdowns implemented by the government. Recent studies have shown that police reports of IPV, and crisis text and hotline calls increased globally following stay-at-home orders (Kofman & Garfin, 2020; Rauhaus, Sibila, & Johnson, 2020). However, given that the students in the current study were either previously in, or currently in dating relationships, it is unclear how the COVID-19 pandemic may have impacted CC behaviors. On one hand, it is possible that, for those currently dating, the stay-at-home orders created physical distance between dating individuals that reduced the use of CC behaviors. On

the other hand, the increase in physical distance from the stay-at-home orders may have caused an increase in the use of certain CC behaviors like online monitoring, or frequent calls and texts, as a CC perpetrator would not be able to physically be with their dating partner.

Another important feature of the sample in the current study to note is the high rate of students who identified as gender and sexual minorities. Approximately twenty-percent of students in the current study identified as something other than cis-gender and heterosexual. This is important to note, given the context of the study being conducted in Lebanon, where open differences in gender and sexual identities can have negative consequences.

Finally, it is important to note that only 13 male students participated in the current study. The implication of this will be explored in further detail as a limitation of the current study. The low number of male students in the current study was likely due to a low number of male students enrolled in the psychology course from which participants were recruited for the current study.

A. Coercive Control Scale (CCS) Scores and Tactics

The CCS scores in this study are mostly similar to those reported in the study by Conroy (2016). In the current study, the most frequently endorsed CCS items were similar to those reported by Conroy (2016). Specifically, both the current study and study by Conroy (2016) found that some of the most frequently reported CC tactics were, "Blamed my partner for causing problems in our relationship," "Insisted on knowing the location of my partner at all times," "I monitored the public activity on my partner's social media sites," and "I persistently called or texted my partner to see where they were or what they were doing." This finding suggests that young adults in both the United States and Lebanon use similar CC tactics in their

early relationships. Given that some of the most frequently endorsed CC tactics involved new communication technologies and social media, this finding highlights the importance of how these new technologies are being used in the perpetration of CC.

Notably, the first hypothesis of this study that male students would be more likely to perpetrate CC in dating relationships compared to female students was not supported, however this finding must be interpreted with caution given the low number of males in the study. In agreement with the "Family Violence" perspective of IPV research, this study found that, when assessing CC behaviors in a university convenience sample, male and female students report similar rates of CC perpetration. This finding diverges from the study by Conroy (2016) who reported that men were significantly more likely to perpetrate CC compared to women. The finding that male and female students did not perpetrate significantly different levels of CC is in agreement with the suggestion of previous studies that convenience samples will not capture gendered differences in the perpetration of CC (Carney & Barner, 2012; Hardesty & Ogolsky, 2020; Jasinski, Blumenstein, & Morgan, 2014, Raghavan et al., 2019). Convenience samples do not detect gendered differences in the perpetration of CC, or IPV more generally, because such samples reflect the particular population being sampled, and thus the rate of IPV found (Raghavan et al., 2019). That is, whereas female victims of IPV are more likely to be represented in studies drawing from clinical samples, this is not the case in studies utilizing convenience samples (Johnson, 2006).

However, in the current study, it was suggested that previous studies utilizing convenience samples may have captured equal rates of CC perpetration among men and women due to these studies using measures of psychological violence or aggression as a proxy-measure of CC (i.e., Straus & Gozjolko, 2014). The current study attempted to address this by using an

instrument designed to measure CC specifically. Several possible explanations will be highlighted below detailing why, despite using an instrument designed to measure CC specifically, the current study found non-significant differences in CC perpetration.

First, it is possible that male students in the current study withheld reporting acts of CC due to the societal stigmatization of male violence against women (Wincentak, Connoly, & Card, 2017). This is a possibility given the expected negative relationship between the Coercive Control Scale (CCS) and Social Desirability Scale (SDS). Another possibility that is more likely is that this convenience sample did not capture men who perpetrate high levels of CC in their dating relationships. Third, the low sample size of males may not have allowed for an accurate detection of male perpetration of CC. Finally, the CCS is limited in that it does not allow for an analysis of motivation, or context in the perpetration of CC.

A case detailed by Hamberger et al. (2017) illustrates the aforementioned point,

> "A female participant identified her primary motivation for her use of [violence] as 'control.' She then explained that her partner had a history of violence against her and she had sustained a severe head injury as a result of an assault. She decided that she needed to use force to physically restrain and remove him from her residence …" (Hamberger et al., 2017, p. 2).

The example above demonstrates that, without important contextual information, understanding the motivations and reasons for the use of coercive controlling behaviors is limited. Further, as mentioned, CC is defined as "…violence in the context of a pervasive pattern of controlling tactics …" (Crossman & Hardesty, 2018, p. 196). While the CCS captures a frequency count of coercive controlling behavior, without qualitative data to contextualize the behavior, it is difficult to identfiy the individual surveyed a definite perpetrator of CC, or

psychological violence. This is an important limitation that will be addressed in further detail below.

B. The Relationship between Attachment Anxiety and Coercive Control

The second hypothesis of the current study, that attachment anxiety would be a significant positive predictor of CC, was supported. It is noteworthy that attachment anxiety was a significant predictor of CC among heterosexual and sexual and gender minority university students. This finding underscores the importance of attachment anxiety as a predictor of CC in LGBT and heterosexual relationships, and is in agreement with other studies that have found attachment anxiety to be a significant predictor of other forms of intimate partner violence (IPV) (Barbaro & Shackelford, 2019, Doumas et al., 2008; Lee et al., 2014; Wright, 2017).

As noted earlier, Bowllby's attachment theory suggests that individuals develop *internal working models* based on early experiences with caregivers. Thus, it may be that individuals who engage in coercive controlling behaviors had early caregiving experiences characterized by unresponsiveness and unreliability from the caregiver. Individuals with such experiences may presently engage in coercive controlling behaviors as a maladaptive attempt to ensure the reliability and dependability of their current romantic partner.

In previous studies, the attachment anxiety subscale of the ECR-R has been found to be predictive of physical intimate partner violence (Barbaro & Shackelford, 2019; Doumas et al., 2008; Lee et al., 2014), cyber/technology privacy invasion (Wright, 2017), psychological aggression (Barbaro & Shackelford, 2019), and sexual coercion (Barbaro & Shackelford, 2019). Other studies have found that coercive control was related to other forms of intimate partner violence victimization like physical violence (Tahna et al., 2010; Loveland & Raghavan, 2017),

psychological abuse (Tahna et al., 2010), and sexual violence (Tahna et al., 2010). These studies have theorized that when CC fails, the perpetrator will resort to other forms of violence to subordinate and control a partner (Beck & Raghavan, 2010; Loveland & Raghavan, 2017; Tanha, Beck, Figueredo, & Raghavan, 2010). The results of the current study that attachment anxiety predicts CC adds a new dimension to the relationship between CC and other forms of IPV. It is possible that attachment anxiety is a motivating factor for CC and IPV, and that CC may mediate the relationship between attachment anxiety and IPV. In the current study, it was suggested that individuals who romantically attach in an anxious style may use CC tactics as an attempt to maintain emotional and physical proximity to their romantic partners, thereby assuaging some of the anxiety they experience. When the CC tactics fail, and anxieties run high, a perpetrator of IPV may utilize more dangerous and threatening forms of violence to maintain emotional and physical proximity to their partner.

C. The Relationship between Prior Exposure to Violence and Coercive Control

The third hypothesis of this study was that prior exposure to violence would be a significant, positive predictor of CC. This hypothesis was not supported for neither heterosexual dating university students, nor LGBT students. To assess prior exposure to violence, the Adverse Childhood Experiences (ACE) scale was used. Scores on the ACE did not predict the perpetration of CC for heterosexual or LGBT students. This finding diverges with previous research that used varying scales to assess prior exposure to violence and dating violence perpetration. For example, Whitfield et al. (2003) found that having experienced physical violence, sexual abuse, and witnessing IPV resulted in an increased risk of perpetrating later physical IPV. Similarly, Lu et al. (2019) found that PTSD symptoms mediate the relationship

between childhood physical abuse and physical DV perpetration. Lastly, Lee et al. (2014) found that mother-to-child and father-to-child aggression was directly predictive of physical dating violence perpetration for women and men.

It is noteworthy that in the majority of the previous research on this topic, researchers found that experiencing and witnessing violence in the family of origin was predictive of *physical* DV and IPV perpetration. Few studies, such as one by Gover et al. (2008), found that experiencing childhood abuse was significantly associated with physical violence perpetration, and that, for females but not males, experiencing childhood abuse was associated with the perpetration of psychological abuse in dating relationships. Another study by Gage et al. (2016) found that, for males, observing violence perpetrated by the father was associated with an increase in psychological DV perpetration. For females, observing violence perpetrated by the mother or father in the family of origin was not associated with any type of DV perpetration.

These contradictory results are likely a consequence of different study recruitment methods, and methods of assessing the experience and perpetration of violence. From the previous literature, it may be that witnessing *physical* violence in the family of origin is a relevant predictor of later *physical* abuse perpetration in romantic relationships. Other factors, such as witnessing the perpetration of psychological abuse, spousal manipulation, or coercive control may be better predictors of perpetrating later coercive control. Gender also appears to play a role, with some past studies reporting that witnessing or experiencing violence in the family of origin is only a predictor of later DV perpetration for males, and not females, and vice-versa. Future studies should aim to examine if witnessing violence in the family of origin is only a predictor of later physical violence perpetration, if the intergenerational transmission of

violence pertains to the perpetration of coercive control, and how and if gender influences the intergenerational transmission of violence.

D. The Relationship between Hostile and Benevolent Sexism and Coercive Control

The fourth hypothesis of the current study was that hostile and benevolent sexism would be significant, positive predictors of CC for male and female students. This hypothesis was partially supported. Although hostile sexism was found to be a positive predictor of CC for male and female students, benevolent sexism was not found to be a positive predictor of CC.

Most of the previous research examining the relationship between sexism and IPV has been conducted among male populations. The results of the current study are mostly in agreement with these previous findings. For example, Torres et al. (2012) found that adversarial sexual beliefs were positively related to psychological aggression for both male and female university students. Similarly, Renzetti et al. (2018) found among a sample of male participants recruited online that higher hostile sexism scores were predictive of higher rates of psychological and physical abuse against their intimate partners. In the same study, it was found that benevolent sexism scores were not predictive of either form of IPV perpetration. A study by Makin-Byrd and Azar (2011) found that male undergraduates who endorsed more hostile beliefs about women were more likely to perpetrate violence compared to their non-violent counterparts. Finally, Ibabe, Arnoso, and Elgorriaga (2016) found that benevolent sexism positively correlated with DV perpetration for male college students, and hostile sexism positively correlated with DV perpetration for both male and female college students.

Although benevolent and hostile sexist attitudes have been thought of as “powerful control systems” (Rebeiz & Harb, 2010, pg. 737), the current study did not find that benevolent

sexist attitudes predicted coercive controlling behaviors. One possible explanation is that benevolent sexism is a salient predictor of CC for men, yet this was not detected due to the low sample size of males in the study. Another possible explanation is that certain items on the Benevolent Sexism subscale of the Ambivalent Sexism Inventory like “in a disaster, women ought to be rescued before men,” “a good woman should be set on a pedestal by her man,” and “women should be cherished and protected by men” may reflect important cultural values in Lebanese society that men should be helpful respectful toward women (Obeid, Chang, & Ginges, 2010). Although these values are sexist in nature, in Lebanese society benevolent sexist attitudes may not be predictive of coercive controlling behaviors because they are widespread and not associated with harming women.

How is the link between sexism and the use of coercive control, among other forms of intimate partner violence best explained? Glick et al. (2002) suggests that, in intimate relationships, violations of gendered norms or expectations may increase the propensity for IPV. For example, a man who obtains a high hostile sexism score on the Ambivalent Sexism Inventory (ASI) may have certain beliefs or expectations for the behavior of his female intimate partner. When his female intimate partner fails to comply with his hegemonic beliefs or expectations, the man may attempt to exert control, or use other forms of IPV, such that his female partner complies with his gendered expectations and beliefs. A woman who obtains a high hostile sexism score on the Ambivalent Sexism inventory may have similar hegemonic ideas and expectations for how her male partner should behave within the context of their relationship. When the male partner fails to be a “strong protecting provider” (for example), the woman may attempt to use controlling tactics to force her male partner into a role that matches her gendered idea and expectation of what a man “should” be in a relationship.

E. Limitations.

In the current study, there are several important limitations to be noted. The first limitation is that too few male students were recruited for, and participated in the current study. From the literature on the use of coercion and violence in intimate relationships, it would appear that men and women may utilize and weaponize these behaviors differently in their relationships. Future studies should aim to continue parsing out the relationship between gender and the perpetration of coercive control, among other forms of dating and intimate-partner violence.

Next, the current study did not examine if items on the Coercive Control Scale (CCS) were perpetrated in a systemic, or patterned way. The CCS does not allow for such an examination, as CCS items do not query for a frequency count of coercive-controlling acts. Rather, the CCS asks respondents to note whether they perpetrated a behavior *never*, *rarely*, *sometimes*, or *very often*. Relatedly, the study did not examine if these behaviors were perpetrated in isolation of, or in a constellation of other coercive control tactics. As mentioned earlier, the definition of coercive control used for the current study is "…violence in the context of a pervasive pattern of controlling tactics, such as isolation and intimidation, used to create a foundation for one partner to exert and maintain control over another partner…" (Crossman & Hardesty, 2018, p. 196). Although the CCS allowed for the assessment of commonly utilized CC tactics, it remains unclear how, or if, these tactics were used in a "pervasive pattern." Accordingly, the current study did not allow for the classification of certain participants as definite perpetrators of coercive control. In the current study, the appropriate conclusion to be drawn is that attachment anxiety is a significant, positive predictor of coercive controlling *behaviors*. Future studies might examine if attachment anxiety is a significant predictor of CC in

known perpetrators through the study of offending populations, or using qualitative data to better understand the extent, cause, purpose, and patterns of the use of common CC tactics.

It is worth noting here that another limitation of the CCS is that it does not address the complete range of possible CC tactics that a perpetrator could use in an intimate relationship. It is unlikely that such a scale would ever be developed, given that a perpetrator of CC will often tailor their behaviors to exploit a particular weakness or vulnerability of their target. This can most clearly be seen in LGBT relationships. For example, in a homosexual relationship, one individual may be "out," while the other individual may be "in the closet." The partner that is "out" may make threats of "outing" their partner as a way to exert domination and control. Such possible CC tactics that are unique to LGBT relationships, among other possible CC tactics, were not addressed by the CCS. As noted, it is unlikely that a self-report instrument would ever be able to address and capture the full breadth of CC behaviors. Accordingly, a more useful route for future work may be to examine the intent, or reasons for certain behaviors. For example, knowing that a behavior is engaged in with the purpose of degrading or debasing a partner may provide more utility than knowing an individual "tried to make their partner feel inadequate," but not knowing the underlying reason why.

Another limitation pertaining to the factor analysis of the CCS is that the factor loadings were not the same as Conroy (2016). The factor analysis of the CCS in the current study suggested the retention of a five-factor model, with many items not loading onto the five factors, whereas Conroy (2016) reported four factors for the CCS after factor analysis. While the CCS in the current study had an acceptable Cronbach's alpha coefficient overall ($\alpha = .73$), the alpha coefficients of the individual subscales ranged from .29 to .59, with the *sexual coercion* subscale being the lowest. Such low subscale scores may represent a strong cultural component

impacting the reliability of the scale in Lebanon. In the current study the *sexual coercion* subscale of the CCS was particularly problematic. As seen with the negative relationship between the CCS and Social Desirability Scale (SDS), it may also be that the *sexual coercion* items in particular, were difficult for participants to acknowledge. Thus, future studies may aim to develop more reliable assessments of *sexual coercion* and Coercive Control more generally, for Arab and Middle Eastern populations.

Next, the study asked participants to indicate their coercive controlling behaviors only in their current or most recent relationship. This methodology was used to reduce confusion about which relationship the study wanted participants to address. Therefore, the study cannot conclude whether some participants perpetrated CC behaviors in a single relationship, or multiple relationships, or if there were reasons specific to the current or most recent relationship that resulted in the participant using CC behaviors.

Another limitation is that the study used measures that were not developed or standardized for use in a Lebanese or Arab population. Although Arabic versions of the Experiences in Close Relationships Scale (ECR-R) and Adverse Childhood Experiences Scale (ACE) have been developed, the other measures used in this study like the Ambivalent Sexism Inventory (ASI) and Coercive Control Scale (CCS) have not been validated in Arabic. Accordingly, to maintain uniformity, the current study used English versions for each scale. It is possible that each factor assessed by the ECR-R, ACE, ASI, and CCS manifest differently in Lebanese and Arab populations. Accordingly, a direction for future research may be to develop standardized measures of CC, among other forms of IPV and dating violence, for use in Lebanon and the Middle East and North Africa.

Relatedly, the current study utilized English versions of each scale. English versions of each scale were used as Arabic versions were not available for all scales. Although all participants were students at an English-speaking university, it is possible that some questions, phrases, or scale items were not well understood by participants. The current study aimed to ameliorate this problem by conducting a pilot study in which the clarity of measures was checked. The entire pilot study sample, however, consisted of graduate students while the study population consisted of undergraduate students. It is possible that the graduate students had superior English-language abilities, thus, did not detect items that may have been more difficult for students at the undergraduate level.

Although the CCS measure scores did not significantly correlate with scores on the SDS, the relationship approached significance and was in the expected negative direction. This suggests that students in the current study may have withheld the reporting of socially undesirable behavior like coercive control perpetration. Additionally the sample may have been further biased because males may not have not opted to participate in the study due to social desirability concerns. Future studies should explore avenues through which objective cases of coercive control can be identified and studied.

Finally, the current study was conducted during the COVID-19 pandemic. Additionally, in Lebanon, students were faced with an on-going economic crisis, and the aftermath of one of the largest non-nuclear explosions in history (Rigby et al., 2020). These external events were significant and likely influenced the results of the current study.

F. Strengths

Although there are several limitations present in the current study, there are several strengths to be noted as well. The strengths of the current study are that the study used psychometrically strong instuments, was conducted online, utilized a Social Desirability Scale (SDS), and was carried out in a relevant, university setting where dating relationships are common.

First, the current study used psychometrically sound instuments like the Experiences in Close Relationship Scale – Revised (ECR-R), Adverse Childhood Experiences Scale (ACE), and Ambivalent Sexism Inventory (ASI). These scales have been used extensively in the previous literature and demonstrate good psychometric properties. These strong psychometric properties lend validity to the interpretations of the results in the current study.

A related strength pertains to the Coercive Control Scale (CCS). Although the scale did not factor analyze in the same way as in the original study for which it was developed (Conroy, 2016), this study was one of the few that used a scale that explicitly measured coercive-controlling behaviors. Other previous studies that aimed to investigate coercive control used other measures of psychological abuse as a proxy-measure for coercive control. Earlier, it was argued that coercive control is a distinct construct from psychological abuse. Thus, it is important that future studies of coercive control use measures explicitly designed and validated for the measurement of that construct, and not psychological abuse.

Another strength of the current study is that the study was conducted online. The Coercive Control Scale (CCS) includes items that are difficult to admit to. Further, in the pilot study, pilot study participants admitted that it was difficult to answer the items on the CCS truthfully. Thus, conducting a study of this nature online may have been valuable. Participants

may have felt more comfortable anonymously answering the CCS than if the CCS were to have been distributed in a pen-and-paper format.

The current study also utilized a Social Desirability Scale (SDS) to aid in the interpretation of the data. Although a non-significant relationship between the SDS and CCS was found, the correlation between the SDS and CCS was in the expected negative direction, as SDS scores increased, CCS scores decreased. The inclusion of the SDS in the current study suggests that participants may withhold reporting social undesirable information such as the perpetration of coercive-controlling behaviors in dating relationships, and is an important point for future studies to consider.

Finally, the current study aimed to investigate the presence of coercive-controlling behaviors in dating relationships. Thus, the sampling frame of the current study at a four-year undergraduate institution was appropriate. A fringe benefit of conducting such a study in a university setting was the inclusion of a considerable number of students who identified as gender and sexual minorities. There was strong evidence for the finding of attachment anxiety as a significant predictor of coercive-controlling behaviors, given that this finding was present in cisgender, heterosexual relationships, and relationships among gender and sexual minority individuals.

G. Contributions to the Literature

The current study makes several important contributions to the literature. First, the current study aimed to understand what psychological factors contribute to the perpetration of CC at the individual, familial, and environmental levels. The current study also aimed to examine if CC behaviors were present in the relationships of dating university students where

early relationships may serve as learning templates for later romantic relationships. Finally, the current study was completed in Lebanon, a country in the Middle East and North Africa (MENA). The current study contributes important information about the presence of CC in a non-Western country. These findings are discussed in further detail below.

The current study makes several important contributions to the existing literature on dating violence and CC. First, this study demonstrates that attachment anxiety is a significant predictor of coercive controlling behaviors among heterosexual and gender and sexual minority dating college students. This finding is valuable for clinicians working with couples in which coercive controlling behaviors are present – attachment issues and anxiety in romantic relationships should be addressed. Additionally, hostile sexism was shown to be a significant, positive predictor of coercive controlling behaviors in heterosexual relationships. The reduction of sexist ideas, beliefs, and attitudes may present an avenue for ameliorating or preventing coercive controlling behaviors.

This study demonstrates that coercive controlling behaviors are present even in early romantic relationships, and future studies may consider utilizing a longitudinal research design to follow the development of these behaviors over a period of time. Future studies may consider investigating whether those who perpetrate controlling behaviors such as those assessed in the current study, perpetrate higher levels of coercive control in later relationships compared to those who exhibit no controlling behaviors. Such a study could be used to inform a possible risk assessment of investigating whether individuals who engage in CC behaviors in early relationships later perpetrate higher and more severe levels of violence in their intimate partnerships.

Next, this study highlights the frequency with which new communication technologies like cellphones, social media, and the internet are implicated in the use of CC. Items pertaining to communication technologies were frequently endorsed by students in the current study. This finding is important because it underscores the need for new CC assessments that address the use and weaponization of these technologies. Future studies of CC in intimate relationships should be careful to assess how communication technologies are used to monitor, stalk, and microregulate.

Finally, this study demonstrates the presence of coercive controlling behaviors in Lebanese society. This is the first study to examine coercive control in the Middle East and North Africa, and future studies may consider studying this construct in other countries in the region. In the current study, the factor analysis of the CCS scale yielded results different from the factor analysis of the CCS scale in a Western population. Although there are many external factors that may have contributed to this, one possibility is that coercive control, as a construct, has a different factor structure compared to coercive control in the Western world. Future studies may consider developing methods of measuring and assessing coercive control, along with other forms of IPV, that are suitable for the Middle East and North Africa

H. Clinical Implications

The findings of the current study suggest that clinicians and other service providers who work with violent offenders target hostile sexist beliefs and attachment anxiety in offenders of intimate partner violence (IPV), particularly offenders of coercive control (CC). Attachment anxiety, in particular, may offer a viable avenue through which clinicians can work to help

offenders reduce their attachment-related anxieties, feel more secure and stable in their romantic relationships, and reduce coercive controlling behaviors.

In the family violence literature, Dallos and Vetere (2009) suggest that attachment-informed couples therapy can only work with those who show capacity for empathy. These authors note that empathy is thought to be the greatest inhibitor of the perpetration of violence, and that empathy develops from early experiences of emotional attunement (Schore, 1994 cited in Dallos & Vetere, 2009). Although the current study did not assess for levels of empathy among students who engaged in coercive controlling behaviors, it can be hypothesized that perpetrators of coercive control would be low in empathy. Thus, attachment-focused therapies may reduce attachment anxiety and subsequent perpetration of coercive coontrol vis-à-vis increasing the capacity for empathy.

Vetere (2015) describes the integration of attachment narrative therapy in work with violent couples as involving four domains of practice: creating a secure base in therapy, exploring narratives and attachments within a systemic framework (loosening attachment dilemmas), considering alternatives (emotional risk taking and change), and the future (maintaining the therapeutic base). A clinical case example followed that utilized attachment narrative therapy. In the case example, the therapy room was first established as a secure base for the couple. Next, attachment narratives were explored. The therapist (Vetere) looked for attachment dilemmas and other unspoken attachment needs. Finally, the therapist explored the attachment strategies and ways of responding to an attachment threat. The therapy proved useful for the couple, and provides evidence for the applicability of attachment therapies to cases of IPV. Future work may consider further exploring the applicability and usefulness of attachment-based therapies in couples struggling with violence.

Although less studied, intervention at the level of sexist beliefs may also prove to be a viable strategy for reducing IPV and CC. An app-based, monitored intervention “Liad@s” was recently conducted in a residential youth care setting in Spain (Navarro-Perez, Oliver, Carbonell, & Schneider, 2020). The “Liad@s” app attempted to address variables linked to dating violence, including sexism. The study found that the app was effective in reducing scores on both the benevolent sexism and hostile sexism subscales of the Ambivalent Sexism Inventory. Although the study did not specifically address or test for dating violence behaviors, the finding that an app-based intervention could reduce levels of sexism may prove valuable for clinicians working with perpetrators. If an app-based intervention can reduce levels of sexism, such an intervention may be useful in reducing coercive controlling behaviors that are tied to sexist attitudes and beliefs.

CHAPTER VII:

FUTURE DIRECTIONS AND CONCLUSION

There are several important future directions for consideration by interpersonal violence researchers. These directions include: questions regarding the development of coercive controlling behaviors over the lifetime, differences in the perpetration and experience of coercive control among cisgender, heterosexual and gender and sexual minority groups, examining other predictors of coercive controlling violence, and the development of culturally appropriate assessments of coercive controlling behaviors.

First, the current study provides evidence for the presence of coercive controlling behaviors in early, dating relationships. However, questions remain regarding the distinction between *coercive control* and *coercive controlling behaviors*. For example, some participants in the current study indicated that they perpetrated one coercive controlling behavior infrequently, while others indicated that they perpetrated several at higher rates of frequency. Future research should address the distinction between the perpetration of coercive control and coercive controlling behavior. That is, using the Coercive Control Scale (CCS) as an example, at what point is an individual denoted as a perpetrator of coercive control as opposed to coercive controlling behavior? Is it after the individual indicates that they perpetrated three coercive controlling behaviors? Or four? The line that distinguishes a perpetrator of coercive controlling behavior and coercive control remains blurry and should be addressed in future research.

Relatedly, are individuals who perpetrate low, or a few, coercive controlling behaviors in their early relationships at risk for perpetrating higher levels of coercive control, or even more serious forms of intimate partner violence in their future relationships? Logically, this would

make sense but this question has yet to be tested. Researchers might consider a future study where individuals in early, dating relationships are assessed for the perpetration of coercive controlling behaviors, and then assessed again at a later time. It is possible that certain factors protect against the later perpetration of coercive control, or that other factors increase the risk of becoming a perpetrator.

Next, future research should also examine the qualitative and quantitative differences in the experience and perpetration of coercive control among cisgender, heterosexual and gender and sexual minority groups. The coercive control and intimate partner violence literature has shown that perpetrators in LGBTQ relationships will use tactics that directly target the victim's gender and sexual identity (Raghavan et al., 2019). An example of this is one partner in a LGBTQ relationship threatening to "out" the other partner (Renzetti, 1992). Thus, future studies should consider developing assessments of coercive control that are specific and appropriate for LGBTQ relationships.

On a similar note, future research should continue examining if there are different predictors of coercive control for LGBTQ individuals compared to cisgender, heterosexual individuals. The current study showed that attachment anxiety was a significant, positive predictor of coercive controlling behaviors for cisgender, heterosexual and LGBTQ individuals. Other researchers have suggested that the experience of gender and sexual minority stress and microaggressions leads to an increased risk of intimate partner violence perpetration in these populations (Edwards & Sylaska, 2012). Thus, there may be important differences in the predictors of coercive controlling behaviors for LGBTQ individuals, compared to cisgender, heterosexual individuals that are worthy of further investigation.

Other predictors of coercive controlling behaviors should be examined. As mentioned, the current study showed that attachment anxiety was a significant, positive predictor of coercive control. Other constructs related to adult attachment anxiety like emotion regulation, anger, jealousy, abandonment fears, empathy, and childhood attachment may be investigated as other potential predictors of coercive control. Similarly, the current study found that Adverse Childhood Experiences (ACE) were not predictive of coercive control. This finding was explained that the ACE scale partly assesses for witnessing parental physical violence, and witnessing physical violence may noto be predictive of later coercive control perpetration. Future studies may consider if witnessing coercive control in the family of origin is predictive of later coercive control perpetration. Such a study would show the relevance of social learning theory and the intergenerational transmission of violence to coercive control.

Finally, the current study demonstrates that culturally appropriate assessments of coercive control are necessary. The factor analysis of the Coercive Control Scale (CCS) in the current study suggested a five-factor model, whereas the original development study of the CCS suggested a four-factor model (Conroy, 2016). Additionally, many items in the CCS did not load onto any factor. Although there are several possible explanations for this, one explanation is that coercive control is enacted differently outside of the western world. One example of this is a study conducted in Morocco where Moroccan participants agreed that denying educational opportunities, threatening to take children away, and insulting a partner in front of others are acts of violence, but partner jealousy or restricting a partner from seeing friends or family were not considered acts of violence (Cheatham, Bassil, & Raghavan, 2018). Thus, future studies may consider developing measures of coercive control for use outside of western countries, as it is possible that coercive control is perpetrated differently in diverse cultural contexts.

In conclusion, the future study of coercive control is incredibly important. The COVID-19 pandemic has resulted in an increase of domestic violence cases worldwide (Crossette, 2020). Additionally, England and Wales (Serious Crime Act, 2015), Australia (Australasian Legal Information Institute, 2017), as well as the states of California (California Legislative Information, 2020) and Hawai'i (Hawai'i State Legislature, 2020) in the United States have recently criminalized the perpetration of coercive control. As more states in the United States, and other countries are likely to follow, the definition and assessment of coercive control is going to become increasingly important. Future research should be aimed at helping service providers, and those involved at various levels of the civil justice system identify coercive control. Research in this area will hopefully lead to a reduction in coercive control and domestic violence cases as the world recovers from the COVID-19 pandemic.

APPENDIX A

INFORMED CONSENT FORM

American University of Beirut

P.O. Box 11-0236; Riad El Solh, 1107 2020; Beirut, Lebanon

CONSENT TO SERVE AS A PARTICIPANT IN A RESEARCH PROJECT

Research Project: Coercive control among university students in Lebanon: Examining the roles of attachment anxiety, sexism, and adverse childhood experiences

Principal Investigator: Fatimah el Jamil, Ph.D.
Clinical Associate Professor, Department Chair, Department of Psychology,
fa25@aub.edu.lb
01-350000 Ext. 4372

Student Investigator: Alexander Legg, M.A Candidate
Graduate student in Clinical Psychology, Department of Psychology
anl02@mail.aub.edu

You are invited to participate in a research study entitled **Coercive control among university students in Lebanon: Examining the roles of attachment anxiety, sexism, and adverse childhood experiences** conducted by Dr. Fatimah El Jamil and Alexander Legg, Faculty of Arts and Sciences at the American University of Beirut. The conduct of this study will adhere to the IRB approved protocol.

The purpose of the study is to examine interpersonal experiences in dating relationships.

PROCEDURES

This message invites you to:

1. Read the consent document and consider whether you want to be involved in the study.

And to note:

- Participation is completely voluntary
- Completing the questionnaire will take around 30 minutes
- Only the data your provide in the questionnaire will be collected and analyzed. The researchers will not have access to your name or contact details.
- The results of the survey will be published in a thesis report available in printed form and electronically from AUB libraries.
- To be eligible for the study you must be:
    - 18 years or older

- Have been in a dating relationship lasting longer than one month.
- Were born and raised in Lebanon, or another Middle East or North African (MENA) Country (Algeria, Bahrain, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Syria, Tunisia, Turkey, United Arab Emirates, and Yemen), and have not lived outside of the MENA region for more than four years.

- You are ineligible for the study if you:
  - Are 18 years or younger
  - Have NOT been in a dating relationship lasting longer than one month.
  - Were born and raised outside of Lebanon, or another Middle East or North African Country (MENA)
  - You were born and raised in Lebanon or another MENA Country but have lived outside of Lebanon or another MENA Country for more than FOUR years.

- Self-identified lesbian, gay, bisexual, and transgender (LGBT) participants are welcome to participate, but will not complete the entire survey because some questions are specific to heterosexual dating relationships.

- The study seeks to recruit approximately 80 participants who have been in a dating relationship.

As a compensation for participating in this study, you will receive an extra point on your final PSYC101/201 grade per hour of participation for a maximum of three credit points (or less if you have already participated in other studies as part of the PSYC101/201 pool). A randomized number will be given to you to present to the PSYC 201 coordinator, however the code will not be recorded. Instead, the coordinator will check that you participated and should receive extra credit. The randomized identification number will not be recorded and will be remain with you or destroyed.

POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY

You will not receive payment for participation in this study. The results of the study will aid researchers in further understanding interpersonal and romantic relationships among university students in Lebanon.

POTENTIAL RISKS TO SUBJECTS AND/OR SOCIETY

This study involves **more than** minimal risk because some survey questions are sensitive, and you may experience distress or embarrassment when answering some of the survey questions. Sensitive issues in the survey include questions about past experiences of physical, verbal, and sexual abuse, current attitudes toward men and women, experiences in past and current romantic relationships, and behaviors in past and current romantic relationships.

One study question asks you to report if your dating partner has shared private sexual photos of you with other people against your will. If you indicate that your dating partner has shared

private sexual photos of you with other people against your will, we advise you to report this incident to the competent authority, as this act is illegal in Lebanon.

If you experience distress during the study, the American University of Beirut Counseling Center is available Monday through Friday, 8:00am – 3:00pm in West Hall – 2nd floor – Room 210. Appointments can be made by calling 01 350 000 ext. 3196, or online: https://www.aub.edu.lb/SAO/Pages/Counseling-Center.aspx

Appointments can also be made at the American University of Beirut Psychiatry Department by calling +961 1 759620/2, or by visiting the University Health Services (UHS) at AUBMC Family Medicine Clinics – Wassef and Souad Sawwaf Building on Clemenceau Street or by calling +961 1 350000 Ext. 3000.

The American University of Beirut Title IX Office is located in the College Hall, 4th Floor (Room 425) and can be contacted at 01 350 000 ext. 2514. Incidents of dating violence can be reported to the Title IX Office, titleix@aub.edu.lb, www.aub.edu.lb/titleix

If you are experiencing intimate partner violence or abuse, assistance can be found through Kafa (enough) Violence and Exploitation, Helpline – 03 018 019
43, Badaro Street, Beydoun Bldg, First Floor
kafa.org.lb

The primary investigator, Dr. Fatimah El Jamil, can be reached via email, fa25@aub.edu.lb, or in Jesup Hall Rm 101 in the event that you experience distress during the study.

CONFIDENTIALITY

The collected data will remain confidential *and anonymous.* Records will be monitored and may be audited by the IRB while assuring confidentiality.

ALTERNATIVES TO PARTICIPATION

If you are not interested in participating in this study and would still like the opportunity to earn extra credits, you could either participate in another study advertised to PSYC101/201 student or you can write a summary of a research article. Please speak with your course instructor regarding alternatives to participation.

PARTICIPATION AND WITHDRAWAL

If you voluntarily consent to take part in this study, you can change your mind and withdraw at any time without consequences of any kind. If you decide to withdraw for any reason, you will still receive the amount of credits.

Refusal to participate or withdrawal from the study will involve no penalty or loss of benefits to which you are otherwise entitled, and neither will it affect your relationship with your organization and AUB/AUBMC or your grades.

QUESTIONS ABOUT THE STUDY
If you have any questions about the study, can contact the research team

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ACCESS TO THE SURVEY

If after reading the consent document and having your questions answered, you voluntarily agree to take part in the study; you can access the survey by clicking on the following link.

CONCERNS OR QUESTIONS ABOUT YOUR RIGHTS

If you have concerns about the study or questions about your rights as a participant h, you can contact the **AUB IRB Office**:

Social & Behavioral Sciences Institutional Review Board
ACC building, third floor
00961-1-350000 or 1 374374, **ext**: 5445
irb@aub.edu.lb

APPENDIX B

Study Demographic Questionnaire

1. How old are you? (Write in)
2. Where were you born?
    a. Lebanon
    b. Other Country
        i. If other, what country were you born in? (Write in)
        ii. How old were you when you moved to Lebanon? (Write in)
3. Do you identify as any of the following?
    a. Straight/heterosexual
    b. Gay
    c. Lesbian
    d. Bisexual
    e. Other
    f. Don't want to answer
4. What is your gender?
    a. Female
    b. Male
    c. M2F: Identify Female
    d. F2M: Identify Male
    e. Gender non-conforming
    f. Other
5. What is your biological born sex?
    a. Female
    b. Male
    c. Intersex

The next few questions will be about your previous dating relationships. If you have not been in a relationship before, you are not eligible to participate in the study.

1. Have you been in a dating relationship before?
    a. Yes
    b. No
2. Are you currently in a dating relationship?
    a. Yes
    b. No
3. How long have you been/were you in this relationship?
    a. Years (write in), Months (write in)
4. What was the gender of your current or most recent dating partner?
    a. Female
    b. Male
    c. M2F: Identify Female
    d. F2M: Identify Male
    e. Gender non-conforming
    f. Other

APPENDIX C

Adverse Childhood Experiences Questionnaire (ACE)

Instructions: While you were growing up, during your first 18 years of life:

Yes No

ACE1 1. Did a parent or other adult in the household **often** …

Swear at you, insult you, put you down, or humiliate you?

OR

Act in a way that made you afraid you might be physically hurt?

ACE2 2. Did a parent or other adult in the household **often** …

Push, grab, slap, or throw something at you?

OR

Ever hit you so hard that you had marks or were injured?

ACE3 3. Did an adult or person at least 5 years older than you **ever** …

Touch or fondle you or have you touch their body in a sexual way?

OR

Try to actually have oral, anal, or vaginal sex with you?

ACE4 4. Did you **often** feel that …

No one in your family loved you or thought you were important or special?

OR

Your family didn't look out for each other, feel close to each other, or support each other?

ACE5 5. Did you **often** feel that …

You didn't have enough to eat, had to wear dirty clothes, and had no one to protect you?

OR

Your parents were too drunk or high to take care of you or take you to the doctor if you needed it?

ACE6 6. Were you parents **ever** separated or divorced?

ACE7 7. Was your mother or stepmother:

Often pushed, grabbed, slapped, or had something thrown at her?

OR

Sometimes or often kicked, bitten, hit with a fist, or hit with something hard?

OR

Ever repeatedly hit over at least a few minutes or threatened with a gun or knife?

ACE8 8. Did you live with anyone who was a problem drinker or alcoholic or who used street drugs?

ACE9 9. Was a household member depressed or mentally ill or did a household member attempt suicide?

ACE10 10. Did a household member go to prison?

APPENDIX D

Ambivalent Sexism Inventory (ASI)

Instructions: Below is a series of statements concerning men and women and their relationships in contemporary society. Please indicate the degree to which you agree or disagree with each statement using the following scale: 0 = disagree strongly; 1 = disagree somewhat; 2 = disagree slightly; 3 = agree slightly; 4 = agree somewhat; 5 = agree strongly

		Disagree strongly	Disagree somewhat	Disagree slightly	Agree slightly	Agree somewhat	Agree Strongly
Benevolent Sexism (BS)		0	1	2	3	4	5
BS1	No matter how accomplished he is, a man is not truly complete as a person unless he has the love of a woman						
BS2	In a disaster, women ought not necessarily to be rescued before men						
BS3	People are often truly happy in life without being romantically involved with a member of the other sex						
BS4	Many women have a quality of purity that few men possess						
BS5	Women should be cherished						

	and protected by men
BS6	Every man ought to have a woman whom he adores
BS7	Men are complete without women
BS8	A good woman should be set on a pedestal by her man
BS9	Women, compared to men, tend to have a superior moral sensibility
BS10	Men should be willing to sacrifice their own well being in order to provide financially for the women in their lives
BS11	Women, as compared to men, tend to have a more refined sense of culture and good taste.
Hostile Sexism (HS)	
HS1	Many women are actually seeking

	special favors, such as hiring policies that favor them over men, under the guise of asking for "equality."
HS2	Most women interpret innocent remarks or acts as being sexist
HS3	Women are too easily offended
HS4	Feminists are not seeking for women to have more power than men
HS5	Most women fail to appreciate fully all that men do for them
HS6	Women seek to gain power by getting control over men.
HS7	Women exaggerate problems they have at work.
HS8	Once a woman gets a man to commit to her, she usually tries to put him on a tight leash
HS9	When women lose to men in a

	fair competition, they typically complain about being discriminated against
HS10	There are actually very few women who get a kick out of teasing men by seeming sexually available and then refusing male advances
HS11	Feminists are making entirely reasonable demands of men

APPENDIX E

Coercive Control Scale (CCS)

Instructions: The following questions will ask about your actions and behaviors in your current romantic relationship. If you are not currently in a romantic relationship, please refer to your most recent romantic relationship. Note that sharing private sexual photos of other people against their will is illegal in Lebanon (question 23)

In my current or most recent relationship, I …

		Never	Rarely	Sometimes	Very often	Do not with to say
Isolation and monitoring		1	2	3	4	5
CCS1	Insisted on knowing where my partner was at all times					
CCS2	Expected my partner to ask permission before doing things without me					
CCS3	Attempted to control my partner's communication with friends, like phone calls or online messages					
CCS4	Had friends monitor my partner's behavior when they weren't with me					
CCS5	Encouraged my partner to change residence					
CCS6	Attempted to control the time my partner spent with their family and friends					
CCS7	Told my partner what they could or could not wear					
Verbal coercion and manipulation						
CCS8	Blamed my partner for causing problems in our relationship					

CCS9	Tried to make my partner feel inadequate
CCS10	Threatened to date someone else
CCS11	Damaged something that belonged to my partner
CCS12	Accused my partner of having an affair
CCS13	Threatened to harm and/or kill myself
CCS14	Threatened to physically hurt my partner
Communication technology control	
CCS15	Monitored the public activity on my partner's social media sites
CCS16	Persistently called or texted to see where my partner was or what they were doing
CCS17	Checked my partner's text messages, emails, and/or social media messages to monitor their activity
CCS18	Demanded my partner's online and/or cell phone passwords
CCS19	Sent threatening messages to my partner via text message, online or social media sites, or phone calls
CCS20	Wrote hurtful things about my partner on social media
CCS21	Used key logging software to track my partner's activity
Sexual coercion	
CCS22	Refused to use a condom when we had sex
CCS23	Pressured my partner to send sexual/naked photos

CCS24	Pressured my partner to engage in sexual activities that they didn't want
CCS25	Threatened to pursue sexual activity with other people if my partner didn't have sex with me
CCS26	Told my partner that if they cared about me, they would have sex with me.
CCS27	Pressured my partner to videotape or photograph sexual acts
CCS28	Shared private sexual photos of my partner with other people against their will

APPENDIX F

Experiences in Close Relationships – Revised (ECR-R)

Instructions: The following questions ask about your current romantic relationship. If you are not currently in a romantic relationship, please refer to your most recent romantic relationship Respond to each statement by selecting a response to indicate how much you disagree or agree with the statement.

		Strongly disagree	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree	Strongly Agree
		0	1	2	3	4	5	6
ECR1	I'm afraid that I will lose my partner's love							
ECR2	I often worry that my partner will not want to stay with me							
ECR3	I often worry that my partner doesn't really love me							
ECR4	I worry that romantic partners won't care about me as much as I care about them							
ECR5	I often wish that my partner's feelings for me were as strong as							

	my feelings for him or her
ECR6	I worry a lot about my relationships
ECR7	When my partner is out of sight, I worry that he or she might become interested in someone else
ECR8	When I show my feelings for romantic partners, I'm afraid they will not feel the same about me
ECR9	I rarely worry about my partner leaving me
ECR10	My romantic partner makes me doubt myself
ECR11	I do not often worry about being abandoned
ECR12	I find that my partner(s) don't want

	to get as close as I would like
ECR13	Sometimes romantic partners change their feelings about me for no apparent reason
ECR14	My desire to be very close sometimes scares people away
ECR15	I'm afraid that once a romantic partner gets to know me, he or she won't like who I really am
ECR16	It makes me mad that I don't get the affection and support I need from my partner
ECR17	I worry that I won't measure up to other people
ECR18	My partner only seems to notice

me when
I'm angry

APPENDIX G

Marlowe-Crowne Social Desirability Scale 13-Item Short Form (SDS)

Instructions: Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is true or false as it pertains to you

		True	False
SDS1	It is sometimes hard for me to go on with my work if I am not encouraged.		
SDS2	I sometimes feel resentful when I don't get my own way		
SDS3	On a few occasions, I have given up doing something because I thought too little of my ability		
SDS4	There have been times when I felt like rebelling against people in authority even though I knew they were right		
SDS5	No matter who I'm talking to, I'm always a good listener		
SDS6	There have been occasions when I took advantage of someone		
SDS7	I'm always willing to admit it when I make a mistake		
SDS8	I sometimes try to get even, rather than forgive and forget		
SDS9	I am always courteous, even to people who are disagreeable		
SDS10	I have never been irked when people expressed ideas very different from my own		
SDS11	There have been times when I was quite jealous of the good fortune of others		
SDS12	I am sometimes irritated by people who ask favors of me		
SDS13	I have never deliberately said something that hurt someone's feelings		

APPENDIX H

Coercive Control Factor Analysis

Coercive Control Scale Factor Analysis Table

Item	Item	Online Surveillance	Isolation	Pressure and Persuasion	Psychological Abuse	Monitoring	Communality	Uniqueness	Complexity
CCS17	Checked my partner's text messages, emails, and/or social media messages to monitor their activity	0.826					0.687	0.31	1.0
CCS18	Demanded my partner's online and/or cellphone passwords	0.788					0.674	0.33	1.3
CCS26	Refused to use a condom when we had sex	0.629					0.402	0.60	1.1
CCS21	Used keylogging software to track my activity without my knowledge	0.58					0.335	0.67	1.4
CCS16	Wrote hurtful things about my partner on social media	0.402					0.226	0.77	1.3
CCS2	Attempted to control my partner's communication with friends like phone calls or online messages						0.097	0.90	2.7

CCS28	Told my partner if they cared about me, they would have sex with me				0.017	0.98	3.2
CCS4	Insisted on knowing where my partner was at all times	0.794			0.559	0.44	1.1
CCS6	Expected my partner to ask permission before doing things without me	0.623			0.444	0.56	1.6
CCS1	Limited the time my partner spent with family or friends	0.529			0.420	0.58	1.3
CCS14	Blamed my partner for causing problems in our relationship	0.369			0.217	0.78	1.7
CCS8	Tried to make my partner feel inadequate	0.365			0.116	0.88	1.2
CCS22	I pressured my partner to send sexual/naked photos		0.887		0.761	0.24	1.1
CCS24	I pressured my partner to engage in sexual activities they didn't want		0.789		0.611	0.39	1.1
CCS3	I encouraged my partner to change residence		0.347		0.217	0.78	2.1
CCS5	I told my partner what they could or could not wear				0.165	0.83	2.4
CCS11	Damaged something that belonged to my partner			0.779	0.628	0.37	1.1
CCS19	Persistently called or texted to see where my partner was or what they were doing	0.463		0.485	0.462	0.54	2.2

CCS12	Threatened to harm and/or kill myself	0.398		0.184	0.82	1.3
CCS10	Threatened to physically hurt my partner	0.353		0.417	0.58	3.4
CCS9	Threatened to date someone else			0.065	0.94	1.7
CCS20	Monitored the public activity on my partner’s social media sites			0.063	0.94	1.9
CCS7	Had friends monitor my partner’s behavior when they weren’t with me		0.879	0.785	0.21	1.2
CCS15	Sent threatening messages to my partner via text, online, social media sites, or phone calls		0.38	0.389	0.61	2.7
CCS13	Accused my partner of having an affair			0.072	0.93	1.4
CCS27	Threatened to pursue sexual activity with other people if my partner didn’t have sex with me			0.015	0.98	3.7

REFERENCES

Archer, J. (2000). Sex differences in aggression between heterosexual partners: A meta-analytic review. *Psychological Bulletin, 126*(5), 651-680.

Archer, J. (2013). Can evolutionary principles explain patterns of family violence? *Psychological bulletin*, *139*(2), 403.

Anderson, K. L. (2002). Perpetrator or victim? Relationships between intimate partner violence and well-being. Journal of Marriage and the Family, 64, 851–863.

Anderson, K. L. (2009). Gendering coercive control. *Violence against women*, *15*(12), 1444-1457.

Babcock, J. C., Jacobson, N. S., Gottman, J. M., & Yerington, T. P. (2000). Attachment, emotional regulation, and the function of marital violence: Difference between secure, preoccupied, and dismissing violent and nonviolent husbands. *Journal of family violence*, *15*, 391-409.

Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological review*, *84*(2), 191.

Banyard, V. L., Cross, C., & Modecki, K. L. (2006). Interpersonal Violence in Adolescence: Ecological Correlates of Self-Reported Perpetration. *Journal of Interpersonal Violence*, *21*(10), 1314–1332. https://doi.org/10.1177/0886260506291657

Barbaro, N., & Shackelford, T. K. (2019). Environmental unpredictability in childhood is associated with anxious romantic attachment and intimate partner violence perpetration. *Journal of interpersonal violence*, *34*(2), 240-269.

Bates, E. A. (2019). "No one would ever believe me": An exploration of the impact of intimate

partner violence victimization on men. *Psychology of Men & Masculinities*.

Bates, E. A., Graham-Kevan, N., & Archer, J. (2014). Testing predictions from the male control theory of men's partner violence. *Aggressive behavior*, *40*(1), 42-55.

Beck, C. J., Menke, J. M., Brewster, K. O. H., & Figueredo, A. J. (2009). Validation of a measure of intimate partner abuse with couples participating in divorce mediation. *Journal of Divorce & Remarriage*, *50*(5), 295-308.

Beck, C. J., & Raghavan, C. (2010). Intimate partner abuse screening in custody mediation: The importance of assessing coercive control. *Family Court Review*, *48*(3), 555-565.

Bookwala, J., Frieze, I. H., Smith, C., & Ryan, K. (1992). Predictors of dating violence: A multivariate analysis. *Violence and victims*, *7*(4), 297-311.

Bookwala, J., & Zdaniuk, B. (1998). Adult attachment styles and aggressive behaviors within dating relationships. *Journal of Social and Personal Relationships*, *15*, 175-190.

Bowlby, J. (1984). Violence in the family as a disorder of the attachment and caregiving systems. *The American journal of psychoanalysis*, *44*(1), 9-27.

Bowlby, J. (1988). *A secure base: Parent-Child attachment and healthy human development*. New York, NY: Basic Books.

Boy, A., & Kulczycki, A. (2008). What we know about intimate partner violence in the Middle East and North Africa. *Violence against women*, *14*(1), 53-70.

Breiding, M. J., Chen, J., and Walters, M. L. (2013). The National Intimate Partner and Sexual Violence Survey (NISVS): 2010 Findings of Victimization by Sexual Orientation. Atlanta, GA: National center for injury prevention and control.

Brofenbrenner, U. (1979). Contexts of child rearing: Problems and prospects. American Psychologist, 34, 844–850. doi:1037/0003-066X.34.10.844

Brown, T. N., & Herman, J. (2015). *Intimate partner violence and sexual abuse among LGBT people*. eScholarship, University of California.

Butchart, A., & Mikton, C. (2014). Global status report on violence prevention, 2014.

Buzawa, E. S., Buzawa, C. G., & Stark, E. (2017). Responding to domestic violence: The integration of criminal justice and human services. Thousand Oaks, CA: Sage. http://dx.doi.org/10.1007/978-3-319-56721-1

Carney, M. M., & Barner, J. R. (2012). Prevalence of partner abuse: Rates of emotional abuse and control. *Partner Abuse*, *3*(3), 286-335.

CDC. (2020). Preventing Teen Dating Violence. Retrieved from https://www.cdc.gov/violenceprevention/intimatepartnerviolence/teendatingviolence/fastfact.html

CDC. (2018). Intimate Partner Violence. Retrieved from https://www.cdc.gov/violenceprevention/intimatepartnerviolence/index.html

Cheatham, L., Bassil, N., & Raghavan, C. (2018, Novermber 14 – 17). *Local Conceptualizations of Domestic Violence in Morocco* [Coonference Presentation]. American Society for Criminology 2018 Convention, Atlanta, GA, United States.

Chen, P. H., & White, H. R. (2004). Gender differences in adolescent and young adult predictors of later intimate partner violence: A prospective study. *Violence against women*, *10*(11), 1283-1301.

Conroy, N. E. (2013). Rethinking adolescent peer sexual harassment: Contributions of feminist theory. *Journal of School Violence*, 12, 340-356.

Conroy, N. E. (2016). Young Adult Dating Violence and Coercive Control: A Comparative Analysis of Men and Women's Victimization and Perpetration Experiences.

Controlling or coercive behaviour in an intimate or family relationship, Serious Crime Act 2015, c.3.1. Available at https://www.cps.gov.uk/legal-guidance/controlling-or-coercive-behaviour-intimate-or-family-relationship (Accessed: 20 June 2020).

Crossette, B. (2020). Domestic Violence Rises Worldwide as the Coronavirus Rages. *Ms.*

Crossman, K. A., & Hardesty, J. L. (2018). Placing coercive control at the center: What are the processes of coercive control and what makes control coercive?. *Psychology of Violence*, *8*(2), 196.

Cui, M., Ueno, K., Gordon, M., & Fincham, F. D. (2013). The continuation of intimate partner violence from adolescence to young adulthood. *Journal of Marriage and Family*, 75, 300-313. doi:10.1111/jomf.12016

Dallos, R., & Vetere, A. (2009). *Systemic therapy and attachment narratives: Applications in a range of clinical settings*. Routledge.

Dank, M., Lachman, P., Zweig, J. M., & Yahner, J. (2014). Dating violence experiences of lesbian, gay, bisexual, and transgender youth. *Journal of Youth and Adolescence*, 43, 846–857. http://dx.doi.org/10.1007/s10964-013-9975-8

Dardis, C. M., Dixon, K. J., Edwards, K. M., & Turchik, J. A. (2015). An examination of the factors related to dating violence perpetration among young men and women and associated theoretical explanations: A review of the literature. *Trauma, Violence, & Abuse*, *16*(2), 136-152.

Davis, J. P., Dumas, T. M., Berey, B., Merrin, G. J., Tan, K., & Madden, D. R. (2018a). Poly-victimization and trajectories of binge drinking from adolescence to young adulthood among serious juvenile offenders. Drug and Alcohol Dependence, https://doi.org/10.1016/j.drugalcdep.2018.01.006.

Davis, J. P., Dumas, T. M., Merrin, G. J., Espelage, D. L., Tan, K., Madden, D., & Hong, J. S. (2018b). Examining the pathways between bully victimization, depression, academic achievement, and problematic drinking in adolescence. Psychology of Addictive Behaviors, 32(6), 605–616. https://doi.org/10.1037/adb0000394

Davis, J. P., Ports, K. A., Basile, K. C., Espelage, D. L., & David-Ferdon, C. F. (2019). Understanding the buffering effects of protective factors on the relationship between adverse childhood experiences and teen dating violence perpetration. *Journal of youth and adolescence*, *48*(12), 2343-2359.

Dichter, M. E., Thomas, K. A., Crits-Christoph, P., Ogden, S. N., & Rhodes, K. V. (2018). Coercive control in intimate partner violence: Relationship with women's experience of violence, use of violence, and danger. *Psychology of violence*, *8*(5), 596.

Doumas, D., Pearson, C., Elgin, J., & McKinley, L. (2008). Adult attachment as a risk factor for intimate partner violence: The "mispairing" of partners' attachment styles. *Journal of interpersonal violence*, *23*, 616-634.

Dube, S. R., Felitti, V. J., Dong, M., Chapman, D. P., Giles, W. H., & Anda, R. F. (2003). Childhood abuse, neglect, and household dysfunction and the risk of illicit drug use: the adverse childhood experiences study. *Pediatrics*, *111*(3), 564-572.

Dutton, D. G., Golant, S. K. (1995). *The batterer: a psychological profile.* New York: Basic Books.

Dutton, M. A., & Goodman, L. A. (2005). Coercion in intimate partner violence: Toward a new conceptualization. *Sex roles*, *52*(11-12), 743-756.

Edwards, K. M., & Sylaska, K. M. (2013). The perpetration of intimate partner violence among

LGBTQ college youth: The role of minority stress. *Journal of youth and adolescence*, *42*(11), 1721-1731.

Ehrensaft, M. K., Cohen, P., Brown, J., Smailes, E., Chen, H., & Johnson, J. G. (2003). Intergenerational transmission of partner violence: a 20-year prospective study. *Journal of consulting and clinical psychology*, *71*(4), 741.

Ernst, A. F., & Albers, C. J. (2017). Regression assumptions in clinical psychology research practice-a systematic review of common misconceptions. *PeerJ*, *5*, e3323. https://doi.org/10.7717/peerj.3323

Fairchild, A. J., & Finney, S. J. (2006). Investigating validity evidence for the experiences in Close Relationships-Revised Questionnaire. *Educational and Psychological Measurement*, 66(1), 116-135.

Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, *39*, 175-191

Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., & Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) Study. *American journal of preventive medicine*, *14*(4), 245-258.

Figueredo, A. J., Corral-Verdugo, V., Frıas-Armenta, M., Bachar, K. J., White, J., McNeill, P. L., ... & del PilarCastell-Ruiz, I. (2001). Blood, solidarity, status, and honor: The sexual balance of power and spousal abuse in Sonora, Mexico. Evolution and Human Behavior, 22(5), 295-328.

Fraley, C. R. (2002). Attachment stability from infancy to adulthood: Meta-analysis and dynamic

modeling of developmental mechanisms. *Personality and social psychology review*, *6*(2), 123-151.

Fraley, R. C., & Waller, N. G. (1998). Adult attachment patterns: A test of the typological model. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 77-114). New York, NY: Guilford.

Fraley, R. C., Waller, N. G., & Brennan, K. A. (2000). An item response theory analysis of self-report measures of adult attachment. *Journal of personality and social psychology*, *78*(2), 350

Frankland, A., & Brown, J. (2014). Coercive control in same-sex intimate partner violence. *Journal of family violence*, *29*(1), 15-22.

Fincham, F. D., & Cui, M. (2011). Emerging adulthood and romantic relationships: An introduction. *Romantic relationships in emerging adulthood*, 3-12.

Finkelhor, D., Ormrod, R. K., & Turner, H. A. (2007a). Poly-victimization: a neglected component in child victimization. *Child Abuse & Neglect,* 31(1), 7–26.

Finkelhor, D., Ormrod, R. K., & Turner, H. A. (2007b). Polyvictimization and trauma in a national longitudinal cohort. *Development and Psychopathology*, 19(01), 149–166.

Forbes, G. B., Adams-Curtis, L. E., & White, K. B. (2004). First-and second generation measures of sexism, rape myths and related beliefs, and hostility towards women. *Violence Against Women*. 10, 236–261.

Forbes, G. B., Jobe, R. L., White, K. B., et al. (2005). Perceptions of dating violence following a sexual or nonsexual betrayal of trust: Effects of gender, sexism, acceptance of rape myths, and vengeance motivation. *Sex Roles*. 52, 165–173.

Gage, A. J. (2016). Exposure to spousal violence in the family, attitudes and dating violence

perpetration among high school students in Port-au-Prince. *Journal of interpersonal violence*, 31(14), 2445-2474.

Garthe, R. C., Sullivan, T. N., & McDaniel, M. A. (2017). A meta-analytic review of peer risk factors and adolescent dating violence. *Psychology of Violence*, *7*(1), 45.

Gelles, R. J., & Straus, M. A. (1988). Intimate violence. New York: Simon & Schuster.

Glick, P., & Fiske, S. T. (1996). The ambivalent sexism inventory: Differentiating hostile and benevolent sexism. *Journal of personality and social psychology*, *70*(3), 491.

Glick P., Sakalli-Ugurlu N., Ferreria M. C., & Aguiar de Souza, M. (2002). Ambivalent sexism and attitudes towards wife abuse in Turkey and Brazil. *Psychol Women Quart*. 26, 292–297.

Godbout, N., Daspe, M. È., Lussier, Y., Sabourin, S., Dutton, D., & Hébert, M. (2017). Early exposure to violence, relationship violence, and relationship satisfaction in adolescents and emerging adults: The role of romantic attachment. *Psychological trauma: Theory, research, practice, and policy*, *9*(2), 127.

Godbout, N., Dutton, D. G., Lussier, Y., & Sabourin, S. (2009). Early exposure to violence, domestic violence, attachment representations, and marital adjustment. *Personal Relationships*, *16*(3), 365-384.

Gover, A. R., Kaukinen, C., & Fox, K. A. (2008). The relationship between violence in the family of origin and dating violence among college students. *Journal of Interpersonal Violence*, *23*(12), 1667-1693.

Government of Jordan & ORC Macro. (2003). Jordan population and family health survey 2002. Calverton, MD: Author.

Greenman, S. J., & Matsuda, M. (2016). From early dating violence to adult intimate partner

violence: continuity and sources of resilience in adulthood. *Criminal behaviour and mental health*, *26*(4), 293-303.

Hamby, S., & Jackson, A. (2010). Size does matter: The effects of gender on perceptions of dating violence. *Sex Roles*, 63, 324–331.

Hamberger, L. K., Larsen, S. E., & Lehrner, A. (2017). Coercive control in intimate partner violence. *Aggression and Violent Behavior*, *37*, 1-11.

Hardesty, J. L., & Ogolsky, B. G. (2020). A socioecological perspective on intimate partner violence research: A decade in review. *Journal of Marriage and Family*, *82*(1), 454-477.

Hazan, C., & Zeifman, D. (1999). Pair bonds as attachments: Evaluating the evidence. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (pp. 336-354). New York, NY: Guilford.

H.B. 2425, 30th Legislature, (Haw. 2020). https://www.capitol.hawaii.gov/session2020/bills/HB2425_.HTM

Hester, M., & Donovan, C. (2009). Researching domestic violence in same-sex relationships—A feminist epistemological approach to survey development. *Journal of Lesbian Studies*, *13*(2), 161-173.

Hijazi, R. (2004). Adult attachment styles and emotional stress following romantic relationship dissolution. Unpublished Masters of Arts Thesis, Department of Social and Behavioral Sciences, The American University of Beirut, Beirut, Lebanon.

Hinduja, S., & Patchin, J. W. (2011). Electronic dating violence: A brief guide for educators and parents. Retrieved from http://www.cyberbullying.us/electronic_dating_violence.php

Hughes, H. M., Massura, C. E., Anukem, O. V., & Cattage, J. S. (2016). Women college

students' reasons for engaging in psychological dating aggression: A qualitative examination. *Journal of family violence*, *31*(2), 239-249.

Husnu, S., & Mertan, B. E. (2017). The roles of traditional gender myths and beliefs about beating on self-reported partner violence. *Journal of interpersonal violence*, *32*(24), 3735-3752.

Ibabe, I., Arnoso, A., & Elgorriaga, E. (2016). Ambivalent sexism inventory: Adaptation to Basque population and sexism as a risk factor of dating violence. *The Spanish Journal of Psychology*, *19*.

James, G., Witten, D., Hastie, T., & Tibshirani, R. (2013). *An introduction to statistical learning* (Vol. 112, p. 18). New York: springer.

Jasinski, J., Blumenstein, L., & Morgan, R. (2014). Testing Johnson's typology: Is there gender symmetry in intimate terrorism?. *Violence and Victims*, *29*(1), 73-88.

Johnson, M. P. (2006). Conflict and control: Gender symmetry and asymmetry in domestic violence. *Violence against women*, *12*(11), 1003-1018.

Johnson, M. P. (2010). Langhinrichsen–Rolling's confirmation of the feminist analysis of intimate partner violence: Comment on "Controversies Involving Gender and Intimate Partner Violence in the United States". *Sex Roles*, 62(3-4), 212–219.

Johnson, M. P. (2011). Gender and types of intimate partner violence: A response to an anti-feminist literature review. *Aggression and Violent Behavior*, 16, 289–296.

Johnson, M. P. (2015). Toward a standard approach to operationalizing coercive control and classifying violence types. *Journal of Marriage and Family*, *77*(4), 833-843.

Johnson, W. L., Giordano, P. C., Manning, W. D., & Longmore, M. A. (2015). The age–IPV

curve: Changes in the perpetration of intimate partner violence during adolescence and young adulthood. *Journal of youth and adolescence*, *44*(3), 708-726.

Johnson, H., & Sacco, V. F. (1995). Researching violence against women: Statistics Canada's national survey. *Canadian J. Criminology*, *37*, 281.

Kaplenko, H., Loveland, J. E., & Raghavan, C. (2018). Relationships between shame, restrictiveness, authoritativeness, and coercive control in men mandated to a domestic violence offenders program. *Violence and victims*, *33*(2), 296-309.

Kazarian, S. (2003, July). Horizontal and vertical varieties of individualism and collectivism and interpersonal relating. Paper presented at the Sixth Regional Congress of the International Association of Cross-Cultural Psychology, Budapest, Hungary.

Kazarian, S., & Martin, R.A. (2004). Humor styles, personality, and wellbeing among Lebanese university students. *European Journal of Personality*, 18(3), 209- 300.

Kazarian, S. S., & Taher, D. (2010). Validation of the Arabic Center for Epidemiological Studies Depression (CES-D) scale in a Lebanese community sample. *European Journal of Psychological Assessment*.

Khawaja, M. (2004). Domestic violence in refugee camps in Jordan. *International Journal of Gynecology & Obstetrics*, *86*(1), 67-69.

Khawaja, M., & Tewtel-Salem, M. (2004). Agreement between husband and wife reports of domestic violence: evidence from poor refugee communities in Lebanon. *International Journal of epidemiology*, *33*(3), 526-533.

Kvinna till Kvinna. (2010). *Links between domestic violence and armed conflict: Report from a field trip in Lebanon.* https://kvinnatillkvinna.org/2018/07/18/domestic-violence-and-armed-conflict/

Kofman, Y. B., & Garfin, D. R. (2020). Home is not always a haven: The domestic violence crisis amid the COVID-19 pandemic. *Psychological Trauma: Theory, Research, Practice, and Policy.*

Lawson, D. M., & Malnar, S. G. (2011). Interpersonal problems as a mediator between attachment and intimate partner violence. *Journal of family violence*, *26*, 421-430.

Leary (2014). *Introduction to behavioral research methods*. Pearson.

Lee, M., Reese-Weber, M., & Kahn, J. H. (2014). Exposure to family violence and attachment styles as predictors of dating violence perpetration among men and women: A mediational model. *Journal of interpersonal violence*, *29*(1), 20-43.

Lehmann, P., Simmons, C. A., & Pillai, V. K. (2012). The validation of the Checklist of Controlling Behaviors (CCB) assessing coercive control in abusive relationships. *Violence Against Women*, *18*(8), 913-933.

Lin, H. C., Yang, Y., Elliott, L., & Green, E. (2020). Individual differences in attachment anxiety shape the association between adverse childhood experiences and adult somatic symptoms. *Child Abuse & Neglect*, *101*, 104325.

Linder, J. R., Crick, N. R., & Collins, W. A. (2002). Relational aggression and victimization in young adults' romantic relationships: Associations with perceptions of parent, peer, and romantic relationship quality. *Social Development*, 11, 69 – 86. http://dx.doi.org/10.1111/1467-9507.00187

Little, R. J. A. (1988). A test of missing completely at random for multivariate data with missing values. *Journal of the American Statistical Association, 83*(404), 1198--1202.

Loveland, J. E., & Raghavan, C. (2017). Coercive control, physical violence, and masculinity. *Violence and Gender*, *4*(1), 5-10.

Mahfoud, Z. R., Afifi, R. A., Haddad, P. H., & DeJong, J. (2011). Prevalence and determinants of suicide ideation among Lebanese adolescents: results of the GSHS Lebanon 2005. *Journal of Adolescence*, *34*(2), 379-384.

Makin-Byrd, K., & Azar, S. T. (2011). Beliefs and attributions of partner violence perpetrators: The physical and psychological violence of adolescent males. *Violence and victims*, *26*(2), 177-190.

Mbilinyi, L. F., Logan-Greene, P. B., Neighbors, C., Walker, D. D., Roffman, R. A., & Zegree, J. (2012). Childhood domestic violence exposure among a community sample of adult perpetrators: what mediates the connection?. *Journal of Aggression, Maltreatment & Trauma*, *21*(2), 171-187.

Mersky, J. P., & Janczewski, C. E. (2018). Racial and ethnic differences in the prevalence of adverse childhood experiences: Findings from a low-income sample of US women. *Child abuse & neglect*, *76*, 480-487.

Messinger, A. M. (2011). Invisible victims: same-sex IPV in the national violence against women survey. J. Interpers. Violence 26, 2228–2243. doi: 10.1177/0886260510383023

Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin*, 129, 674–697. http://dx.doi.org/10.1037/0033-2909.129.5.674

Middle East & North Africa Countries (2013). The World Bank. Retrieved from http://go.worldbank.org/7UEP77ZCB0

Murray, K. E., Klonoff, E. A., Garcini, L. M., Ullman, J. B., Wall, T. L., & Myers, M. G. (2014). Assessing acculturation over time: A four-year prospective study of Asian American young adults. *Asian American Journal of Psychology*, *5*(3), 252.

Myhill, A. (2015). Measuring coercive control: What can we learn from national population surveys?. *Violence against women*, *21*(3), 355-375.

Naal, H., El Jalkh, T., & Haddad, R. (2018). Adverse childhood experiences in substance use disorder outpatients of a Lebanese addiction center. *Psychology, health & medicine*, *23*(9), 1137-1144.

Navarro-Pérez, J. J., Oliver, A., Carbonell, Á., & Schneider, B. H. (2020). Effectiveness of a mobile app intervention to prevent dating violence in residential child care. *Psychosocial Intervention*, *29*(2), 59-66.

Obeid, N., Chang, D. F., & Ginges, J. (2010). Beliefs about wife beating: An exploratory study with Lebanese students. *Violence against women*, *16*(6), 691-712.

Pinquart, M., Feußner, C., & Ahnert, L. (2013). Meta-analytic evidence for stability in attachments from infancy to early adulthood. *Attachment & Human Development*, *15*(2), 189-218.

R Core Team (2020). R: A language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria. URL https://www.R-project.org/

Raghavan, C., Beck, C. J., Menke, J. M., & Loveland, J. E. (2019). Coercive controlling behaviors in intimate partner violence in male same-sex relationships: A mixed-methods study. *Journal of Gay & Lesbian Social Services*, *31*(3), 370-395.

Rapoza, K. A., & Baker, A. T. (2008). Attachment style, alcohol, and childhood experiences of abuse: An analysis of physical violence in dating couples. *Violence and victims*, *23*, 52-65.

Rauhaus, B. M., Sibila, D., & Johnson, A. F. (2020). Addressing the increase of domestic

violence and abuse during the COVID-19 pandemic: A need for empathy, care, and social equity in collaborative planning and responses. *The American Review of Public Administration*, *50*(6-7), 668-674.

Rebeiz, M. J., & Harb, C. (2010). Perceptions of rape and attitudes toward women in a sample of Lebanese students. *Journal of Interpersonal Violence*, *25*(4), 735-752.

Renzetti, C. M. (1992). Violent betrayal: Partner abuse in lesbian relationships. Thousand Oaks, CA: Sage.

Renzetti, C. M., Lynch, K. R., & DeWall, C. N. (2018). Ambivalent sexism, alcohol use, and intimate partner violence perpetration. *Journal of interpersonal violence*, *33*(2), 183-210.

Reuter, T. R., Newcomb, M. E., Whitton, S. W., & Mustanski, B. (2017). Intimate partner violence victimization in LGBT young adults: Demographic differences and associations with health behaviors. *Psychology of violence*, *7*(1), 101.

Reuter, T. R., Sharp, C., & Temple, J. R. (2015). An exploratory study teen dating violence in sexual minority youth. *Partner Abuse*, 6, 8–28. http://dx.doi.org/10.1891/1946-6560.6.1.8

Reynolds, W. M. (1982). Development of reliable and valid short forms of the Marlowe-Crowne Social Desirability Scale. *Journal of clinical psychology*, *38*(1), 119-125.

Rigby, S. E., Lodge, T. J., Alotaibi, S., Barr, A. D., Clarke, S. D., Langdon, G. S., & Tyas, A. (2020). Preliminary yield estimation of the 2020 Beirut explosion using video footage from social media. *Shock Waves*, *30*(6), 671-675.

Robertson, K., & Murachver, T. (2011). Women and men's use of coercive control in intimate partner violence. *Violence and victims*, *26*(2), 208-217.

Robinson, K. H. (2005). Reinforcing hegemonic masculinities through sexual harassment: Issues

of identity, power and popularity in secondary schools. *Gender and Education*, 17, 19–37.

Ruddle, A., Pina, A., & Vasquez, E. (2017). Domestic violence offending behaviors: A review of the literature examining childhood exposure, implicit theories, trait aggression and anger rumination as predictive factors. *Aggression and violent behavior*, *34*, 154-165.

Sassler, S., Michelmore, K., & Holland, J. A. (2016). The progression of sexual relationships. *Journal of Marriage and Family*, *78*(3), 587-597.

S.B. 1141 Chapter 248, (Cal. 2020). https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201920200SB1141

Serious Crime Act (2015). Part 5. Protection of children and others: Domestic Abuse, 76. Controlling or coercive behaviour in an intimate or family relationship. 77. Guidance about investigation of offenses under section 76. http://www.legislation.gov.uk/ukpga/2015/9/contents/enacted

Shapiro, S. S., & Wilk, M. B. (1965). An analysis of variance test for normality (complete samples). *Biometrika*, *52*(3/4), 591-611.

Shorey, R. C., Cornelius, T. L., & Strauss, C. (2015). Stalking in college student dating relationships: A descriptive investigation. *Journal of family violence*, *30*(7), 935-942.

Shortt, J. W., Capaldi, D. M., Kim, H. K., Kerr, D. C., Owen, L. D., & Feingold, A. (2012). Stability of intimate partner violence by men across 12 years in young adulthood: Effects of relationship transitions. *Prevention Science*, *13*(4), 360-369.

Smith, S. G., Zhang, X., Basile, K. C., Merrick, M. T., Wang, J., Kresnow, M. J., & Chen, J. (2018). The national intimate partner and sexual violence survey: 2015 data brief–updated release.

Smith-Marek, E. N., Cafferky, B., Dharnidharka, P., Mallory, A. B., Dominguez, M., High, J., ... & Mendez, M. (2015). Effects of childhood experiences of family violence on adult partner violence: A meta-analytic review. *Journal of Family Theory & Review*, *7*(4), 498-519.

Smith, P. H., White, J. W., & Moracco, K. E. (2009). Becoming who we are: A theoretical explanation of gendered social structures and social networks that shape adolescent interpersonal aggression. *Psychology of Women Quarterly*, 33, 25–29. doi:10.1111/j.1471-6402.2008.01470.x

Soper, D.S. (2020). Effect Size Calculator for Multiple Regression [Software]. Available from http://www.danielsoper.com/statcalc

Stark, E. (2007). Coercive control: How men entrap women in personal life. *New York*.

Straus, M. A. (2010). Thirty years of denying the evidence on gender symmetry in partner violence: Implications for prevention and treatment. *Partner Abuse*, *1*(3), 332-362.

Straus, M. A., & Gozjolko, K. L. (2014). "Intimate terrorism" and gender differences in injury of dating partners by male and female university students. *Journal of Family Violence*, *29*(1), 51-65.

Straus, M. A., Hamby, S. L., Boney-McCoy, S., & Sugarman, D. B. (1996). The revised conflict tactics scales (CTS2) development and preliminary psychometric data. *Journal of family issues*, *17*(3), 283-316.

Straus, M. A., Hamby, S. L., Boney-McCoy, S., & Sugarman, D. (1999). Manual for the personal and relationships profile (PRP). *Durham, NH: University of New Hampshire, Family Research Laboratory. Available in:*

http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.612.1761&rep=rep1&type=pdf.

Straus, Murray A. and Vera E. Mouradian. 1999. "Preliminary psychometric data for the personal and relationships profile (PRP): A multi-scale tool for clinical screening and research on partner violence." in *American Society of Criminology*. Toronto, Ontario.

Swan, S. C., Gambone, L. J., Caldwell, J. E., Sullivan, T. P., & Snow, D. L. (2008). A review of research on women's use of violence with male intimate partners. *Violence and victims*, *23*(3), 301-314.

Tanha, M., Beck, C. J., Figueredo, A. J., & Raghavan, C. (2010). Sex differences in intimate partner violence and the use of coercive control as a motivational factor for intimate partner violence. *Journal of Interpersonal Violence*, *25*(10), 1836-1854.

Tolman, R. M. (1989). The development of a measure of psychological maltreatment of women by their male partners. *Violence and victims*, *4*(3), 159.

Torres, J. G., Schumm, J. A., Weatherill, R. P., Taft, C. T., Cunningham, K. C., & Murphy, C. M. (2012). Attitudinal correlates of physical and psychological aggression perpetration and victimization in dating relationships. *Partner Abuse*, *3*(1), 76-88.

Towson, S. M., & Zanna, M. P. (1982). Toward a situational analysis of gender differences in aggression. *Sex Roles*, *8*(8), 903-914.

Usta, J., Farver, J. A. M., & Pashayan, N. (2007). Domestic violence: the Lebanese experience. *Public health*, *121*(3), 208-219.

Vagi, K. J., Rothman, E. F., Latzman, N. E., Tharp, A. T., Hall, D. M., & Breiding, M. J. (2013).

Beyond correlates: a review of risk and protective factors for adolescent dating violence perpetration. Journal of Youth and Adolescence, 42(4), 633–649. https://doi.org/10.1007/s10964-013-9907-7.

Vice, G. C. (2005). *A meta-analysis of the stability of attachment styles from birth to adulthood* (Doctoral dissertation, ProQuest Information & Learning).

Villemez, W. J. & Touhey, J. C. (1977). A measure of individual differences in sex-typing and sex-discrimination: The "macho" scale. Psychological Reports, 41,411-415.

Violence Policy Center. (2018). When men murder women: An analysis of 2016 homicide data. Washington, DC: Violence Policy Center. Retrieved from http://vpc.org/studies/wmmw2018.pdf

Whitaker, M. P. (2013). Centrality of control-seeking in men's intimate partner violence perpetration. *Prev Sci*. 14, 513–523.

White, J. W., & Kowalski, R. M. (1994). Deconstructing the myth of the nonaggressive woman: A feminist analysis. *Psychology of Women Quarterly*, *18*(4), 487-508.

Whitfield, C. L., Anda, R. F., Dube, S. R., & Felitti, V. J. (2003). Violent childhood experiences and the risk of intimate partner violence in adults: Assessment in a large health maintenance organization. *Journal of interpersonal violence*, *18*(2), 166-185.

Williams, S. L., & Frieze, I. H. (2005). Courtship behaviors, relationship violence, and breakup persistence in college men and women. *Psychology of women quarterly*, 29, 248-257.

Wincentak, K., Connolly, J., & Card, N. (2017). Teen dating violence: A meta-analytic review of prevalence rates. *Psychology of Violence*, *7*(2), 224.

Wolfe, D. A., Scott, K. L., & Crooks, C. V. (2005). Abuse and violence in adolescent girls'

dating relationships. In D. J. Bell, S. L. Foster, & E. J. Mash (Eds.), Handbook of behavioural and emotional problems in girls (pp. 381–414). New York, NY: Kluwer Academic/Plenum Press Publishers.

World Bank. (2013). World Bank Definition: MENA. Retrieved from https://web.archive.org/web/20141029180410/http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/MENAEXT/0,,menuPK:247619~pagePK:146748~piPK:146812~theSitePK:256299,00.html

Wright, M. F. (2015). Cyber aggression within adolescents' romantic relationships: Linkages to parental and partner attachment. *Journal of Youth and Adolescence*, 44, 37–47. http://dx.doi.org/10.1007/s10964-014-0147-2

Wright, M. F. (2017). Intimate partner aggression and adult attachment insecurity: The mediation of jealousy and anger. *Evolutionary Behavioral Sciences*, *11*(2), 187.